

## **Marine fisheries legislations**

### **The Indian Fisheries Act, No. 4 of 1897**

This Act is very brief and its current usefulness very limited. Although it is to be read as supplemental to other fisheries laws in force, its substance is directed at prohibiting destruction of fish by use of explosives and poisons in inland waters and on coasts and allowing State governments to make rules for the protection of fish. There is a basic provision governing arrests. Additionally the Fisheries Act defines “water” to include the sea within a distance of one marine league of the seacoast (i.e. 3 nautical miles), where such measures may be taken.

There is no legislation implementing India’s responsibilities for its nationals – including vessels and persons - as required under the 1982 Convention and the UN Fish Stocks Agreement. These obligations also appear in soft law such as the 1995 FAO Code of Conduct for Responsible Fisheries and the 2001 FAO IPOA-IUU.

The Maritime Zones of India (Regulation of fishing by foreign vessels Act, 1981 (No. 42 of 1981). This Act was passed prior to the adoption of the 1982 Convention the UN Fish Stocks Agreement. A wide range of requirements under those, and related instruments are not implemented.

It applies to “fishing” activities, but the definition of such activities is weak and not up to date in two major respects. First, it refers to “catching, taking, killing, attracting or pursuing fish”, all of which contemplate the presence of fish. Modern definitions in national and international instruments refer also to searching and attempting to search for fish including use of aircraft. Second, it is defined to include processing, preserving, transferring, receiving and transporting of fish. Modern definitions separate fishing activities from these “related activities”, for administrative and legal purposes. For example, control over a carrier or reefer vessel is usually legislated in order to regulate transshipment at sea and prohibit supporting illegal fishing activities. The definition of fishing, key to the effective implementation of the Act, needs strengthening and updating.

The Act’s main provisions deal with the grant of licenses, prohibition of Indian citizens using foreign vessels, procedures for granting of permits or licenses, and the responsibility of permit holder for compliance. It requires unlicensed foreign vessels to stow their fishing gear when entering any maritime zone, and allows scientific research. Other provisions relate to powers of search and seizure, offences and penalties and miscellaneous items such as presumptions, and place of trial. The Act relies on rules to elaborate many of the requirements, such as the manner of stowing gear and terms and conditions for scientific research. The alternative would be to allow scope for setting requirements in writing, or by a simpler mechanism than adoption of rules in certain cases where the authority would not be abused. For example, a fisheries manager may wish to identify certain conditions for scientific research that are consistent with a management plan but which do not form part of the rules. However, this is not done and there do not appear to be any rules as foreseen in the legislation.

On the whole it has no mechanism for fisheries management other than the grant of licenses – and even those provisions are largely procedural and not related to mechanisms or procedures to decide conservation and management measures or deny, suspend or revoke licenses or permits. Such actions could occur under relevant fishery management plans or the implementation of measures adopted by RFMOs, but neither of these circumstances is taken into account.

The Act lists the powers of search and seizure by authorized officers, but only in the context of boarding vessels. There is no authority to conduct searches of fish that may have been landed, for example, or are being transported after landing. It is an offence to obstruct an authorized officer, but the duties of persons towards authorized officers – e.g. to allow and assist the officer to carry out his/her duties and to comply with directions - are not detailed.

A key constraint in securing cooperation in enforcement by the flag State, the Act does not incorporate the flag State responsibilities of foreign fishing vessels developed in later years under the international instruments.

### **The Maritime Zones of India (Regulation of fishing by foreign vessels) Rules, 1982**

The Rules cover definitions that are supplementary to those in the Act, but which still do not adequately provide a sound basis for implementation and enforcement. They require certain information to be provided on license applications, but this needs to be updated to implement international instruments and address modern technology and regional and international requirements for the exchange of information. The Rules empower the Central Government to grant a license for a range of activities that are not contemplated in the Act, and do not fall within the definition of “fishing”:

- taking on board any outfit or supplies while at sea;
- landing fish or fish products,
- purchasing or obtaining bait, outfits, provisions or supplies (including fuel) at an Indian port;
- Effecting repairs at an Indian port.

