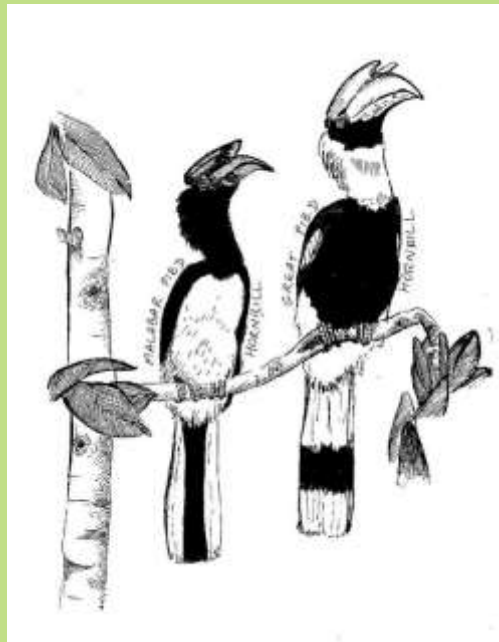


RESEARCH PAPER

Legal Provisions Relating to Biodiversity Conservation in India

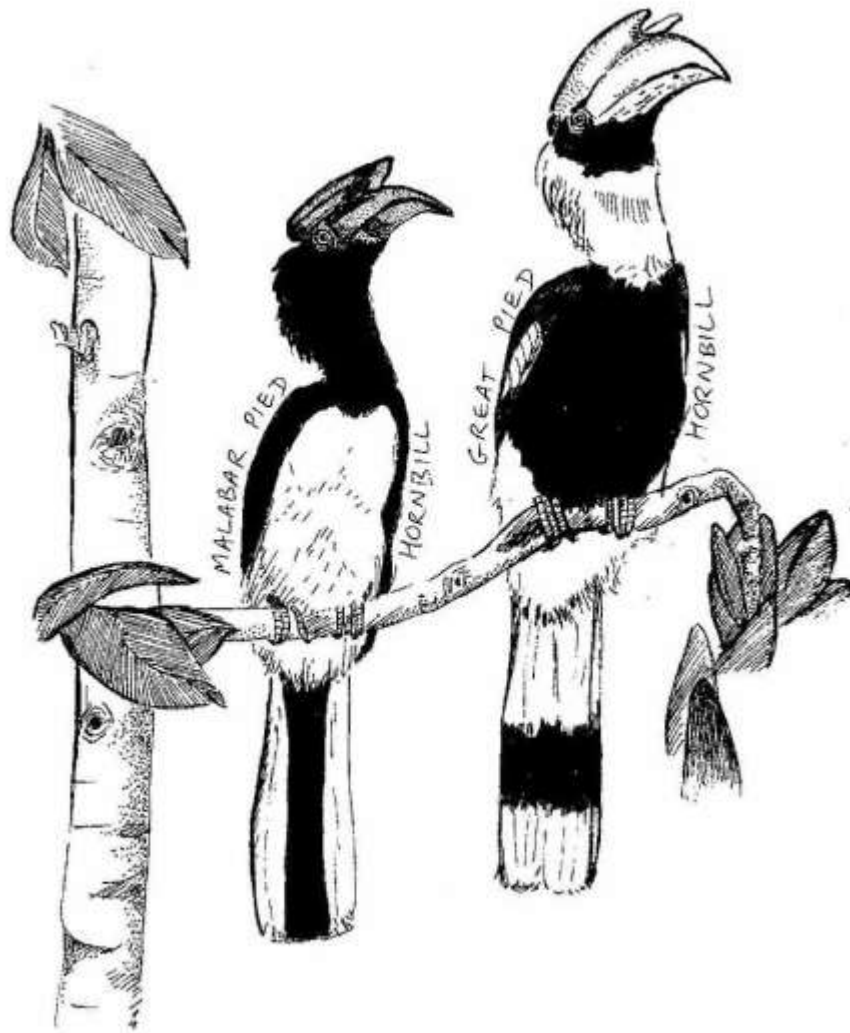
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CAS/E&F-Bio/1999



RaAG

Research, Assessment and Analysis Group



A survey of central acts relevant to the conservation of biodiversity in India, identifying major gaps in coverage.

Scripted in 1992, while both the authors were at the Indian Institute of Public Administration, New Delhi. An edited version of this report was published as a chapter in *Widening Perspectives on Biodiversity*, Anatole F. Krattiger, Jeffrey A. McNeely, William H. Lesser, Kenton R. Miller. (ed.), Natraj Publishers, Dehra Dun, 1994.

The sketch above and on the cover is by Pratibha Pande.

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1.0. INTRODUCTION

1.1. Concern over the rapid erosion of biodiversity has necessitated a review of the national and international provisions relating to its control. Among the vital provisions would be legal measures. To this end the Ministry of Environment and Forests, Government of India, requested a report on the legal structure relating to various aspects of biodiversity conservation and use in India. This paper makes a beginning in this direction, attempting to review the acts and regulations governing the protection of, access to, use of, and other related aspects of biodiversity components*.

1.2. In the course of this study, over 40 central acts (see Appendix 1 for full list) and other relevant material were reviewed. Discussions were held with experts in the field, including Dr. R.S. Paroda, Dy. Director-General, ICAR, Dr. Mangla Rai, Asst. Director General, ICAR, Usha Menon, NISTADS, and others.

2.0. SCOPE AND LIMITATIONS OF STUDY

2.1. Since only about three weeks were given for this study, in order for it to be ready before the next round of the Inter-governmental Negotiating Committee at Nairobi in February, its scope is fairly restricted. It examines only central laws directly relevant to biodiversity; a large number of state legislations which may be of relevance have been identified (see list in Appendix 2) but not reviewed here. Nor have international agreements to which India is a party, and which specify certain obligations with regard to biodiversity protection and use, been studied. Some of these are listed in Appendix 5, with brief notes on the major provisions. In addition, many laws which may be of indirect relevance, such as the Land Acquisition Act of 1894, have

* Unless otherwise specified, 'biodiversity components' in this paper refer to both living species as also genetic material like seeds and germplasm.

not been examined. Nor has it been possible to review all the voluminous rules that have over the last century or so been promulgated under various acts. Finally, this report does not attempt to comment on the implementation of the acts discussed; this would be a full exercise in its own right.

2.2. Notwithstanding the above-mentioned limitations, our discussions with experts in the field lead us to be reasonably sure that, at least at the central level, all the most relevant legislations have been dealt with here. However, we would urge the Ministry of Environment and Forests, or other groups/individuals, to undertake a more comprehensive study taking into its purview the various other aspects mentioned in Section 2.1. above.

3.0. BIODIVERSITY COMPONENTS: A CONCEPTUAL APPROACH

3.1. For the purposes of this paper, we have categorised biodiversity components into five heads:

1. Wild fauna
2. Wild flora
3. Domesticated fauna (livestock)
4. Domesticated flora (crops and other cultivated plants)
5. Genetic materials (seeds, eggs, germplasm, semen, etc.)

3.2. The legal framework relating to each of these categories of biodiversity components has been assessed in terms of 11 aspects of biodiversity. These aspects are discussed below.

3.3.1. Identification: The process of locating, and thereafter establishing the identity, distribution, occurrence, status, and value of biodiversity components. Relevant to both wild and domesticated fauna and flora.

3.3.2. Protection in-situ: Efforts at protecting and conserving biodiversity, including the habitats within which biodiversity components survive and evolve. Applies especially to wild fauna and flora, but also to domesticated fauna and flora at the sites of their use, in so far as these may need to be protected from disease/infestation, displacement by new varieties, and

destruction due to human activities.

