

Biodiversity Protection, Farmers and Breeders Right

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Lecture 12: The Biodiversity Act, 2002

Welcome to the course on Biodiversity Protection Farmers and Breeders Right. This lecture will be about the Biological Diversity Act 2002. The concepts covered in this lecture are the scope and objectives of the Biological Diversity Act 2002, the decentralized model of biodiversity governance in India, the subject matters regulated under the BD Act, the regulated activities, the provisions related to appeal and the offenses under the Act. The keywords are given here. So, India is a party to the United Nations Convention on Biological Diversity which was signed in 1992. The convention affirms the sovereign rights of countries over their genetic resource.

So, India is a country which is rich in biodiversity and associated traditional and contemporary knowledge system. After extensive and intensive consultation process involving various stakeholders, the government of India enacted the Biological Diversity Act in 2002. So, India was one of the first countries to adopt a national legislation to give effect to the principles of Convention on Biological Diversity. The Biological Diversity Act 2002 is the product of an elaborate consultation process with various stakeholders.

The objectives of the Biological Diversity Act are the conservation of biological diversity, the sustainable use of its components, fair and equitable sharing of benefits arising out of the utilization of genetic resource. So, as you can see this is actually the triple objectives of the Convention on Biological Diversity. So, the objectives of the CBD and the Biological Diversity Act enacted by the Indian parliament are the same. The act is intended to provide for conservation of biological diversity, sustainable use of its components and fair and equitable sharing of benefits arising out of the use of biological resource and knowledge and for matters connected therewith or incidental thereto. The act extends to the all of India.

The Biological Diversity Act provides for a decentralized model of biodiversity governance. There are three different authorities constituted under the Biological Diversity Act. The National Biodiversity Authority exists at the central level which is under the central government. There are state biodiversity boards in every state which functions under the state government and there is biodiversity management committees which functions under the local self government. So, the Biological Diversity Act is implemented through a three-tier mechanism with National Biodiversity Authority at the national level, the state biodiversity boards at the state level and Biodiversity

Management Committees at the local level.

So, each of these authorities have their individual powers and functions. So, there is complete decentralization under the Biological Diversity Act. The powers and functions of each of these authorities are separate and these are clearly specified in the Biological Diversity Act. The subject matters which are regulated under the Biological Diversity Act are one the biological resource and second is associated traditional knowledge. The word biological resource is defined in the act.

Biological resource means plants animals microorganisms or parts thereof their genetic material and byproducts excluding value under product with actual or potential use or value, but does not include human genetic material. So, the definition of biological resource covers everything which is having a form of life. So, except sand, stone or other non living materials on the earth surface all other components of biodiversity becomes part of the word biological resource. So, it includes plants, animals, microorganisms, their genetic material, byproducts. So, everything which we can perceive as having a form of life is covered under the definition biological resource.

So, there are only two exemptions from this definition. So, one is human genetic material and the second one is value ordered product. So, human genetic materials are not covered under the Biological Diversity Act. The second exemption is value ordered product. So, value ordered product means products which may contain portions or extracts of plants and animals in unrecognizable and physically inseparable form.

So, the definition of value ordered product is also given in the Biological Diversity Act. So, this means that the normal meaning of the word value ordered product cannot be used in the context of Biological Diversity Act. So, normally the word value ordered product is used to cover products which are developed from various raw materials, but that definition is not applicable in the context of Biological Diversity Act. Under the Biological Diversity Act value ordered product means only products which contain portions or extracts of plants and animals in an unrecognizable and physically inseparable form. So, very few things are excluded as value ordered products under the Biological Diversity Act.

Another subject matter under the Biological Diversity Act is associated traditional knowledge. So, the knowledge associated with biological resource which is commonly known as traditional knowledge is also a subject matter regulated under the Biological Diversity Act. So, if the traditional knowledge is not associated with biological resource, then it is not covered under the Biological Diversity Act. The People's Biodiversity Register which is developed under the Biological Diversity Act has a specific column

called associated traditional knowledge. So, the traditional knowledge can include cultural knowledge, artistic knowledge, medicinal knowledge, biodiversity, natural resources knowledge, agricultural knowledge, sacred knowledge.

So, if it is connected with biodiversity in any way, then it becomes a regulated subject matter under the Biological Diversity Act. So, the activities regulated under the Biological Diversity Act are mainly 5 types of activities. So, one is research, second one is commercial utilization, third one is transfer of research results, fourth one is intellectual property rights and fifth one is transfer of biological resource. So, when we studied about the conventional biological diversity, I mentioned that the operative part of the CBD uses the word genetic resource. Even though in the preamble, the word biological resource was also mentioned.