There is no provision for a corresponding offence or penalty for carrying out these activities without a license. This appears to be a major inconsistency that may be challenged.

Other activities for which a license may be granted are included in the definition of “fishing” in the Act, and refer to commercial fishing, transshipment or supply at sea, processing at sea and transporting fish from the fishing grounds. They should be reexamined for scope and consistency with other laws covering processing on land and transporting fish generally, not just from the fishing grounds to port. In the latter case, activities involving transshipment at port and transport to another port would not be covered.

The issue of transshipment at sea was discussed at the Fifth Meeting of the Inter-Ministerial Empowered Committee on Marine Fisheries, held on 24 January 2007. The Meeting reviewed the decision taken at the Fourth Meeting of the EC, held on 18 July 2006 that “Mid-sea transfer of stocks should be discouraged. As a first step, it was decided that henceforth transshipment would be permitted only within 24 nautical miles or the Contiguous Zones. It would appear so because

Contiguous Zones are declared for customs, fiscal, immigration or sanitary reasons, which are relevant to transshipments. ] It was also decided that transshipment of tuna catches should be done only into carrier vessels, which are in the approved list of the IOTC". It agreed that a new condition should be added, and this information was circulated to companies fishing. Concerns of the companies were subsequently discussed in various fora, but information on the outcomes was unavailable.

The result is that, although transshipment requirements may be included in individual Letters of Permission for vessels to fish in India's EEZ, there are a number of situations that are not now covered, including those that India is required to implement as a member of the Indian Ocean Tuna Commission.

Separate sections deal with the term of validity for licenses (directed at owners of foreign vessels) and permits (directed at Indian citizens who charter foreign vessels). There is no requirement for the government to maintain a register of licenses or permits, or implement the rules of a regional fisheries management organization (RFMO). There is a requirement for the vessel to display the license or permit on board the vessel.

Significantly, the terms and conditions of licenses and permits are very different. For licenses – valid for the length of time on the permit - they are directed at fishing activities, such as reporting, employment of crew, fishing/transporting/processing only in accordance with the terms of the license, communication equipment, storage of fishing gear, research, observers, inspection and vessel identification.

For permits – valid for up to five years – the terms and conditions include to payment for the permit, expertise in fishing, bank guarantee, percentage of crew to be Indian citizens, settlement of disputes, submission of valuation and seaworthiness and safety certificates and other areas directed largely at corporate, rather than fisheries management. In respect of fisheries management, the Rules only prohibit some forms of fishing (for protected species and coastal shrimps) and impose a duty on the charterer to ensure that the vessel reports to an authorized officer before and after every fishing voyage. The Rules, particularly those relating to chartered vessels, do not allow for fisheries management, including relevant requirements under the UN Fish Stocks Agreement, and under RFMO conservation and management measures.

Some general provisions govern transit, permitting scientific research and prohibiting damage to Indian vessels, fishing in territorial waters and use of explosives. Offences under the Rules are punishable by a maximum Rs50, 000 fines. Compared to other jurisdictions, this is very low and the deterrent effect could be very low. Higher fines for "serious offences", such as those described in Article 21 of the 1995 UN Fish Stocks Agreement, are not distinguished.

The forms appended to the Rules are outdated and need review and revision to allow for fisheries management and implementation of international instruments, including the license application,

license, catch data, discards, protected species, daily records, processing on board and voyage of chartered vessels.

The licensing procedures should be reviewed in order that a modern, transparent and accountable process can be established by law.

