

MOEF: (Ministry of Environment and Forest),

- Nodal agency in the central Govt. for implementing the India's Environ. & forest policies, conservation of Nat. Res. and prevention of Pollution.
- Also nodal Agency for UNEP, SACEP (South Asia Co-operative Environmenting), ICGIMOD (International Centre for Integrated mountain development), UNCED.
- National Forest Policy - 1988
- National Environment Policy - 2006.

### (A) Survey of Flora:

- Botanical Survey of India (BSI) - Feb-13-1890 (Kolkata).
- established for carrying out taxonomic and floristic studies on plants.

### (B) Survey of Fauna:

- ZSI: Zoological Survey of India (1916) - HQ - Kolkata.
- 16 Regional centres.

Objectives: Survey, collection documentation.

C- FSI - (Forest Survey of India) - Jan 1, 1981.

→ The mangrove ecosystem symbiotic link between terrestrial (marine ecosystems) found in intertidal zones of sheltered shore, estuaries, creeks, backwaters, lagoons, marshes and mudflats.

- India is home to some of the best mangroves in the world.

- ① West Bengal ② Gujarat ③ Andaman & Nicobar.

### Coral reefs:

Area - 2375 km<sup>2</sup>. ① Gulf of Mannar ② Gulf of Kachchh ③ Lakshadweep ④ Andaman

### Biosphere Reserves:

BRS. Areas of Terrestrial and coastal ecosystems which are internationally recognized within the framework of the Man and the Biosphere (MAB) Programme of UNESCO.

MAB Programme devoted to C

- i) - Conserving Biological Diversity.
- ii) - Promoting Research and Monitoring.
- iii) Seeking to provide models of sustainable development.
- (iv) Conservation of Local Knowledge and Communities.

These Reserves are rich in biological and cultural diversity and encompass unique features of exceptionally pristine nature.

Biotechnology Conservation: (with respect to)

- (i) Biodiversity
- (ii) Sustainability
- (iii) Cartagena Protocol

### (A) Convention on Biological Diversity

CBD: CMO Summit, 1992

- Objectives:
- (i) Conservation of Biological Diversity
  - (ii) Sustainable use of its components
  - (iii) Equitable sharing of benefits

India ratified CBD on February 18, 1994.

→ India enacted the "Biological Diversity Act-2002" to give effect to the provision of this Convention.

Under this Act National Biodiversity Authority was set up in Chennai in 2003.

→ A Cartagena Protocol on Biosafety (CPB) was adopted under CBD.

India is party to the CBD as well as CPB. Therefore a Nagoya

Protocol on Access and benefit sharing (ABS) was adopted in 2010.

### (Biological Diversity)

NBA was set up in Chennai in Oct-2003 U/s -8 of Biological Diversity Act.

→ work also continued for developing a full scale project on establishment of a Centre for Biodiversity Policy and Law (CBBPOL) NBA-Chennai, with technical support from Norway.

### Cartagena Protocol on Biosafety

Adopted on January 29, 2003. India is Party.

Came into force on September-11, 2003. 16 countries are party to it.

→ The main objective of the Protocol is to ensure safe transfer, handling and use of living modified organisms resulting from modern biotechnology that may have adverse effect on the conservation and sustainable use of biological diversity taking into account the risk of human health.

→ Forest Conservation Act - October 25, 1980, (Govt Approval for diversion of forest land for...)

Wildlife  
Two divisions ① Wildlife Division.  
② Project Elephant.

Wildlife Institute Dehradun.

Three Autonomous bodies → Wildlife Institute of India (Dehradun), 1986,  
↳ Central Zoo Authority.  
↳ National Tiger Conservation Authority.

Wildlife Protection Act - 1972.

WCBC (Wildlife Crime Control Bureau) was constituted as a statutory body under the Wildlife (Protection) Act, 1972, on June 6, 2007. (HQ - Delhi).

CZA - 1992. Oversee the functioning of Zoos in the country.

Project Elephant! - (1991-1992). (Implemented in 16 states).

Project Tiger! - April - 1972.

20% increase in Tiger population in 10 (1706), 2006-1411  
At present India has the maximum number of tigers.

Environment Impact Assessment! -

Policy for Abatement of Pollution in 1992.

Central Pollution Control Board! (CPCB) performs functions as laid down under the Water (Prevention and Control of Pollution Act - 1974).

Air (Prevention and Control of Pollution Act - 1981).

Environmental Protection Act - 1986.

Clean Technologies!

CT minimize the generation of waste streams in the production process and utilize waste from other consumption goods and production processes, rather than treating the waste after generation.

National Wetland Conservation Programme!

NWCP - was initiated in 1987, for -

- (i) To lay down policy guidelines for conservation and management of wetlands.
- (ii) To provide financial assistance for undertaking intensive conservation measures in the identified wetlands.
- (iii) To monitor implementation of Programme.
- (iv) To prepare an inventory of Indian Wetlands.