But when it comes to the the Biological Diversity Act, it does not use the word genetic resource, instead it uses only the word biological resource. So, if a user who is an Indian citizen and who is not a non-resident Indian or an Indian institution which does not have any foreign shareholding or participation in management does research, then it is not a regulated activity under the Biological Diversity Act. So, that means, an Indian citizen who is not a non-resident Indian or any Indian institution which does not have any foreign shareholding or foreign participation in management is free to do research without any regulation under the Biological Diversity Act. But if they are doing commercial utilization, they have to give a prior intimation to the concerned state biodiversity board. So, commercial utilization with respect to Indian citizens or Indian institutions are governed by the state biodiversity board.

So, any party who is planning to do commercial utilization, if they are an Indian citizen or an Indian institution which is not having any foreign shareholding shall give prior intimation to the state biodiversity board. If an Indian citizen or an Indian institution wants to do research, they are free to do that. But after conducting research, they want to transfer the research results to a foreign citizen or a foreign company, then the Indian citizen who has done research has to take prior approval from the national biodiversity authority. So, this means that Indian citizen or Indian institutions are free to do research using biological resource or associated additional knowledge. But after doing research, they want to transfer the research results to a foreign entity.

This is a regulated activity under the Biological Diversity Act. So, before transferring the research results to a foreign entity, they have to take the prior approval from the national biodiversity authority. The fourth regulated activity is obtaining of intellectual property rights. So, if an Indian citizen or an Indian institution after doing research wants to apply for a patent or an or any other form of intellectual property rights, then they

have to take prior approval from the national biodiversity authority. If the user is a foreign citizen or a non-resident Indian or a body corporate or association or organization which is not incorporated or registered in India or incorporated or registered in India having any non-Indian participation in shareholding or management.

And if they want to do research, they have to take prior approval from the national biodiversity authority. If they want to do commercial utilization, they have to take prior approval from the national biodiversity authority. And after accessing the biological resource, now they want to transfer the biological resource to another company, then they have to take prior approval from the national biodiversity authority. Similarly, after doing research, they want to obtain an intellectual property right. So, for this also prior approval from national biodiversity authority is required.

So, this means that the regulations under the biological diversity act is dependent upon the legal status of the person or the company which is planning to do the activity. So, if the company is an Indian company which is not having any foreign shareholding or participation in management, they are not regulated for the purpose of doing research. But for the purpose of doing commercial utilization, they have to take approval from the state biodiversity board. But if the company is having foreign participation in shareholding or management or if the user is a foreign citizen, then even for research prior approval is required and the approval has to be taken from the national biodiversity authority. And similarly, if they want to do commercial utilization, prior approval of national biodiversity authority is mandatory.

So, in case of intellectual property rights which either the Indian citizen or the foreign citizen or an Indian company or a foreign company wants to obtain after pursuing research, then they need to take approval from national biodiversity authority. So, for the purpose of intellectual property rights, the approval has to be from national biodiversity authority irrespective of whether it is an Indian citizen or a foreign citizen. So, if any components of biodiversity is used for the purpose of research, transferring of research results, commercial utilization, biosurvey and bioutilization or for obtaining of intellectual property rights, prior approval has to be taken from these statutory authorities. So, if it is an Indian citizen or an Indian institution who is pursuing research, then there is no need of any approval under the biological diversity act. But if it is a foreign citizen or a foreign company who is pursuing the research, then they have to take prior approval from the national biodiversity authority.

Similarly, if an Indian citizen or an Indian company who has done the research wants to transfer the research results to a foreign company, it can be a foreign citizen or a foreign company having foreign participation in shareholding or management, then prior

approval has to be taken from national biodiversity authority before the transfer happens. And in case of commercial utilization using a biological resource, if it is done by an Indian citizen or an Indian company which does not have any foreign participation in shareholding or management, then the approval has to be taken from the state biodiversity board. But if it is a foreign company or a foreign citizen who wants to do commercial utilization using a biological resource, then the prior approval has to be taken from national biodiversity authority. So, similarly in the case of bio survey and bio utilization, if it is undertaken by an Indian citizen or an Indian company which does not have any foreign participation in shareholding or management, then the intimation has to be given only to the state biodiversity board. But if it is a foreign company or a foreign citizen, then the approval has to be taken from the national biodiversity authority before the bio survey and bio utilization is undertaken.

And when it comes to obtaining of intellectual property rights irrespective of whether it is a foreign citizen or an Indian citizen or whether it is a Indian company or a foreign company, the approval has to be taken from national biodiversity authority. So, in case of obtaining of intellectual property rights, national biodiversity authority is the sole authority to grant approvals. So, when an application for undertaking any of these activities is made either to the national biodiversity authority or the state biodiversity board, it goes through a established process under which the application will be scrutinized by the NPA or the state biodiversity board. And once they takes a decision to grant the approval, the approval will be in the form of a written agreement. So, the approval which is granted either by NBA or the SBB will be in the form of a written agreement.