## **Lesson-8**

### **Laws and policies related to the environment**

#### **Expected learning outcome**

- The Environment Protection Act, 1986
- The Water (Prevention and Control of Pollution) Act, 1974
- The Air (Prevention and Control of Pollution) act, 1981
- Wildlife Protection Act 1972
- National Environment Policy 2006
- Laws related to biodiversity
- Biodiversity heritage sites-objectives and Management
- Panchayat (Extension of scheduled areas) act, 1995

#### **The Environment Protection Act, 1986**

Is an umbrella legislation designed to provide a framework for the Central Government to co-ordinate the activities of various Central and State authorities established under previous laws, and to bring about uniformity in regulations. It has provisions to allow the making of rules for various activities and areas of concern/interest, and hence it is an 'enabling' law.

The Act empowers the Central Government to take appropriate measures for the purpose of protecting and improving the environment. It is authorised to lay down standards for controlling emissions and effluent discharges of environmental pollutants, to regulate industrial locations, to prescribe procedures for managing hazardous substances, to establish safeguards for preventing accidents, and to collect and disseminate information regarding environment pollution. In accordance with this act, the central government has issued a number of rules and not Regulations as Regulations connote a different meaning in India.

Ecosystems and landscapes can be notified Ecologically Sensitive Areas (ESA). This would enable control or restriction of certain identified commercial, industrial and development activities. Potentially a strong tool to fight against commercial and industrial pressures.

Subsequent notifications under the Environment Protection Act have also made it mandatory to conduct environmental impact assessments (EIAs) for specified developmental activities and have made public hearings mandatory for all developmental activities. The scope of public hearing has drastically reduced in the most recent EIA notification of 2006. The discharge of pollutants is regulated, inspection schemes are provided, and the location of certain industries in coastal zones

are prohibited and restricted. The ecologically sensitive areas such as habitats of turtles (this more under the Wildlife Act and not so much under the EPA) but does this Act still provides.

### **The Water (Prevention and Control of Pollution) Act, 1974**

Article 252: Power of parliament to legislate for 2 or more states by consent and adoption of such legislation by any other state. It shall be lawful for the parliament to pass an act for regulating that matter and any act so passed shall apply to such states and to any other state by which it is adopted afterwards.

This Act provides for the protection of the coastal sea from land-based sources of pollution subject to the discretion of the state government. The main provisions aim at prevention and control of water pollution as well as restoration of water quality through the establishment of State Pollution Control Boards. In conjunction with the Coastal Regulation Zone Notification of 1991 under the Environment (Protection) Act, 1986, the Act can contribute to regulating land-based sources of pollution in the coastal waters up to a maximum distance as decided by the State government. Most SPCBs claim a very active role with respect to the coastal industries. The Annual Reports of the SPCBs do provide some background in terms of the action taken by the respective coastal state in terms of curbing pollution to the sea.

In 2003, it was reported that no known attempt has been made in any maritime State of India to protect the coastal waters from land-based sources of pollution other than an initiative taken by the Maharashtra Government for the treatment of sewage in Mumbai.

Functions of state pollution board

- To inspect trade effluents, work and plans for treatment of trade effluents under section 17 (7)
- To lay down, modify on annual effluent standards for the trade effluents and for the quality of receiving waters resulting from discharging effluents.
- To advice the state government for location of an industry or industrial activity.
- To take samples of trade effluents being discharged from any plants and to have them analyzed Eg: Harihar poly-fibers near Harihar causing major fish kill

### **The Air (Prevention and Control of Pollution) act, 1981**

The Air (Prevention and Control of Pollution) Act was enacted in 1981 and amended in 1987 to provide for the prevention, control and abatement of air pollution in India. This act to provide for the prevention, control and abatement of air pollution, for the establishment, with a view to carrying out the aforesaid purposes, of Boards, for conferring on and assigning to such Boards

powers and functions relating thereto and for matters connected therewith. Whereas decisions were taken at the United Nations Conference on the Human Environment held in Stockholm in June, 1972, in which India participated, to take appropriate steps for the preservation of the natural resources of the earth which, among other things, include the preservation of the quality of air and control of air pollution and whereas it is considered necessary to implement the decisions aforesaid in so far as they relate to the preservation of the quality of air and control of air pollution.