- 3.3.3. Protection ex-situ: Attempts at preserving living species or genetic material in gene banks, zoological parks, botanical gardens, and sites other than their natural habitat. Relevant to all biodiversity components.
- 3.3.4. Access/extraction: Controls on the kind and amount of access to fauna and flora in the wild, to ex-situ collections, and to genetic material; also the modes of extraction of these components, relevant especially to in-situ stock. Overlaps with Intellectual Property Rights, Section 3.3.11. below.
- 3.3.5. Use: Attempts at utilising biodiversity for subsistence, commercial, scientific, or other purposes. Relevant to all biological components.
- 3.3.6. Breeding/Cultivation/Multiplication: Artificial or induced measures for regenerating flora-fauna populations in captive or closed conditions. Relevant to both wild and domestic fauna and flora.
- 3.3.7. Trade: Activities relating to the barter, sale, import, export, and other forms of exchange of biodiversity components.
- 3.3.8. Introduction/Augmentation/Re-introduction: Measures to deliberately stock an ecosystem or area with species which did not previously exist there (introduction), or where they have declined or need to be increased in number (augmentation), or where they have died out (re-introduction). Relevant to both wild and domesticated fauna and flora, as also to genetic material (e.g. seeds) used for the purpose.
- 3.3.9. Release: Disposal of biodiversity components, without the specific purpose of introducing, augmenting, or re-introducing them, into the environment. Relevant to all biodiversity components.
- 3.3.10. Movement: Measures to transport, by human means, biodiversity components from one location to another; especially relevant in

cases of transportation across ecosystems or bioregions, involving the possibility of accidental release of components. Does not include natural or voluntary movement of animals, or movement of seeds or other floral parts by natural means. Relevant to all biodiversity components.

- 3.3.11. Intellectual property rights: Measures pertaining to the rights of the state, organisations, or individuals, over biological and biotechnological knowledge, including patents, royalties, intellectual property rights, farmers' rights, and breeders' rights.

4.0. CENTRAL LAWS RELEVANT TO BIODIVERSITY: A GENERAL OVERVIEW

4.1. Appendix 4 provides a checklist of the legal status of different categories of biodiversity components in India, pertaining to the various aspects mentioned above (3.3.1 to 3.3.11). Appendix 5 gives a detailed statement of specific laws, and their major provisions relevant to biodiversity, which have been enacted by the Government of India. In this section, we summarise the main findings. For reasons of convenience, and since there is considerable overlap, we are in this section clubbing the categories of biodiversity components into three heads: wild fauna and flora, domesticated fauna and flora, and genetic materials.

4.2. Wild Fauna and Flora

By far the largest number of the laws reviewed were relevant to wildlife and wild biodiversity habitat. These are discussed below, as relevant to each of the 11 aspects of biodiversity.

- 4.2.1. Identification: There appears to be no legal provision stipulating the identification of wild species of fauna and flora. Nevertheless, agencies like the Zoological Survey of India, the Botanical Survey of India, State Forest Departments, and many independent organisations and individuals are involved in identifying species of wild fauna and flora.

4.2.2. Protection in-situ: Several acts are relevant to the protection of species in-situ, either through stipulating restrictions or prohibitions on hunting, cutting, etc. of notified species, or through providing protection to their habitats. The former (species protection) is provided for in the *Wild Life (Protection) Act of 1972* and its 1991 amendments (with legal protection being given to all species listed in Schedules I to IV). The latter (habitat protection) is directly stipulated in the *Indian Forest Act of 1927*, the *Wild Life (Protection) Act of 1972*, the *Forest (Conservation) Act of 1980*, the *Territorial Waters, Continental Shelf, Exclusive Economic Zone, and Other Maritime Zones Act of 1976*, and the *Environment (Protection) Act of 1986*. It is also indirectly provided for in the *Fisheries Act of 1894*, the *Water (Prevention and Control of Pollution) Act of 1974*, the *Air (Prevention and Control of Pollution) Act of 1981*, and the *Prevention of Damage to Public Property Act of 1984*, in so far as these regulate damage to or destruction of natural habitats, though not explicitly with the purpose of protecting biodiversity.

4.2.3. Protection ex-situ: Very few acts relate to ex-situ protection of wild species. The *Wild Life (Protection) Act of 1972* provides some controls over keeping of animals in captivity, while its 1991 amendments contain provisions regarding the management of zoos, and relating to the possession and cultivation of notified plant species. Agencies like the Botanical Survey of India, and wildlife wings of state Forest Departments are making attempts at giving ex-situ protection to wild fauna and flora, though without any legal mandate. Botanical gardens seem to have no national legal status.

4.2.4. Access/Extraction: With the exception of the legal rights vested in individuals, communities, and governments, by virtue of their

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4.2.4. Access/Extraction: With the exception of the legal rights vested in individuals, communities, and governments, by virtue of their

Life (Protection) Act of 1972. As pointed out above, there seems to be no central law which governs botanical gardens in general, such as the *Wild Life (Protection) Act of 1972* governs zoological parks.

4.2.8. Introduction/Augmentation/Re-introduction: There appears to be no central act governing the introduction, augmentation, or re-introduction of wild animals and plants. The only one which may be relevant, to some extent, is the *Destructive Insects and Pests Act of 1914*, which regulates or prohibits activities that could lead to an introduction or spread of pests from one area to another, or from another country into India.

4.2.9. Release: There appears to be no central act covering this.

4.2.10. Movement: Control over the mode and means of transportation of specified biodiversity components is provided for in all the acts relevant to trade (see 4.2.6. above). In addition, the *Prevention of Cruelty to Animals Act of 1960* and its subsequent rules regulate conditions of transportation of animals.

4.2.11. Intellectual property rights: Knowledge of biodiversity components and their characteristics is not covered under any central law. The *Patents Act of 1970* does not include within its purview biodiversity components, since it is restricted to inventions relating specifically to products and processes of manufacture.

4.3. Domesticated Fauna and Flora

Compared to wild fauna and flora, there are relatively fewer laws concerning livestock, crops, and other domesticated biodiversity. These are discussed below, as relevant to each of the 11 aspects of biodiversity.

4.3.1. Identification: There appears to be no central law stipulating the identification (and associated activities) of domesticated fauna and flora. Agencies like the National Bureau of Plant

Genetic Resources, the National Bureau of Fish Genetic Resources, and the National Bureau of Animal Genetic Resources, are conducting identification exercises, but these do not seem to have any legal mandate.

4.3.2. Protection in-situ: Conservation of crops and livestock at the sites of their use, or conversely, sanctions against their destruction at these sites or elsewhere, is not covered by any central law.

4.3.3. Protection ex-situ: There seems to be no act governing the protection of domesticated biodiversity in ex-situ conditions, though agencies like the National Bureau of Plant Genetic Resources (NBPGR) are maintaining such stocks, and the *1988 New Policy on Seed Development* provides for the supply of imported plant cuttings and saplings by the importers to the gene bank of the NBPGR.

4.3.4. Access/Extraction: With the exception of the legal rights vested in individuals, communities, and governments, by virtue of their ownership of private, community, or government property, respectively, there seem to be no central acts governing property rights to domesticated fauna and flora.

4.3.5. Use: As in the case of wild biodiversity, the use of domesticated flora and fauna is governed by very few acts, though there may be several on the use of the products or extracts of these components. The *Prevention of Cruelty to Animals Act of 1960* extends protection against misuse, to domesticated animals.

4.3.6. Trade: The largest number of laws relevant to domesticated biodiversity relate to its barter, sale, import, export, or other form of exchange. Provisions for controlling trade within India are contained in the *Agricultural Produce (Grading and Marking) Act of 1937*, and in several laws relating to individual species or classes of crops, such as the *Rubber (Production and*

(Marketing) Act of 1947, the Tea Act of 1953, the Cardamom Act of 1963, the Tobacco Board Act of 1975, the Coconut Development Board Act of 1979, the National Oilseeds and Vegetable Oils Development Board Act of 1983, and the Spices Board Act of 1986. These acts also govern the import and export of these crops; in addition, import-export of domesticated plants is regulated by the Destructive Insects and Pests Act of 1914 (especially under the Plants, Fruits, and Seeds (Regulation of Import into India) Order of 1984) and the Agricultural and Processed Food Products Export Development Authority Act of 1985-86; the latter includes within its purview medicinal plants. In addition, the Special Licensing Procedures and the Import Policy for Registered Exporters of the Export and Import Policy govern the import of living plants. International trade in some kinds of livestock is covered by the National Dairy Development Board Act of 1987. In addition, import-export of specified kinds of both plants and animals can potentially be controlled by the Import and Exports (Control) Act of 1947 and the Customs Act of 1962.

