Topic – Traditional Conservation Practices

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Traditional Conservation Practices

Traditional Conservation Practices means that the local community adopt certain methods knowingly or unknowingly for protecting the natural resources since many generations. Religious and traditional beliefs and practices play an important role in the conservation of environment and biodiversity.

Various conservation practices in the Indian context are as following:

- Sacred Forests/ Sacred Groves- Some patches of forests are left untouched because of social fencing by local people. These are the forested areas dedicated to a god or goddess by the local population. These types of forests are regarded as sacred groves. Many ethnic groups of India have protected several forest patches with the belief in nature's worship. Cutting of any tree and destroying these patches are probihited. It is believed that if anyone offended the sanctity of the grove, deities will punish by bringing illness or unfortunate to him or her. In India sacred groves occur in Rajasthan(protected by Bishnois), western ghats of Kerala, Uttarakhand, Himachal Pradesh and north-eastern states.
- 2. Sacred Lakes- These are the water bodies used by the priests for rituals. Khecheopalri lake of Sikkim is one such example.
- **3. Religious beliefs-** Respect for nature is inherent in many religious faiths. Forests preserved with reverence have been part of Hindu and Buddhist culture. In Christianity as well as in Islam, conservation of the environment is based on the principle that nature and its components are created by God, and humans are entrusted with the responsibility of protecting it.
- 4. Sacred plants-The Gurjar people of Rajasthan have a unique practice of neem (*Azadirachta indica*) planting and worshipping as abode of God Devnarayan. All the Hindu religious rituals require to honour water and specific trees (e.g. peeple. Banyan, tulsi, ashok, sandalwood and khejdi tree) and use these in worshipping. In addition mango tree leaf, woodapple tree leaf, gooseberry tree all have equal value in the religious rituals. It means saving trees are necessary for rituals to keep going, which then becomes an integral part of life.
- **5.** Sacred animals- Many animals are considered sacred by different communities and are thus protected. The peafowl, considered sacred is never hunted. The blue rock pigeon is considered sacred to Saint Hazrat Shah Lalal and is protected in the Bengal region.
- 6. Nature in Indian art and Scriptures- Indian painting, sculpture, architecture and art is full with themes from nature and wildlife reflecting love and reverence, and therefore the ethics of conservation.
- 7. Various traditional water conservation practices:
 - Kul- Common in Jammu and Himachal Pradesh these are diversion channels that carry water from a glacier to village.
 - Virdas- Developed by the nomadic tribe of Rann of Kutch, Gujarat, these are shallow wells dug within a natural depression(e.g. Jheel). Since the area around is very saline, when rainwater seeps down the soil, it collects over the saline ground water due to the difference in salinity(rainwater being less dense).
 - Bamboo Drip Irrigation System- Practised in Meghalaya this system of water conservation is done using bamboo pipes. The whole irrigation system is made up of different forms of bamboo pipes of varying cross-sections which take the water from springs on the top of the hill. The water is dropped at the base of the plant preventing wastage of water.
 - Johads- Crescent shaped small check dam built from earth and rock to intercept and conserve rainwater. Mainly found in Alwar district of Rajasthan this helps to improve percolation and increases ground water recharge.

- Zabo- Mainly practised in Nagaland, Zabo is used to deal with a lack of drinking water supply. During monsoon, rainwater that falls on the hilltops is collected into the pond like structures that are carved out on the hill sides. The water is then passed onto cattle yards below from where the water enters the paddy fields rich in manure.
- Eri- Widely used in Tamil Nadu these are water tanks which are fed through channels that divert river water. They are interconnected to balance the water in case of excess or lesser supply.
- Khadin- Common in the areas of Jaisalmer and Barmer of Rajasthan, Khadin is a water conservation system designed to store surface run off water for the purpose of agriculture. An embankment is built around a slope, which collects the rain water in an agricultural field.
- Surangam- Present in areas of Karnataka and Kerala, in this a complex labyrinth of fine tunnels are built which constitutes horizontal wells dug in laterite rocks. Water is collected into a storage tank using gravitational force. Vertical shafts are provided for air flow.
- Ahar Pynes-Indigenous to South Bihar. Ahar consists of a catchment basin embanked on three sides, at the end of a rivulet or canal that leads from a river. Pynes are artificial channels, which are constructed to use river water for agriculture. The process of water flow starts from the river, from where the water goes to pynes and eventually lands up in an ahar.
- Kunds- Usually dotting the areas of Rajasthan and Gujarat, these water conservation structures have a saucer shaped catchment area sloping towards the centre to where the well is situated.

To prevent debris falling into well, a wire mesh is used while the sides of the well pit are covered with lime and ash, which acts as a disinfectant. These structures are built to harvest rain water.

Various conservation practices of different countries of world are as following:

- 1. Sacred forest- Kenya(Africa)
- 2. Sacred pool- Crocodile pool of Bakau (Africa), the pool is a pilgrimage site for barren women who come to douse themselves in its curative water.
- **3.** Taungya system- Under this system people cultivate food crops in the first year on cleared forest plots, next year they prepare rows of beds for raising seedlings of trees and in between these rows they cultivate crop species. Crops are raised for 2-3 years during which period root system of tree seedlings grow deep down due to competition with crop plants in the upper soil horizon. Taungya system is common in ethnic communities of South China.
- **4.** It is an old tradition of Javanese people(Indonesia) that as a part of the wedding ceremony the mother of the bride presents to the newly married couple a box of several kinds of seeds, rhizomes etc. that is to be planted in their new residence.
- 5. Traditional conservation of wild life in Papua New Guinea- There is seasonal ban on hunting every three to four years by the ethnic people. There is a belief that if a white wallaby is seen in the bush, it is not to be killed. It is regarded as a sacred animal.
- **6.** Marine Conservation in Australia- Turtle harvesting is under the control of chiefs of certain islands.