So, the written agreement will have different clauses which specifies the do's and don'ts and it will also include a clause on benefit sharing. The benefit sharing percentage will also be mentioned in the written agreement. So, when any of these activities are undertaken either by an Indian citizen or a foreign citizen, it will be regulated by national biodiversity authority or the state biodiversity board. So, when the NBA or the SBB grants the approval based on the legal status of the applicants, the approval will be in the form of a written agreement. So, the written agreement will have different clauses which specifies the do's and don'ts and it will also have a benefit sharing clause which will specify the percentage that has to be shared by the user to the NBA or the SBB.

So, once this benefit sharing is shared with the NBA or the SBB, it will be used for these three purposes mentioned in the act. So, if the benefit climber is identifiable so that means, if the genetic resource or the traditional knowledge is taken from a local community and the local community is identifiable, then they are called the benefit claimers. So, then if the benefit claimers are identifiable, then the benefit sharing amount

received will be directly channeled to the benefit claimers. But if the benefit claimers are not identifiable, then it can be used for the conservation and promotion of bio resource or for socioeconomic development of the area from where the biological resource was collected. So, depending upon whether the benefit claimers are identifiable or not, the benefit sharing amount can be used for these three purposes.

So, the underlying idea is that this contributes to the conservation of biodiversity. So, this will incentivize the benefit claimers to conserve the biodiversity and also this will generate finance for the conservation of biodiversity. So, the commercial utilization is a regulated activity under the biological diversity act. So, let us see what constitutes commercial utilization. So, commercial utilization is defined in the act and it means end use of biological resource for commercial utilization such as drugs, industrial enzymes, food flavors, fragrance, cosmetics, emulsifiers, oleoresins, colors, extracts and genes used for improving crops and livestock through genetic intervention, but does not include conventional breeding or traditional practices in use in any agriculture, horticulture, poultry, dairy farming, animal husbandry or beekeeping.

So, this means that commercial utilization which is regulated under the act is covering actually advanced utilizations of biodiversity. So, if the components of biodiversity which is in the form of a biological resource is used for food consumption normal food consumption then that is not regulated under the word commercial utilization. Similarly, for example, if the wood collected from an area is used for making furnitures. So, this is not regulated as a commercial utilization under the biological diversity act. So, the definition actually covers advanced uses of biodiversity.

Similarly, certain traditional activities like conventional breeding or traditional practices in agriculture, horticulture, poultry etcetera are exempted from the word commercial utilization. So, for doing this activities also permission is not required, but if the conventional breeding is done with a commercial intent then it can constitute commercial utilization. So, this was decided so by the green tribunal in a recent decision. So, one of the important activities regulated under the biological diversity act is obtaining of intellectual property rights. So, if an invention is based on research on a biological resource obtained from India or information on a biological resource obtained from India then before applying for the patent prior approval has to be taken from the national biodiversity authority.

So, this will cover patent applications made in India as well as in foreign countries. So, if a user does research on a biological resource and he develops an invention and later he files for a patent application or application for any other form of intellectual property then prior approval has to be taken from the national biodiversity authority. But there is

an exemption to this rule this provision will not apply if the person is making an application under the plant variety protection act. So, if the application is made for the plant breeders right or farmers right under the protection of plant varieties and farmers right act enacted by the Indian parliament then the prior approval of national biodiversity authority is not required. But if the same person is applying for a plant patent or a breeders right in a foreign country then approval under the biological diversity act is mandatory.

So, the exemption is only for applications made under the law relating to protection of plant varieties enacted by the Indian parliament. And there is no sorry I am just mistake starting. So, there is another provision in the biological diversity act which exempts certain species from the biological diversity act, but that provision is not applicable for obtaining of intellectual property rights. So, even if the biological resource used for research for developing the invention is falling under the normally traded commodities still approval from national biodiversity authority is required before obtaining of intellectual property rights. The biological diversity act has various provisions to ensure conservation of biodiversity.

Under section 37 of the biological diversity act the state government in consultation with local bodies can notify certain areas of biodiversity importance as biodiversity heritage sites. So, this is an important provision in the biological diversity act. The national biodiversity authority has issued guidelines for the selection and management of biodiversity heritage sites. So, biodiversity heritage sites will be areas of biodiversity importance which are notified under the act. So, far 44 biodiversity heritage sites across the country have been notified by different state governments. Section 38 of the biological diversity act provides the power to central government to notify threatened species.