4.3.7. Breeding/Cultivation/Multiplication: There appears to be no central act covering the breeding of domesticated animals, except to some extent the *National Dairy Development Board Act of 1987*, which has general clauses on promoting animal husbandry and facilitating the "enhancement of cattle wealth". Cultivation of domesticated plants in general is not covered by any central act, but growing of tea, cardamom and other spices, coconut, tobacco, oil-yielding plants, and certain other crops is encouraged or regulated by the specific acts mentioned above in Section 4.2.6.

4.3.8. Introduction/Augmentation/Re-introduction: More or less the same acts as govern breeding and cultivation also deal with the introduction, augmentation, and re-introduction of domesticated

animals and plants.

4.3.9. Release: There appears to be no central law relating to this aspect.

4.3.10. Movement: Transportation of specified plants within India, specifically those which might carry pests with them, is regulated by the *Destructive Insects and Pests Act of 1914*. There appears to be no act regulating other domesticated plants. The *Prevention of Cruelty to Animals Act of 1960* and its subsequent rules specify conditions of transportation of animals. The international movement of domesticated species is regulated by the various acts related to import and export, mentioned in Section 4.2.6. above..

4.3.11. Intellectual property rights: Knowledge of agricultural and animal husbandry, variously known as intellectual property, farmers' rights, or breeders' rights, is not covered by any central law. The *Patents Act of 1970* does not include within its purview such components, since it is restricted to inventions relating specifically to products and processes of manufacture.

4.4. Genetic Materials

With the exception of seeds, genetic materials seem to be least covered by laws in India. The acts relevant to various aspects of such materials are discussed below.

4.4.1. Identification: This does not appear to be stipulated in any central act. Agencies like the National Bureau of Plant Genetic Resources, the National Bureau of Fish Genetic Resources, and the National Bureau of Animal Genetic Resources, are conducting identification exercises, but these do not seem to have any legal mandate.

4.4.2. Protection in-situ: In-situ protection seems relevant mainly to seeds, since other genetic materials are best preserved in the living organisms which are their source. However, there appears to be no act providing protection to even this restricted class

of materials; neither the *Seeds Act of 1966* nor the *1988 New Policy on Seed Development* deal with this aspect.

- 4.4.3. Protection ex-situ: Supply of a portion of imported seeds and other plant material, by the importer to the NEPGR for accession to its gene bank, has been made obligatory under the *1988 New Policy on Seed Development*. There appear, however, to be no laws relevant to ex-situ protection of genetic materials. The agencies named in Section 4.4.1. are conducting ex-situ operations without any legal mandate.
- 4.4.4. Access/Extraction: There seems to be no law governing this aspect, except of course those relating to property, in so far as genetic materials may be under private, corporate, or government ownership, and therefore given the status of property.
- 4.4.5. Use: It may be possible to use the Environment (Protection) Act of 1986 to control the use of those genetic materials which can be classified as hazardous. Otherwise, there appears to be no law governing this aspect.
- 4.4.6. Trade: Sale and other exchange of seeds of notified crops, as also their export and import, is governed by the *Seeds Act of 1966*, while all imports of seeds and plant materials are regulated by the *Plants, Fruits and Seeds (Regulation of Import into India) Order of 1984* made under the *Destructive Insects and Pests Act of 1914*. The *1988 New Policy on Seed Development* also stipulates restrictions on the import of plant materials. The *Agricultural Produce (Grading and Marking) Act of 1937* can be used to regulate internal trade of seeds (and possibly other genetic material under a general clause of extension) considered below standard. Import-export of seeds of certain specified crops, like tea and cardamom, are governed by the specific laws mentioned in Section 4.2.6. above. The *National Dairy Development Board Act of 1987* provides for the import of

livesstock semen, but there is no other act regulating the trade in animal genetic materials. It may be possible to extend the scope of both the *Import and Export (Control) Act of 1947* and the *Customs Act of 1962* to include such materials, but, as far as we could ascertain, this has not yet been done.

4.4.7. Breeding/Cultivation/Multiplication: The *National Oilseeds and Vegetable Oils Development Board Act of 1983* has provisions for assisting in the production and development of oilseeds. Such a provision is also made in the acts regulating the cultivation of and trade in tea, rubber, and cardamom, named in Section 4.2.6. above. Apart from these, there seems to be no other act encouraging or regulating the multiplication of genetic materials. The agencies mentioned in Section 4.4.1. above are engaged in this task, but not under any legal mandate.

4.4.8. Introduction/Augmentation/Re-introduction: Introduction of genetic materials of exotic varieties of plants into India is partially covered by the *Seeds Act of 1966*, and the *Plants, Fruits, and Seeds (Regulation of Import into India) Order of 1984* made under the *Destructive Insects and Pests Act of 1914*. The *National Dairy Development Board Act of 1987* provides for the introduction of semen of exotic livestock species into India. There seems to be no other act governing the introduction of genetic materials, even the hazardous act of introducing genetically altered materials.

4.4.9. Release: Recently (1991) rules have been framed under the *Environment (Protection) Act of 1986*, to regulate the release of genetically altered materials into the environment. Other genetic materials are however not covered by this, or other laws.

4.4.10. Movement: The various laws regulating internal and external trade in genetic materials, particularly seeds, also have general stipulation concerning the transportation of any goods

under their purview. Otherwise, there is no act concerning this aspect.

4.4.11. Intellectual property rights: There is no act relevant to knowledge regarding genetic material.

5.0. MAJOR LACUNAE IN LEGISLATION CONCERNING BIODIVERSITY, AND SOME SUGGESTIONS FOR FUTURE DIRECTIONS

5.1. On the basis of the quick survey of central acts relevant to biodiversity, some areas of special concern are apparent. There seem to be serious lacunae in the legal coverage provided to the following categories and aspects of biodiversity.

5.1.1. Identification is not provided for in any laws. Since this is a prerequisite to protection, the laws relevant to in-situ protection can perhaps be amended to include this aspect, for all biodiversity components.

5.1.2 In-situ protection is not extended by any law to domesticated flora and fauna, or to seeds. It is well-established that evolution of crop and livestock varieties takes place "in the field" as much as in laboratory conditions, and that the protection of these varieties in areas of cultivation or animal husbandry is a vital part of biodiversity conservation. In addition, protection against loss of such diversity in the field is crucial if farmers are to gain from it, since their access to ex-situ collections is restricted. Hence a legal structure which could safeguard against in-situ erosion of domesticated flora and fauna is essential.

5.1.3 Ex-situ protection: Though a number of agencies are maintaining ex-situ collections of species, varieties, and genetic material, no direct and explicit provisions apply to such collections, except in the case of wild animals. There is perhaps also a need to give legal backing to the principle that ex-situ conservation measures should never replace in-situ measures.

- 5.1.4. Use: The possibility of misusing genetic material, especially biotechnological materials where genetic alterations have been made, is a real threat. The issue of "bio-safety" is currently being discussed even at the level of the global Biodiversity Convention, and needs to be urgently examined within India. Legal stipulations on such use would be necessary.
- 5.1.5 Introduction: The introduction of exotics into natural and agricultural ecosystems has often caused havoc in India and elsewhere, including erosion of biodiversity. Legal restrictions and prohibitions on this are absent in the case of all biodiversity components, and are urgently required.
- 5.1.6 Release: Repercussions of dumping, or unintentional release of biodiversity components, especially exotics, can be disastrous. No law covers this for any biodiversity component (except genetically altered materials), a gap which needs to be plugged.
- 5.1.7 Intellectual property rights: This is a difficult and contentious issue. At a global level, India and many other nations had until very recently taken a position of free access to plant genetic resources, intellectual property, biotechnology, etc. This was diluted when FAO accepted the compromise formulations of 'farmers' rights' and 'breeders' rights' (a detailed assessment of this has been done by Usha Menon of NISTADS for the Ministry of Environment). Within the country, a legal structure ensuring free access should be created, while at the same time rewarding and providing some form of incentives to those with traditional or new knowledge relating to biodiversity and biotechnology.
- 5.2. Filling the above mentioned major gaps, and other specific minor ones, in the legal framework concerning biodiversity in India is an urgent requirement. It would be necessary, however, to first conduct a more comprehensive survey and analysis of laws, regulations, policies,

orders, and procedures, both at the central level and state level, than has been possible in this study. Also necessary would be an assessment of the efficacy of the existing laws, to address the constraints in implementation. Such a task should be urgently handled by an individual or group competent in legal matters as well as biodiversity issues.