### **Central Board for the Prevention and Control of Air Pollution.**

The Central Board for the Prevention and Control of Water Pollution constituted under section 3 of the Water (Prevention and Control of Pollution) Act, 1974 (6 of 1974), shall, without prejudice to the exercise and performance of its powers and functions under this Act, exercise the powers and perform the functions of the Central Board for the Prevention and Control of Air Pollution under this Act.

Powers and functions of boards

### **Functions of Central Board**

(1) Subject to the provisions of this Act, and without prejudice to the performance, of its functions under the Water (Prevention and Control of Pollution) Act, 1974 (6 of 1974), the main functions of the Central Board shall be to improve the quality of air and to prevent, control or abate air pollution in the country.

(2) In particular and without prejudice to the generality of the foregoing functions, the Central Board may-

(a) Advise the Central Government on any matter concerning the improvement of the quality of air and the prevention, control or abatement of air pollution;

(b) Plan and cause to be executed a nation-wide programme for the prevention, control or abatement of air pollution;

(c) Co-ordinate the activity of the State and resolve disputes among them;

(d) Provide technical assistance and guidance to the State Boards, carry out and sponsor investigations and research relating to problems of air pollution and prevention, control or abatement of air pollution;

12[(dd) perform such of the function of any State Board as may, be specified in and order made under sub-section (2) of section 18;]

(e) Plan and organize the training of persons engaged or to be engaged in programmes for the prevention, control or abatement of air pollution on such terms and conditions as the Central Board may specify;

(f) Organize through mass media a comprehensive programme regarding the prevention, control or abatement of air pollution;

(g) Collect, compile and publish technical and statistical data relating to air pollution and the measures devised for its effective prevention, control or abatement and prepare manuals, codes or guides relating to prevention, control or abatement of air pollution;

(h) Lay down standards for the quality of air.

(i) Collect and disseminate information in respect of matters relating to air pollution;

(j) Perform such other functions as may be prescribed.

(3) The Central Board may establish or recognize a laboratory or laboratories to enable the Central Board to perform its functions under this section efficiently.

(4) The Central Board may-

(a) Delegate any of its functions under this Act generally or specially to any of the committees appointed by it;

(b) Do such other things and perform such other acts as it may think necessary for the proper discharge of its functions and generally for the purpose of carrying into effect the purposes of this Act.

### **Functions of State Boards**

(1) Subject to the provisions of this Act, and without prejudice to the performance of its functions, if any, under the Water (Prevention and Control of Pollution) Act, 1974 (Act 6 of 1974), the functions of a State Board shall be-

- (a) To plan a comprehensive programme for the prevention, control or abatement of air pollution and to secure the execution thereof,
- (b) To advise the State Government on any matter concerning the prevention, control or abatement of air pollution;
- (c) To collect and disseminate information relating to air pollution;
- (d) To collaborate with the Central Board in organizing the training of persons engaged or to be engaged in programmes relating to prevention, control or abatement of air pollution and to organize mass-education programme relating thereto;
- (e) To inspect, at all reasonable times, any control equipment, industrial plant or manufacturing process and to give, by order, such directions to such persons as it may consider necessary to take steps for the prevention, control or abatement of air pollution;
- (f) To inspect air pollution control areas at such intervals as it may think necessary, assess the quality of air therein and take steps for the prevention, control or abatement of air pollution in such areas;
- (g) To lay down, in consultation with the Central Board and having regard to the standards for the quality of air laid down by the Central Board, standards for emission of air pollutants into the atmosphere from industrial plants and automobiles or for the discharge of any air pollutant into the atmosphere from any other source whatsoever not being a ship or an aircraft:
- Provided that different standards for emission may be laid down under this clause for different industrial plants having regard to the quantity and composition of emission of air pollutants into the atmosphere from such industrial plants.
- (h) To advise the State Government with respect to the suitability of any premises or location for carrying on any industry which is likely to cause air pollution?
- (i) To Perform such other functions as may be prescribed or as may, from time to time, be entrusted to it by the Central Board or the State Government.
- (j) To do such other things and to perform such other acts as it may think necessary for the proper discharge of its functions and generally for the purpose of carrying into effect the purposes of this Act.