So, this allows the state government in consultation with the concerned state government to notify any species which is on the verge of extinction or likely to become extinct in the near future as a threatened species and prohibit or regulate the collection of such species under the act. So, utilizing this provision the central government has notified many species as threatened species under the act. So, section 52 of the biological diversity act provides for filing of appeals. So, if any person is aggrieved by any order issued by the national biodiversity authority or the state biodiversity board or any determination of benefit sharing made by the national biodiversity authority or the state biodiversity board they can file an appeal to the national green tribunal. So, the provision for filing appeal is provided under section 52 of the act and thus green tribunal has jurisdiction over decisions taken by national biodiversity authority or the state biodiversity board.

Under section 40 of the biological diversity act the central government can notify certain species and exempt them from the provisions of the biological diversity act. So, accordingly the central government has notified 421 items or biological resources as normally traded commodities under the provisions of the biological diversity act. The parts of these plants, source and common name which are exempted is specified in the notification issued by the central government. These items traded as a matter of common practice are considered as normally traded as commodities, but if any person is using the same material for doing research commercial utilization or obtaining of intellectual property rights then prior approval under the act is mandatory. The exemption is only for the purpose of commodity trade, but if the same species is used for any of the regulated activities under the biological diversity act then the prior approval from the NBA or the SBB is mandatory.

Similarly, utilizing the powers under section 40 the central government has issued another notification to exempt annex 1 crops of ITPGRFA. So, the international treaty for plant genetic resources related to food and agriculture requires exchange of genetic materials which are predominantly used for agriculture purposes. So, India being a party to ITPGRFA has an obligation to make these species for the purpose of food and agriculture. So, accordingly 26,563 accessions belonging to 9 crops has been notified by the government as exempted species under section 40 of the biological diversity act. But this exemption is only from section 3 and 4 of the biological diversity act, but if the same species is used for doing research and subsequently a patent application or and subsequently a patent application is filed then the prior approval under the act is mandatory.

So, the non-compliance with the provisions of biological diversity act is a punishable offence. The contravention or attempt to contravene or abet the contravention of sections 3, 4 and 6 which is related to research commercial utilization transfer of research results or obtaining of intellectual property rights is punishable with imprisonment up to 5 years and fine up to 10 lakhs. So, if the damage cost exceed 10 lakhs then the fine will commensurate with the damage cost. So, section 3 is in relation to research or commercial utilization undertaken by foreign citizens or companies having foreign participation in shareholding or management. Section 4 relates to transfer of research results by an Indian citizen or an Indian institution to a foreign company or a foreign citizen.

Section 6 relates to obtaining of intellectual property rights either by Indian citizen or a foreign citizen or an Indian company or a foreign company. So, these activities are regulated activities under the biological diversity act, but if any person undertakes these

activities without obtaining the prior approval from the national biodiversity authority then it is a punishable offence with imprisonment up to 5 years or with fine up to 10 lakh rupees. Similarly, contravention or attempt to contravene or abet the contravention of section 7. So, section 7 deals with the prior intimation to state biodiversity port for the purpose of doing commercial utilization or bio survey. So, section 7 deals with Indian citizens and Indian companies who want to do commercial utilization.

So, section 7 requires that such companies have to give a prior intimation to the state biodiversity board, but if they fail to comply with this provision then they are punishable with imprisonment up to 3 years or with fine up to 5 lakh rupees. All the offences under the biological diversity act are cognizable and non-bailable. So, under the biological diversity act no court shall take cognizance of any offence under the act except upon a complaint made by either the central government or any authority or officer authorized by the central government in this behalf. So, central government has from time to time notified the authorities or officers who are empowered to file complaint under the biological diversity act. So, the different notifications covers officers like advisor law of national biodiversity authority, officers who are not below the rank of scientists C of state biodiversity board, national biodiversity authority or ministry of environments regional officers or forest range officers with regard to their jurisdiction.

So, these are the officers or authorities notified by the central government who are empowered to file a complaint. So, based on the complaint filed by these officers or authorities the courts can take cognizance of the offence. Similarly, any benefit claimer who has given a notice of not less than 30 days in the prescribed manner is also entitled to file a complaint. So, any benefit claimer who wants to file a complaint can give a notice and after expiry of 30 days they are entitled to file complaint under the act. This notification issued in 2009 gives the power for filing complaint to forest officer not below the rank of range officers in their respective jurisdictions.

So, forest range officers are also entitled to file a complaint if the offence is committed within their jurisdiction. So, to conclude the biological diversity act 2002 is a comprehensive legislation enacted by the parliament. It gives effect to the triple objectives of convention on biological diversity. The biological diversity act provides for a decentralized model of biodiversity governance. The powers and functions of central the state and local level bodies are clearly demarcated in the law.

The act adequately balances the need for sustainable utilization of biodiversity and the conservation objectives of CBD. The references for this lecture are given here. Thank you very much for listening the lecture. I hope you are enjoying the course.