Appendix 1

CENTRAL ACTS STUDIED IN THE PREPARATION OF THIS REPORT

(Acts arranged chronologically)

Sl.No.	Name of Act	Year	No.
1	Fisheries Act	1897	4
2	Live-stock Importation Act	1898	9
3	Destructive Insects and Pests Act	1914	2
4	Forest Act	1927	16
5	Sugar-cane Act	1934	15
6	Agricultural produce (Grading and Marking) Act	1937	1
7	Agricultural Produce Cess Act	1940	27
8	Drugs and Cosmetics Act	1940	23
9	Coffee Act	1942	7
10	Import and Export (Control) Act	1947	18
11	Rubber Act	1947	24
12	Drugs (Control) Act	1950	26
13	Tea Act	1953	29
14	Medicinal and Toilet Preparations (Excise Duties) Act	1955	16
15	Prevention of Cruelty to Animals Act	1960	59
16	Customs Act	1962	52
17	Marine Insurance Act	1963	11
18	Cardamom Act	1965	42
19	Seeds Act	1966	54
20	Patents Act	1970	39
21	Wild Life (Protection) Act	1972	53
22	Marine Products Export Development Authority Act	1972	13

Sl.No.	Name of Act	Year	No.
23	Water (Prevention and Control of Pollution) Act	1974	6
24	Conservation of Foreign Exchange and Prevention of Smuggling Activities Act	1974	52
25	Tobacco Board Act	1975	4
26	Territorial Waters, Continental Shelf, Exclusive Economic Zone and other Maritime Zones Act	1976	80
27	Coconut Development Board Act	1979	5
28	Forest (Conservation) Act	1980	69
29	National Bank for Agricultural and Rural Development Act	1981	61
30	Maritime Zones of India (Regulation of Fishing by Foreign Vessels) Act	1981	42
31	Air (Prevention and Control of Pollution) Act	1981	14
32	National Oil Seeds and Vegetable Oils Development Board Act	1983	21
33	Prevention of Damage to Public Property Act	1984	3
34	Inland Waterways Authority of India Act	1985	82
35	Spices Board Act	1986	10
36	Agricultural and Processed Food Products Export Development Authority Act, 1985	1986	2
37	Environment (Protection) Act	1986	29
38	Spices Cess Act	1986	11
39	Consumer Protection Act	1986	68
40	National Dairy Development Board Act	1987	37

STATE ACTS WHICH MAY BE RELEVANT TO BIODIVERSITY

(Arranged alphabetically by state, and within each state, by act name)

STATE	NAME OF ACT	YEAR	NUMBER
Andhra Pradesh	Agricultural Pests and Diseases Act	1919	3
Andhra Pradesh	Animals and Birds Sacrifices Prohibition Act	1950	32
Andhra Pradesh	Cotton Control Act	1952	15
Andhra Pradesh	Dangerous Drugs (Andhra Pradesh) (Andhra Area) Amendment Act	1950	16
Andhra Pradesh	Estate Communal Forest and Private Lands (Prohibition of Alienation) Act	1947	14
Andhra Pradesh	Fisheries (Andhra Pradesh Extension and Amendment) Act	1961	5
Andhra Pradesh	Forest (Validation) Act	1882	Central Act 21
Andhra Pradesh	Forest Act	1967	1
Andhra Pradesh	Gaming Act	1974	27
Andhra Pradesh	Improved Seeds and Seedlings Act	1951	28
Andhra Pradesh	Jute (Control of Prices and Sales) Act	1950	5
Andhra Pradesh	Live-stock Improvement Act	1940	15
Andhra Pradesh	Minor Forests Produce (Regulation of Trade) Act	1971	4
Andhra Pradesh	Opium and Dangerous Drugs (Andhra Pradesh) (Andhra Area) Amendment Act	1951	32
Andhra Pradesh	Opium and Dangerous Drugs (Andhra Pradesh) (Andhra Area) Amendment Act	1947	34
Andhra Pradesh	Preservation of Private Forests Act	1954	President's Act 12
Andhra Pradesh	Prohibition of Cow Slaughter and Animal Preservation Act	1977	11
Andhra Pradesh	Rivers Conservancy Act	1884	4
Andhra Pradesh	Scheduled Areas Minor Forest Produce (Regulation of Trade) Regulation	1979	1
Andhra Pradesh	Silkworm Seed (Control) Act	1956	15
Andhra Pradesh	Slaughter of Animals Act	1950	7
Andhra Pradesh	Sugarcane (Regulation of Supply and Purchase) Act	1961	45

STATE	NAME OF ACT	YEAR	NUMBER
Andhra Pradesh	Towns Nuisances and Prevention of Cruelty to Animals (Amendment) Act	1942	20
Arunachal Pradesh	Anchal Forest Reserve (Constitution and Maintenance) Act	1976	1
Arunachal Pradesh	Forest (Removal of Timber) Regulation Act	1983	5
Arunachal Pradesh	Forest Reserve (Constitution and Maintenance) Act	1976	1
Assam	Agricultural (Pests and Diseases) Act	1950	35
Assam	Agricultural Produce Marketing Act, 1972	1974	23
Assam	Cattle Preservation Act	1951	13
Assam	Cruelty to Animals Act	1869	1
Assam	Forest Product (Acquisition) Act	1950	31
Assam	Forest Protection Force Act, 1986	1987	22
Assam	Game and Betting Act	1970	18
Assam	Private Fisheries Protection Act	1935	1
Assam	Pure Food Act	1947	22
Assam	Rhinoceros Preservation Act	1954	20
Assam	Water Hyacinth Act	1926	3
Bihar	Agricultural Products Market (Validation) Act	1982	64
Bihar	Development of Ayurvedic and Unani systems of Medicines Act, Bihar	1951	31
Bihar	Development of Homoeopathic Systems of Medicine (Validation) Act, 1974	1975	4
Bihar	Development of Homoeopathic Systems of Medicine Act, Bihar	1953	24
Bihar	Forest Produce (Regulation of Trade) Act	1984	12
Bihar	Forests (Bihar and Orissa Amendment) Act, Indian	1934	3
Bihar	Forests (Bihar and Orissa Amendment) Act, Indian	1935	9
Bihar	Kendu Leaves (Control on Trade) Act, 1973	1974	5
Bihar	Khadi and Village Industries Act, Bihar	1956	14

STATE	NAME OF ACT	YEAR	NUMBER
Bihar	Preservation and Improvement of Animals Act, Bihar	1956	2
Bihar	Prevention and Control of Agricultural Pests, Diseases and Noxious Weeds Act, Bihar	1953	22
Bihar	Private Fisheries Protection Act	1889	2
Bihar	Private Forests (Validating) Act, Bihar	1949	12
Bihar	Private Forests Act, Bihar	1946	9
Bihar	Public Parks Act, Bengal	1904	2
Bihar	Raw Jute and Jute Goods Futures Act, Bihar	1950	4
Bihar	Restriction of Uses of Land Act, Bihar	1948	23
Bihar	Soil and Water Conservation and Land Development Act, 1981	1982	7
Bihar	Sugarcane (Regulation of Supply and Purchase) Act, 1981	1982	37
Daman and Diu	Diseases of Animals Act	1974	9
Daman and Diu	Fisheries (Goa, Daman and Diu Amendment) Act, 1968	1970	11
Daman and Diu	Live-stock Improvement Act, 1972	1973	5
Daman and Diu	Marine Fishing Regulation Act	1981	3
Daman and Diu	Plant Diseases and Pests Act	1976	12
Daman and Diu	Preservation of Trees Act	1984	6
Goa	Diseases of Animals Act	1974	9
Goa	Fisheries (Goa, Daman and Diu amendment) Act, 1968	1970	11
Goa	Live-stock Improvement Act, 1972	1973	5
Goa	Maharashtra Agricultural Produce Marketing (Regulation) (First Goa, Daman and Diu Amendment) Act, 1971	1972	3
Goa	Marine Fishing Regulation Act	1981	3
Goa	Plant Diseases and Pests Act	1976	12
Goa	Preservation of Trees Act	1984	6
Gujarat	Agricultural Pests and Diseases Act, Gujarat	1980	7