### **National Environment Policy 2006**

A National Environment Policy was adopted by Cabinet in 2006, giving rise to a range of issues, some of which are parallel to concerns about fisheries law and policy. The industry-friendly aspects of the environmental reforms have been criticized by a broad base of environmental supporters. The Policy itself has no timelines, institutional responsibilities or targets, but instead offers measures and possible action plans that may or may not materialize. The Policy does refer to fisheries, but only indirectly in terms of the effect that environmental degradation could have on fisheries and food for the poor, the need for wetlands and the desirability of building adequate environmental safeguards into development projects in the islands, in particular those relating inter alia to deep sea fishing. A key concern of stakeholder groups is the Policy's objective of decentralization (also in the Fisheries Policy) and the lack of human capacity to implement it effectively. The question of whether existing



sectoral policies would be replaced, such as those relating to forest, water, biodiversity and pollution, does not appear to have been addressed. Another issue is that other environmental laws have been disregarded, such as the Wildlife Protection Act, 1972 or the Water (Prevention and Control of Pollution) Act, 1974 as amended in 1988. The lack of transparency in developing the Policy was a prominent and widespread concern.

### **Protected area Management**

There are two ways of conservation of the flora and fauna

- **Ex-situ conservation:** Keeping the organisms outside their natural habitat in place almost similar to their natural habitat. Eg: Zoo, germplasm conservation
- **In-situ conservation:** Keeping the organisms in their natural habitat where all animals and plants are in that area is protected. Eg: Turtle conservation, Tiger conservation etc. All types anthropogenic activities are prohibited in protected area.

A protected area is defined as an area of land and/or sea especially dedicated to the protection and maintenance of biological diversity, and of natural and associated cultural resources, and managed through legal or other effective means. To give greater coherence to the role and scope of protected areas within conservation planning and sustainable land use, IUCN and its World Commission on Protected Areas have expanded on this basic definition and developed six modified categories of protected area. The new IUCN Protected Area Categories were proposed in February 1992 at the IVth World Congress on National Parks and Protected Areas which are summarized below.

**Category Ia:** Strict nature reserve/wilderness protection area managed mainly for science or wilderness protection - an area of land and/or sea possessing some outstanding or representative ecosystems, geological or physiological features and/or species, available primarily for scientific research and/or environmental monitoring.

**Category Ib:** Wilderness area: protected area managed mainly for wilderness protection - large area of unmodified or slightly modified land and/or sea, retaining its natural characteristics and influence, without permanent or significant habitation, which is protected and managed to preserve its natural condition.

**Category II:** National park: protected area managed mainly for ecosystem protection and recreation - natural area of land and/or sea designated to (a) protect the ecological integrity of one or more ecosystems for present and future generations, (b) exclude exploitation or occupation inimical to the purposes of designation of the area and (c) provide a foundation for spiritual, scientific, educational, recreational and visitor opportunities, all of which must be environmentally and culturally compatible.

**Category III:** Natural monument: protected area managed mainly for conservation of specific natural

features - area containing specific natural or natural/cultural feature(s) of outstanding or unique value because of their inherent rarity, representativeness or aesthetic qualities or cultural significance.

**Category IV:** Habitat/Species Management Area: protected area managed mainly for conservation through management intervention - area of land and/or sea subject to active intervention for management purposes so as to ensure the maintenance of habitats to meet the requirements of specific species.

**Category V:** Protected Landscape/Seascape: protected area managed mainly for landscape/seascape conservation or recreation - area of land, with coast or sea as appropriate, where the interaction of people and nature over time has produced an area of distinct character with significant aesthetic, ecological and/or cultural value, and often with high biological diversity. Safeguarding the integrity of this traditional interaction is vital to the protection, maintenance and evolution of such an area.