STATE	NAME OF ACT	YEAR	NUMBER
Gujarat	Animals and Birds Sacrifices (Prohibition) Act, Gujarat	1972	19
Gujarat	Diseases of Animals (Control) Act, Gujarat	1963	27
Gujarat	Felling of Trees (Infliction of Punishment) Act, Saurashtra	1951	17
Gujarat	Fodder and Grain Control Act, Bombay	1939	26
Gujarat	Forest (Bombay Amendment) Act, Indian	1956	20
Gujarat	Forest (Bombay Amendment) Act, Indian	1956	17
Gujarat	Forest (Bombay Amendment) Act, Indian	1953	25
Gujarat	Forest (Bombay Amendment) Act, Indian	1948	62
Gujarat	Forest (Bombay Amendment) Act, Indian	1955	24
Gujarat	Forest (Bombay Amendment) Act, Indian	1957	26
Gujarat	Forest (Gujarat Amendment) Act, Indian	1963	48
Gujarat	Forest (Gujarat Amendment) Act, Indian	1976	11
Gujarat	Forest (Gujarat Unification and Amendment) Act, Indian	1960	15
Gujarat	Live-stock Improvement Act, Gujarat	1980	25
Gujarat	Minor Forest Produce Trade Nationalisation Act, Gujarat	1979	7
Gujarat	Private Forests (Acquisition) Act, Gujarat	1979	14
Haryana	Agricultural Pests, Diseases and Noxious Weeds Act (Punjab)	1949	4
Haryana	Agricultural Produce Markets Act (Punjab)	1961	23
Haryana	Ayurvedic and Unani Practitioners Act (Punjab)	1963	42
Haryana	Cattle Fairs Act (Haryana)	1970	30
Haryana	Fisheries Act (Punjab)	1914	2
Haryana	Forest (East Punjab Amendment) Act, (Indian)	1948	7
Haryana	Forest (Haryana Amendment) Act, Indian	1973	12

STATE	NAME OF ACT	YEAR	NUMBER
Haryana	Forest (Haryana Second Amendment) Act, Indian	1973	31
Haryana	Forest (Punjab Amendment) Act, Indian	1962	13
Haryana	Forest (Punjab Amendment) Act, Indian	1954	20
Haryana	Forest Development Act, Haryana	1983	7
Haryana	Fruit Nurseries Act (Punjab)	1961	13
Haryana	Improved Seeds and Seedlings Act (Punjab)	1949	19
Haryana	Land Preservation Act (Punjab) Act	1900	2
Haryana	Livestock Improvement Act (Punjab)	1953	47
Haryana	Livestock and Birds Diseases Act (Punjab)	1948	47
Haryana	Silk Worm Seed Control Act (Punjab)	1953	17
Haryana	Sugarcane (Regulation of Purchase and Supply) Act (Punjab)	1953	40
Haryana	Village Common Lands (Regulation) Act (Punjab)	1961	18
Himachal Pradesh	Agricultural Pests, Diseases and Noxious Weeds Act, 1968	1969	18
Himachal Pradesh	Ayurvedic and Unani Practitioners Act	1968	21
Himachal Pradesh	Fisheries Act	1976	16
Himachal Pradesh	Forest (Himachal Pradesh Amendment) Act	1968	25
Himachal Pradesh	Forest (Sale of Timber) Act	1968	18
Himachal Pradesh	Forest Act	1927	16
Himachal Pradesh	Forest Produce (Regulation of Trade) Act	1982	5
Himachal Pradesh	Fruit Nurseries Registration Act	1973	15
Himachal Pradesh	Land Preservation Act	1978	28
Himachal Pradesh	Livestock Improvement Act	1968	16
Himachal Pradesh	Livestock and Birds Diseases Act, 1968	1969	24

STATE	NAME OF ACT	YEAR	NUMBER
Himachal Pradesh	Preservation of Forests and Maintenance of Forest Based Supplies Essential to the Community Act	1984	22
Himachal Pradesh	Private Forests Act, 1954	1955	6
Himachal Pradesh	Silkworm Seeds Control Act	1968	17
Himachal Pradesh	Universities of Agriculture, Horticulture and Forestry Act, 1986	1987	4
Himachal Pradesh	Van Utpad (Beopar Viniyam) Adhiniyam	1982	5
Jammu and Kashmir	Aid to Agriculturists and Land Improvements Act	Svt: 1993	7
Jammu and Kashmir	Ayurvedic and Unani Practitioners Act	1959	26
Jammu and Kashmir	Fisheries Act	Svt: 1960	
Jammu and Kashmir	Food Control Act	Svt: 1986	1
Jammu and Kashmir	Forest (Sale of Timber) Act	Svt: 1987	3
Jammu and Kashmir	Forest Act	Svt: 1987	2
Jammu and Kashmir	Forest Corporation Act	1978	12
Jammu and Kashmir	Fruit Nurseries (Licensing) Act	1987	22
Jammu and Kashmir	Game Preservation Act	Svt: 1977	20
Jammu and Kashmir	Government Aid to Agriculturists and Land Improvement Act	Svt: 1993	7
Jammu and Kashmir	Livestock Improvement Act	Svt: 1996	23
Jammu and Kashmir	Mulberry Protection Act	Svt: 2006	10
Jammu and Kashmir	Nationalization of Forest Working Act	1987	7
Jammu and Kashmir	Plant Diseases and Pests Act	1973	14
Jammu and Kashmir	Preservation of Specified Trees Act	1969	5

STATE	NAME OF ACT	YEAR	NUMBER
Jammu and Kashmir	Prevention of Cruelty to Animals Act	Svt: 2006	13
Jammu and Kashmir	Prohibition on Conversion of Land and Alienation of Orchards Act	1975	8
Jammu and Kashmir	Removal of Bovine Animal Prohibited	Svt: 1950	
Jammu and Kashmir	Sheep and Sheep Products Development Board Act	1979	9
Jammu and Kashmir	Silk Protection Act (see Kashmir Silk Protection Act)	Svt: 1964	12
Jammu and Kashmir	Utilization of Land Act	Svt: 2010	9
Jammu and Kashmir	Vegetable Seeds Act	Svt: 2009	12
Jammu and Kashmir	Wild Life Protection Act	1978	8
Karnataka	Agricultural Lands (Prohibition of Alienation) (Repealing) Act	1974	4
Karnataka	Agricultural Pests and Diseases Act, 1968	1969	1
Karnataka	Agricultural Produce Marketing (Regulation) Act	1966	27
Karnataka	Animal Diseases (Control) Act, 1961	1962	18
Karnataka	Coffee Stealing Prevention Act, Madras	1878	8
Karnataka	Coffee Stealing Prevention Act, Mysore	1878	8
Karnataka	Cotton Control Act	1964	43
Karnataka	Estates, Communal Forest and Private Lands (Prohibition of Alienation) Act, Madras	1947	14
Karnataka	Fisheries (Madras Amendment) Act, Madras	1929	2
Karnataka	Fisheries Act, Hyderabad	1356	23
Karnataka	Fodder and Grain Control Act, Bombay Forfeited Lands Restoration Act, Bombay	1938	22
Karnataka	Forest (Validation) Act, Madras	1882	21
Karnataka	Forest Act, 1963	1964	5

STATE	NAME OF ACT	YEAR	NUMBER
Karnataka	Government Parks (Preservation) Act	1975	23
Karnataka	Hill Stations (Preservation of Trees) Act, Madras	1955	17
Karnataka	Improved Seeds and Seedlings Act, Hyderabad	1951	28
Karnataka	Jute (Control of Prices and Sales) Act, Madras	1950	5
Karnataka	Jute Goods Control Act, Madras	1949	28
Karnataka	Livestock Improvement Act	1961	30
Karnataka	Marine Fishing (Regulation) Act	1986	24
Karnataka	Opium and Dangerous Drugs (Madras Amendment) Act, Madras	1947	34
Karnataka	Parks, Play-Fields and Open Spaces (Preservation and Regulation) Act	1985	16
Karnataka	Preservation of Tree Act	1976	76
Karnataka	Prevention of Animal Sacrifices Act, 1959	1960	3
Karnataka	Prevention of Cow Slaughter and Cattle Preservation Act	1964	35
Karnataka	Prevention of Cruelty to Animals (Bombay Amendment) Act	1953	22
Karnataka	Prevention of Cruelty to Animals, the Bombay District Police and the City of Bombay Police (Amendment) Act, Bombay	1946	28
Karnataka	Prevention of Sale of Silahdori Horses Act, Hyderabad	1317	9
Karnataka	Rivers Conservancy Act, Madras	1884	6
Karnataka	Scheduled Castes and Scheduled Tribes (Prohibition of Transfer of certain Lands) Act, 1978	1979	2
Karnataka	Seed Farms Act	1975	15
Karnataka	Sheep and Sheep Products Development Act, 1973	1974	12
Karnataka	Silk Worm Seed and Cocoon (Regulation of Production Supply and Distribution) Act, 1959	1960	5
Karnataka	Slaughter of Animals Act, Hyderabad	1950	7
Karnataka	Tribal Areas Regulation, Hyderabad	1359	3

STATE	NAME OF ACT	YEAR	NUMBER
Kerala	Animals and Birds Sacrifices Prohibition Act	1968	20
Kerala	Cochin University of Science and Technology Act	1986	31
Kerala	Essential Articles Control Act	1986	13
Kerala	Estates, Communal, Forest and Private Lands (Prohibition of Alienation) Act	1947	14
Kerala	Fisheries Act	1950	34
Kerala	Forest Act	1962	4
Kerala	Forest Produce (Fixation of Selling) Price Act	1978	29
Kerala	Hill Stations (Preservation of Trees) Act	1955	17
Kerala	Irrigation Tanks (Preservation and Improvement) Act	1952	23
	(Applicable to Malabar only)		
Kerala	Land Conservancy Act	1958	8
Kerala	Land Development Act	1964	17
Kerala	Livestock Improvement Act	1961	17
Kerala	Marine Fishing Regulation Act	1968	32
Kerala	Parks, Playfields and Open Spaces (Preservation and Regulation) Act	1969	2
Kerala	Plant Diseases and Pests Act	1972	25
Kerala	Preservation of Private Forests Act	1972	16
Kerala	Preservation of Trees Act	1986	35
Kerala	Prevention and Control of Animal Diseases Act	1967	4
Kerala	Prevention of Cruelty to Animals Act	1095	18
Kerala	Prevention of Cruelty to Animals Act	1079	4
	(Applicable to Cochin only)		
Kerala	Prevention of Rubber Theft Act	1089	7
	(Applicable to Travancore-Cochin only)		
Kerala	Private Forests (Vesting and Assignment) Act	1971	26

STATE	NAME OF ACT	YEAR	NUMBER
Kerala	Raw Cashewnuts (Marketing and Transport and Fixation of Minimum Price) Act	1981	14
Kerala	Restriction on Cutting and Destruction of Valuable Trees Act	1974	7
Kerala	Rivers Conservancy Act	1884	6
Kerala	Silent Valley Protected Area (Protection of Ecological Balance) Act (Applicable to Travancore only)	1979	14
Kerala	Silk Worm Seed (Production, Supply and Distribution) Act	1956	23
Madhya Pradesh	Agricultural Cattle Preservation Act	1959	18
Madhya Pradesh	Agricultural Pests and Diseases Act	1959	18
Madhya Pradesh	Ayurvedic Unani Tatha Prakritik Chikitsa Vyawasai Adhiniyam	1971	5
Madhya Pradesh	Fisheries Act	1948	8
Madhya Pradesh	Game Act	1935	15
Madhya Pradesh	Indian Forest (M.P. Amendment) Act	1965	9
Madhya Pradesh	Krishi Prayojan Ke Liye Upyog ki Ja Rahi Dakhil Rahit Bhoomi Par Bhoomiswami Adhikaron Ka Pradan Kiya Jane (Vishesh Upabandh) Adhiniyam	1984	30
Madhya Pradesh	Livestock Improvement Act	1950	20
Madhya Pradesh	Pashu (Niyantiran) Adhiniyam	1976	21
Madhya Pradesh	Prevention of Cruelty to Animals Laws Repealing Act	1962	9
Madhya Pradesh	Rajya Beej Evam Farm Vikas Nigam Adhiniyam	1980	18
Madhya Pradesh	Rajya Matsya Vikas Nigam Adhiniyam	1979	6
Madhya Pradesh	Rajya Pashudhan Evam Kukkut Vikas Nigam Adhiniyam	1982	37
Madhya Pradesh	Regulation of Uses of Land Act	1948	47
Madhya Pradesh	Regulation of Waters Act	1949	37
Madhya Pradesh	Van Upaj (Vyapar Viniyaman) Adhiniyam	1969	9
Madhya Pradesh	Van Upaj Ke Kararon ka Punrikshan Adhiniyam	1987	32

STATE	NAME OF ACT	YEAR	NUMBER
Madhya Pradesh	Van-Bhumi Shashwat Patta prati Sanharan Adhiniyam	1973	33
Madhya Pradesh	Vanaspati Rog Tatha Vinashi Kit Adhiniyam	1973	27
Maharashtra	Agricultural Pests and Diseases Act (Bombay)	1947	43
Maharashtra	Animal Preservation Act, Maharashtra	1977	9
Maharashtra	Diseases of Animals Act, Bombay	1948	59
Maharashtra	Essential Commodities and Cattle (Control) Act, Bombay	1958	62
Maharashtra	Felling of Trees (Regulation) Act, Maharashtra	1964	34
Maharashtra	Fisheries Act, Maharashtra	1961	1
Maharashtra	Fodder and Grain Control Act, Bombay	1939	26
Maharashtra	Forest (Bombay Amendment) Act, Indian	1955	24
Maharashtra	Forest (Bombay Amendment) Act, Indian	1948	62
Maharashtra	Forest (Bombay Amendment) Act, Indian	1956	10
Maharashtra	Forest (Bombay Amendment) Act, Indian	1957	26
Maharashtra	Forest (Bombay Amendment) Act, Indian	1953	25
Maharashtra	Forest (Bombay Second Amendment) Act, Indian	1956	17
Maharashtra	Forest (Maharashtra Amendment) Act	1965	15
Maharashtra	Forest (Maharashtra Amendment) Act	1968	27
Maharashtra	Forest (Maharashtra Amendment) Act, 1984, Indian	1985	7
Maharashtra	Forest (Maharashtra Second Amendment) Act, 1984, Indian	1984	23
Maharashtra	Forest (Maharashtra Unification and Amendment) Act, Indian	1961	6
Maharashtra	Forest Development (Tax on Sale of Forest-produce by Government or Forest Development Corporation) (Continuance) Act, 1983, Maharashtra	1983	22
Maharashtra	Fruit Nurseries (Regulation) Act, Maharashtra	1969	45
Maharashtra	Marine Fishing Regulation Act, Maharashtra	1981	54