**Category VI:** Managed Resource Protected Area: protected area managed mainly for the sustainable use of natural resources - area containing predominantly unmodified natural systems, managed to ensure long-term protection and maintenance of biological diversity, while also providing a sustainable flow of natural products and services to meet community needs.

## **CITES**

CITES (the Convention on International Trade in Endangered Species of Wild Fauna and Flora) is an international agreement between governments. Its aim is to ensure that international trade in specimens of wild animals and plants does not threaten their survival. Widespread information nowadays about the endangered status of many prominent species, such as the tiger and elephants, might make the need for such a convention seem obvious. But at the time when the ideas for CITES were first formed, in the 1960s, international discussion of the regulation of wildlife trade for conservation purposes was something relatively new. With hindsight, the need for CITES is clear. Annually, international wildlife trade is estimated to be worth billions of dollars and to include hundreds of millions of plant and animal specimens. The trade is diverse, ranging from live animals and plants to a vast array of wildlife products derived from them, including food products, exotic leather goods, wooden musical instruments, timber, tourist curios and medicines. Levels of exploitation of some animal and plant species are high and the trade in them, together with other factors, such as habitat loss, is capable of heavily depleting their populations and even bringing some species close to extinction. Many wildlife species in trade are not endangered, but the existence of an agreement to ensure the sustainability of the trade is important in order to safeguard these resources for the future. Because the trade in wild animals and plants crosses borders between countries, the effort to regulate it requires international cooperation to safeguard certain species from over-exploitation. CITES was conceived in the spirit of such cooperation. Today, it accords varying degrees of protection to more than 30,000 species of animals and plants, whether they are traded as live specimens, fur coats or dried herbs. CITES was drafted as a result of a resolution adopted in 1963 at a meeting of members of IUCN (The World Conservation Union). The text of convention was finally agreed at a meeting of representatives of 80 countries in Washington DC., United States of America, on 3 March 1973, and on 1 July 1975 CITES entered in force. CITES is an

international agreement to which States (countries) adhere voluntarily. States that have agreed to be bound by the Convention ('joined' CITES) are known as Parties. Although CITES is legally binding on the Parties – in other words they have to implement the Convention – it does not take the place of national laws. Rather it provides a framework to be respected by each Party, which has to adopt its own domestic legislation to ensure that CITES is implemented at the national level. For many years CITES has been among the conservation agreements with the largest membership, with now 175 Parties.

### **Forest (Conservation) Act, 1980**

This Act, amended in 1988, deals primarily with using forestlands for non-forestry purposes, mainly industry and mining; fisheries habitat and water quality would be affected. It requires state governments to acquire the approval of the central government before it de-gazettes a reserved forest, leases forestland to a private person or corporation, or clears it for the purpose of reforestation. Implementation of this act has reduced the annual rate of diversion of forestlands for non-forestry purposes to 16,000 hectares a year, compared with 150,000 hectares per year prior to 1980. (Sampath). The Forest Conservation Act, as stated earlier, becomes relevant in the context of mangroves forest which are declared reserved under the Indian Forest Act. The dereservation or use of such forests for non-forestry purposes or clear felling such forests or leasing such forests would attract the Forest Conservation Act.

### **National Forest Policy, 1988 (NFA 1988)**

This policy deals with conservation and management of forests, afforestation and with the rules governing people's access to government owned forests and their products. This policy for the first time after Independence places greater importance on using local forest resources to meet local people's needs rather than industrial needs. The policy stresses the involvement of local people in the management of forests. In particular tribal communities access to the forests and resources on which their livelihoods depend have been recognized. It was under this policy that the Government Resolution on Joint Forest Management (JFM) was passed in India in 1990. Since then millions of ha of forests outside PAs have been brought under JFM. JFM aims at regenerating degraded forests with the participation of local communities and sharing the benefits accruing from timber harvests from these areas with local communities. JFM has been a miserable failure in some states and sites while quite successful in others, depending on the state policies and methods of implementation, and often also on individual forest officers and concerned local communities.

### **Mangroves and Economic development**

According to a recent IUCN/FAO report, one out of every six mangrove species may soon go extinct because of over-exploitation and invasive industries, such as shrimp farming. Mangrove forests are critical to climate change mitigation due to their enhanced ability to sequester large amounts of carbon in their surrounding soils. However, mangrove forest ecosystems are under siege everywhere they are found, from destructive tourism development in Bimini Island in the Bahamas to golf course development in Malaysia; from out of control oil exploitation in the Niger Delta on the western coast of Africa to unmanaged urban expansion in India's Bhitarkanika Wildlife Sanctuary. One percent of our planet's mangroves are disappearing each year-that's 150, 000 ha a year lost to unsustainable development.

## **Biological Diversity Act 2002 (No. 18 of 2003)**

The Biological Diversity Act 2002 has three main objectives:

- the conservation of biodiversity;
- the sustainable use of biological resources;
- Equity in sharing benefits from such use of resources.

Among its key provisions relevant to fisheries, it provides for measures to conserve and sustainably use biological resources, including habitat and species protection, environmental impact assessments (EIAs) of projects, and integration of biodiversity into the plans, programmes, and policies of various departments/sectors. It also provides for the establishment of State Biodiversity Boards SBB at state level, and a National Biodiversity Authority (NBA) and most importantly biodiversity management committees (BMCs) at the local bodies' level which is defined to mean local self-government level. The role of BMCs would be quite critical in the coastal context. The National Biodiversity Authority also has representation from the Ministries of Ocean Development, Agriculture and Science and Technology among others which has direct implications on the Coastal and Ocean Management from the biodiversity stand point. The Biodiversity Act also provides for creation of biodiversity heritage sites which can be declared by the state government in consultation with the local bodies. Further, the Central Government also has the power under this Act to notify threatened species and prohibit or regulate the collection of such species in any such biodiversity area. By implications this could also include marine or coastal areas. Some organizations and people feel that the basic framework of the Act is problematic, since it accepts intellectual property rights on biodiversity, could be used to further commercialize biodiversity, and does not truly empower communities. Others feel that the Act provides some potential for checking biopiracy, achieving conservation, and facilitating community action. They stress that a combination of strong rules, and amendments related to the above points, would help strengthen this potential. It is also relevant to add that the Biological Diversity Act is also a reflection of the commitment or the fact that the India is committed to the Convention on Biological Diversity.

### **Equitable sharing of benefits**

If any foreign company, assess the pharmaceutical plant extractions, then royalty should be given to all the persons be given to all the persons involved in its preparation. The part of royalty is also to the person who is involved in its conservation. The royalty is distributed among the persons according to their contribution. The foreign companies can't access flora and fauna without talking permission from the authority even if it is for research purpose.

Article 21: Sharing of benefits of various kinds.

Section 37: It gives powers to the state government to declare areas of biodiversity importance as biodiversity heritage sites. However this declaration has to be in consultation to local bodies such as panchayats, gram sabhas and biodiversity management committees.

Creation of Biodiversity Management Committees (BMC) at the village level. BMCs are supposed to

help communities in management, protection and recording of local biological diversity. Provides for the declaration of areas being conserved for agricultural or wildlife biodiversity as Biodiversity Heritage Sites (BHS). This act includes all elements of biological diversity, domestic and wild and provides for protection of all kinds of ecosystems. The National Biodiversity Authority (NBA) and the State Biodiversity Boards (SBB) established under the Act are required to consult the local BMCs while taking decisions related to the use of biological resources and knowledge associated with such categories.

The provision of BMC and BHS could be used to increase local community participation in wildlife and biodiversity conservation and enhance livelihoods. BMCs could be strong local institutions for management and conservation of biodiversity and the rules made under the Act could have strengthened this aspect of the act. The provisions of Biodiversity Heritage Sites could be used to provide legal backing to CCAs, but this will depend on how BHS are defined and interpreted in the Rules or Guidelines for their implementation.