STATE	NAME OF ACT	YEAR	NUMBER
Nagaland	Forest Products Limited (Acquisition of Shares) Act	1982	5
Nagaland	Livestock and Poultry Contagious Diseases Act, 1980	1981	4
Nagaland	Tribal, Area Range and Village Councils Act	1966	3
Orissa	Agricultural Produce Market Act	1957	3
Orissa	Ayurvedic Medicine Act	1960	14
Orissa	Communal Forest and Private Land (Prohibition of Alienation) Act	1948	1
Orissa	Forest Act	1972	14
Orissa	Forest Produce (Control of Trade) Act	1981	22
Orissa	Kendu Leaves (Control and Trade) Act	1961	28
Orissa	Khadi and Village Industries Board Act	1956	3
Orissa	Live-stock Improvement act	1958	5
Orissa	Marine Fishing Regulation Act	1981 10	of 1982
Orissa	Soils Conservation Act	1965	4
Orissa	University of Agriculture and Technology Act	1965	17
Pondicherry	Animals and Birds Sacrifices Prohibition Act	1965	8
Pondicherry	Fisheries (Pondicherry Amendment) Act	1965	18
Pondicherry	Gaming Act	1965	15
Pondicherry	Indian Fisheries (Pondicherry Amendment) Act	1965	18
Pondicherry	Patents (Abolition) Act	1970	23
Pondicherry	Plant Diseases and Pests Act	1970	16
Pondicherry	Village and Commune Panchayats Act	1973	10
Punjab	Agricultural Pests Diseases and Noxious Weeds Act	1949	4
Punjab	Agricultural Produce Markets (Validation) Act	1955	24
Punjab	Agricultural Produce Markets (Validation) Act	1976	10
Punjab	Agricultural Produce Markets (Validation) act	1953	50

STATE	NAME OF ACT	YEAR	NUMBER
Rajasthan	Agricultural Produce Markets Act	1961	38
Rajasthan	Animal Diseases Act	1959	5
Rajasthan	Animals and Birds Sacrifice (Prohibition) Act	1975	21
Rajasthan	Commercial Crops Cess Act	1975	9
Rajasthan	Fisheries Act	1953	16
Rajasthan	Forest Act	1953	13
Rajasthan	Homoeopathic Medicine Act	1970	1
Rajasthan	Live-stock Improvement Act	1958	45
Rajasthan	Medicine Act	1953	5
Rajasthan	Preservation of Certain Animals Act	1950	4
Rajasthan	Public Parks Act	1956	21
Rajasthan	Seeds and Seedlings Act	1960	23
Rajasthan	Soil and Water Conservation Act	1965	1
Rajasthan	State Cattle Fairs Act	1963	14
Rajasthan	Tendu Leaves (Regulation of Trade) Act	1974	5
Sikkim	Cultivator's Protection (Temporary Provisions) Act	1975	1
Sikkim	Fisheries Act	1980	3
Sikkim	Khadi and Village Industries Board Act	1978	11
Tamil Nadu	Agricultural Pests and Diseases Act	1919	3
Tamil Nadu	Agricultural Produce Market Act	1959	23
Tamil Nadu	Animals and Birds Sacrifices Prohibition Act	1950	32
Tamil Nadu	Coffee Stealing Prevention Act	1878	8
Tamil Nadu	Cotton Control Act	1952	15
Tamil Nadu	Estates Communal, Forest and Private Lands (Prohibition of Alienation) Act	1947	14
Tamil Nadu	Forest Act	1882	5
Tamil Nadu	Hill Areas (Preservation of Trees) Act	1955	17
Tamil Nadu	Homoeopathy System of Medicine and Practitioners of Homoeopathy Act	1972	5

STATE	NAME OF ACT	YE R	NUMBER
Tamil Nadu	Jute (Control of Prices and Sales) Act	1950	5
Tamil Nadu	Live-stock Improvement Act	1940	15
Tamil Nadu	Marine Fishing Regulation Act	1983	8
Tamil Nadu	Nilgiris Game and Fish Preservation Act	1879	2
Tamil Nadu	Parks, Play-felds and Open Spaces (Preservation and Regulation) Act	1959	26
Tamil Nadu	Periyar Irrigation Tanks (Preservation) Act	1934	5
Tamil Nadu	Preservation of Private Forests (Continuance) Act	1965	32
Tamil Nadu	Preservation of Private Forests Acts	1949	27
Tamil Nadu	Private Forests (Assumption of Management) Act	1961	55
Tamil Nadu	Registration of Practitioners of Integrated Medicine Act	1956	27
Tamil Nadu	Rivers Conservancy Act	1884	16
Tamil Nadu	Silk Worm Seed (Production, Supply and Distribution) Act	1956	23
Tripura	Agricultural Produce Market Act	1983	184
Tripura	Homoeopathic System of Medicine Act	1979	129
Tripura	Indian Forest (Tripura Amendment) Act	1984	196
Tripura	Khadi and Village Industries Board Act	1966	20
Tripura	Plant Diseases and Pests Act	1969	32
Tripura	Tribal Areas Autonomous District Council Act	1979	132
Uttar Pradesh	Agricultural Diseases and Pests Act	1955	15
Uttar Pradesh	Bhoomi Evam Jal Sanrakshan Adhiniyam	1963	16
Uttar Pradesh	Fisheries Act	1948	45
Uttar Pradesh	Forest (U.P. Amendment) Act	1951	18
Uttar Pradesh	Forest Corporation Act	1975	4
Uttar Pradesh	Fruit Nurseries (Regulation) Act	1976	21
Uttar Pradesh	Homoeopathic Medicine Act	1952	8

STATE	NAME OF ACT	YEAR	NUMBER
Uttar Pradesh	Jute Goods (Control) Act	1950	15
Uttar Pradesh	Krishi Utpadan Mandi Adhiniyam	1964	25
Uttar Pradesh	Parks, Playgrounds and Open Spaces (Preservation and Regulation) Act	1975	55
Uttar Pradesh	Private Forests Act	1949	6
Uttar Pradesh	Protection of Fruit Trees (Regulation of Harmful Establishments and Housing Scheme) Act	1985	18
Uttar Pradesh	Protection of Trees in Rural and Hill Area Act	1976	15
Uttar Pradesh	Resin and Other Forest Produce (Regulation of Trade) Act	1976	13
Uttar Pradesh	Sugar-Cane (Regulation of Supply and Purchase) Act	1953	24
Uttar Pradesh	Tendu Patta (Vpayar Viniyaman) Adhiniyam	1972	19
West Bengal	Agricultural Lands and Fisheries (Acquisition and Resettlement) Act	1958	18
West Bengal	Agricultural Produce Marketing (Regulation) Act	1972	35
West Bengal	Animal Slaughter Control Act	1950	22
West Bengal	Cruelty to Animals (Repeal of Laws) Act	1974	4
West Bengal	Diseases of Animals Act, Bengal	1944	6
West Bengal	Fisheries (Requisition and Acquisition) Act	1965	20
West Bengal	Homoeopathic System of Medicine Act	1963	33
West Bengal	Indian Forest (West Bengal Amendment) Act	1981	39
West Bengal	Indian Forest (West Bengal Amendment) Act	1975	14
West Bengal	Inland Fisheries Act, West Bengal	1984	25
West Bengal	Jute Goods (Control) Act	1950	4
West Bengal	Jute Goods Act	1950	5
West Bengal	Live Stock Improvement Act	1954	34
West Bengal	Paschim Banga Ayurvedic System of Medicine Act	1961	13

STATE	NAME OF ACT	YEAR	NUMBER
West Bengal	Paschim Banga Unani System of Medicine Act	1979	45
West Bengal	Private Fisheries Protection Act	1889	2
West Bengal	Private Forest Act	1948	14
West Bengal	Public Parks Act, Bengal	1934	2
West Bengal	Sundarbans Act	1925	1
West Bengal	Utilisation of Land for Production of Food Crops Act	1969	16
West Bengal	Water Hyacinth Act, Bengal	1936	13
West Bengal	Waterways Act, Bengal	1934	12

Appendix 3

LEGAL COVERAGE OF VARIOUS ASPECTS OF BIODIVERSITY IN INDIA

	Wild		Domestic		Genetic
	Fauna	Flora	Fauna	Flora	Materials
1. Identification	N	N	N	N	N
2. Protection <u>in-situ</u>	W	W	N	N	N
3. Protection <u>ex-situ</u>	W	P	N	N	N
4. Access/Extraction	P	P	N	N	N
5. Use	W	P	W	N	N
6. Trade	W	W	P	W	P
7. Breeding/Cultivation/ Multiplication	W	P	P	P	P
8. Introduction/Augmentation/ Re-introduction	P	P	P	P	P
9. Release	N	N	N	N	P
10. Movement	W	P	P	P	P
11. Intellectual property rights	N	N	N	N	N

N = Not covered

P = Partially covered

W = Well covered

MAJOR RELEVANT PROVISIONS OF CENTRAL ACTS RELATING TO BIODIVERSITY

(Acts arranged alphabetically)

1. Agricultural and Processed Food Products Export Development Authority Act, 1985/1986

- i) Promotion and regulation of export of agricultural products specified in schedules - includes medicinal plants

2. Agricultural Produce (Grading and Marking) Act, 1937

- i) Fixing grade designations to indicate quality of any specified agricultural produce [3a, b]
- ii) Prohibition or restriction on trade in wrongly marked/graded produce [3g]
- iii) Extension of such provisions to any other article (incl. non-agricultural articles) [6]

3. Cardamom Act, 1965

Provisions as in Rubber Act (see below); includes seeds. Provision for prohibiting/restricting export/import of cardamom [21]. Applicable to *Elettaria cardamomum maton*, but extendable to any other plant notified by Cardamom Board [3].

4. Coconut Development Board Act, 1979

As in Rubber Act, Tea Act, Cardamom Act, etc.

5. Customs Act, 1962

- i) Regulation or prohibition of import and export of specified articles [21].
- ii) Regulation of import-export specifically for:
 - a) The protection of human, animal or plant life or health [11(t)]
 - b) The conservation of exhaustible natural resources [11(m)]
- iii) Regulation of transportation and storage of notified items [11(j,k,l,m)].

6. Destructive Insects and Pests Act, 1914

- i) Prohibition or regulation of import of any articles which may cause infection to any plant [3(1)]
- ii) Prohibition or regulation of movement, between states within India, of articles likely to cause infection to any plant [4A]

Note: 'articles' includes insects and plants

7. Environment (Protection) Act, 1986

- i) General measures to protect environment [3(1)]
- ii) Restriction of industrial and other processes/activities in specified areas [3(2)(v)]

(Read with Rule 5 of Environment (Protection) Rules, 1986)

- iii) Prevention and control of hazardous substances, including their manufacture, use, release, and movement [3(2), 7, 8]

8. Fisheries Act, 1897

- i) Prohibition on use of explosives for fishing [4(1)]
- ii) Prohibition on use of poisons for fishing [5]
- iii) Regulation on fishing in private waters, with consent of owners/right-holders [6(2) & (3)]
- iv) Prohibition of all fishing in specified waters for maximum 2 years [6(4)]

9. Forest Act, 1927

- i) Setting up and managing reserved forests [Chapter II]
- ii) Setting up and managing village forests [Chapter III]
- iii) Setting up and managing protected forests [Chapter IV]
- iv) Protection of non-government forests and lands [Chapter V]
- (v) Control of movement of forest produce [Chapter VII]
- vii) Control of grazing or trespass by cattle in forest land [Chapter X]

10. Forest (Conservation) Act, 1980

- i) Prohibiting or regulating non-forest use of forest lands [2]

11. Import and Export (Control) Act, 1947

- i) Prohibition or restriction on imports and exports of specified items [3].
- ii) Regulations on transportation of specified items [4e]

12. Marine Products Export Development Authority, 1972

- i) Establishment of an Authority for developing and controlling marine products [4, 9(1)]
- ii) Developing and regulating off-shore and deep-sea fishing; taking measures for conservation; fixing standards for export; regulating exports [9(2a, c, f)]

- iii) Prohibition/restriction on export and import of marine products [20(1)]

13. Maritime Zones of India (Regulation of Fishing by Foreign Vessels) Act, 1981

- i) Regulation of fishing in India's EEZ by people using foreign vessels [3]
- ii) Permits only to be granted within definition of public interest, and for scientific research, experiments, etc. [5(3), 8]

14. National Dairy Development Board Act, 1987

- i) Establishment of a Board which promotes dairy development and other agriculture based industries [4, 16(1a)].
- ii) Financing and facilitating animal husbandry, agriculture, high yielding cattle (including import of semen), import-export of milch animals and bulls and general enhancement of cattle wealth [16(1)].

15. National Oilseeds and Vegetable Oils Development Board, 1983

- i) As in Rubber Act, etc. Special focus on providing farmers, esp. small farmers, benefits from development of oilseeds industry [9(2)a]
- ii) Assistance for production and development of breeder's seeds, foundation seeds, and certified seeds of high quality, and for improved methods of cultivation

16. Prevention of Cruelty to Animals Act, 1960

- i) Restrictions on cruel treatment of animals, including use, transportation, and trade [Chapter III, and Rules under Section 38].
- ii) Restrictions on use of animals for purposes of experimentation and performances [Chapter IV & V].

17. Rubber (Production and Marketing) Act, 1947

- i) Establishment of Indian Rubber Board, with function of developing/encouraging improved rubber cultivation and marketing, advising or import/export [8(1) & (2)]
- ii) Restrictions on right of rubber planters - licence required to plant or replant, where to plant, etc. [17]

Note: Applicable to 4 species of rubber initially, more if Board so notifies [Definitions]

18. Seeds Act, 1966

- i) Regulation on quality of seeds of notified food crops, cotton, and fodder, to be sold for agricultural purposes [5, 6].

- ii) Restriction on export/import of notified seeds [17]
- iii) Exemption to persons selling/delivering, on own premises, seeds grown by them [24]

19. Spices Board Act, 1986

As in Rubber Act, etc., for cardamom; for other spices, restricted to export-import development and regulation

20. Tea Act, 1953

As in Rubber Act, etc. Includes restrictions on export of tea seeds [17]. Applicable to one species, *Camellia sinensis*, presumably to all its varieties.

21. Territorial Waters, Continental Shelf, Exclusive Economic Zone, and other Maritime Zones Act, 1976

- i) Establishment of sovereign rights over waters and seabed within the continental shelf and exclusive economic zone (200 nautical miles from nearest appropriate point on Indian territory) (3(1), 5(1), 6(2), 7(4))
- ii) Sovereign right to explore, exploit, conserve and manage resources of continental shelf and EEZ [6(3), 7(4)]
- iii) Notification of any area within this zone for purposes of protection and resources and conservation of marine environment (6(5), 7(6))

22. Tobacco Board Act, 1975

As in Rubber Act, Tea Act, Cardamom Act, etc.

23. Wildlife (Protection) Act, 1972 and Wildlife (Protection) Amendment Act, 1991

- i) Restriction or prohibition on hunting of animals [chapter III]
- ii) Protection of specified plants (Chapter IIIA)
- iii) Setting up and managing sanctuaries and national parks [Chapter IV]
- iv) Setting up of zoo authority, control of zoos, and captive breeding [Chapter IVA]
- v) Control of trade and commerce in wild animals, animal articles and trophies [Chapter V & Chapter VA]

INTERNATIONAL AGREEMENTS RELEVANT TO BIODIVERSITY, OF WHICH INDIA IS A SIGNATORY

[Note: Bilateral treaties are not covered. For explanations on the terms 'Biodiversity components' and 'Aspects' used below, see Section 3 of the paper.]

1. The Convention on Wetlands of International Importance Especially as Waterfowl Habitat ("Ramsar Convention")

Relevant provisions: Obliges signatory countries to designate and conserve wetland sites considered of international importance. Also enjoins upon them to prepare inventories of wetlands and their resources, and urges "wise use" of all wetlands.

Biodiversity components covered: Wild fauna; Wild flora

Aspects covered: Identification; Protection in-situ

2. Convention on International Trade in Endangered Species of Fauna and Flora ("CITES")

Relevant provisions: Obliges signatory countries to restrict or prohibit international trade in specified threatened species.

Biodiversity components covered: Wild fauna; Wild flora

Aspects covered: Trade

3. Convention on the Conservation of Migratory Species of Wild Animals ("Bonn Convention")

Relevant provisions: Obliges signatory countries to give special protection to species which migrate between countries.

Biodiversity components covered: Wild fauna

Aspects covered: Protection in-situ

4. International Undertaking on Plant Genetic Resources

Relevant provisions: Obliges countries to provide free global access to these resources, subject to restriction imposed by the operation of farmers' and plant breeders' rights

Biodiversity components covered: Wild flora; Domesticated flora; Plant-related genetic material

Aspects covered: Identification; Protection in-situ; Protection ex-situ; Cultivation; Trade; Intellectual property rights

