

## **Biodiversity Protection, Farmers and Breeders Right**

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### **Lecture 18 : Comparison of Biodiversity Laws of countries**

Welcome to the course on Biodiversity Protection, Farmers and Breeders Right. This lecture will be a comparison of biodiversity laws of three different countries. The concepts covered in this lecture will be biodiversity laws of kingdom of Bhutan, Japan and Malaysia. The keywords of this lecture can be seen here. The Convention on Biological Diversity and its protocols provide a mandate on the member countries to develop laws and policies on conservation, sustainable use of biological diversity, access and benefit sharing related to genetic resource and the use of traditional knowledge related to genetic resource and biosafety. So, while implementing this mandate countries have encountered some success and many obstacles in fulfilling implementing of its terms.

This is mainly due to the complexity of implementing the conventions terms in a clear and coherent fashion that functions alongside other existing laws and policies. So, apart from the Convention on Biological Diversity, there are several multilateral environmental agreements of which different countries are parties. So, in order to fulfill those obligations, nation states would have already enacted several legislations relating to environment, forest and wildlife. So, Convention on Biological Diversity cast another obligation on the member countries to develop national legislations and policies.

So, in order to fulfill this many countries including the kingdom of Bhutan, Japan and Malaysia have enacted legislations at national level. Bhutan is located in eastern Himalayas, which have been identified as a global biodiversity hotspot and counted among the globally outstanding eco regions of the world. Bhutan is a landlocked country in the Himalayas and because of its geographical location, it is having significant importance for biodiversity conservation. Biodiversity protection and sustainable development is one of the top priorities of the government of Bhutan. As Article 5 of the Bhutan's constitution makes it clear, every Bhutanese person is considered as a trustee of the kingdoms natural resource and environment.

As a result, the Royal Government of Bhutan is constitutionally enjoined to conserve and improve the environment and safeguard the country's biodiversity, notably by ensuring that a minimum of 60 percentage of the Bhutan's total land area is maintained under forest cover for all the time. Bhutan has even adopted a development philosophy of gross national happiness, which is having environmental sustainability as one of its pillars. Because of its particular geographical location in the Himalayas and being a landlocked country

neighboring India, it is having great significance with regard to policymaking for the conservation of Himalayan ecosystem as well. Sustainable development and biodiversity protection are ensured in Bhutan by a high level autonomous agency of Royal Government of Bhutan, which is known as National Environment Commission or the NEC. It is responsible for monitoring the impact of development on the environment, coordinating intersectorial programs, implementing policies and legislation with regard to environment and ensuring that all projects irrespective of whether they are public or private take environmental aspects into consideration.

So, while implementing developmental policies, it is ensured that environment aspects are given adequate consideration. Another key institution in Bhutan is the National Biodiversity Centre, which is serving as the implementation agency for the Convention on Biological Diversity and is directly responsible for coordinating biodiversity conservation and sustainable programs in the country. The main threats for biodiversity in Bhutan include land conversion, over exploitation, dependence on wood for fuel, pollution by domestic sewage, climate change and forest fires. Forest biodiversity is threatened by the state of country's development process and their associated needs for forest products, infrastructure development, population growth, living space requirement, rapid urbanization, agricultural expansion, grazing pressures and forest fires. Likewise, pressure on water resources is bound to increase as a result of growing urbanization and industrialization.

The specific threats to domesticated biodiversity include unsustainable cropping practices, agricultural land conversion, cultivation of exotic agricultural crops and land degradation in the form of erosion. Immediately after the signing of the Convention on Biological Diversity, the government of Bhutan was one of the first countries to enact a national legislation to give effect to the principles of CBD. So, Bhutan enacted its first biodiversity legislation in 2003, which was known as Biodiversity Act of Bhutan 2003. So, immediately after India enacted its national legislation in 2002, being a neighboring country, Bhutan also enacted a national legislation. It provided for conservation of biological diversity, sustainable use of its components and equitable sharing of benefits arising from the utilization of biodiversity.

In 2022, a significant change happened because the Biodiversity Act of Bhutan 2022 was introduced to repeal the old legislation, which was enacted in 2003 and provide for a more comprehensive biodiversity governance in the Himalayan region. So, the new legislation was enacted in 2022 to give effect to a comprehensive biodiversity governance framework. The new legislation has 12 chapters and more than 160 sections. The legislation also provides for establishing a sui generis system for the protection of plant varieties. So, it is a combination of a governance framework for the protection of biodiversity and it also

provides for an intellectual property based mechanism for the protection of new plant varieties.

So, with regard to the sui generis system for protection of plant varieties, it provides for the registration of plant varieties, which are developed through a breeding process and the persons who develop the new breeds are given the breeders right, which is very similar to the PP of RA legislation in India. The Bhutan's legal framework provides for establishing a national competent authority. So, a national competent authority is established under the law, which was enacted in 2022, which will oversee the implementation of the Convention on Biological Diversity in the Kingdom of Bhutan. The act also provides for designating a national focal point. So, under the 2022 legislation, the National Biodiversity Centre will act as the national focal point.

It also creates Bhutan Access and Benefit Sharing Fund. So, the legislation also provides for creation of a fund through which all the benefit sharing will be credited, which will be utilized for the conservation of biodiversity and the fund is called as Bhutan Access and Benefit Sharing Fund. The act also provides for monitoring and enforcement. So, there are some provisions in the newly enacted legislation, which gives sufficient powers to the governmental authorities to monitor and enforce the legislation. The act also provides for offenses and penalties, which is in the form of fines and also compensation is provided in the act.

So, non-compliance becomes a punishable offense with fine and compensation. Japan is an island nation in the Pacific Ocean with a small area of about 38 million hectares, which is very rich in biodiversity. The number of known species in Japan is estimated to be over 90,000 and to exceed 3 lakhs if unclassified species are also included. The country also has a high rate of endemic species, including nearly 40 percentage of land mammals and vascular plants, 60 percentage of reptiles and 80 percentages of amphibians. The surrounding seas also has a rich diversity of species containing 50 of the world's 127 marine mammals, 122 of the world's 300 seabirds and more than 3700 marine fish species.

So, because of its Pacific geographical location as an island nation, it is also having significant importance in global biodiversity conservation. The National Biodiversity Strategy of Japan, 2012-2020 was adopted by the cabinet in September 2012, immediately following the COP 10, which was convened in Nagoya. The main threats for biodiversity in Japan includes human activities and development, including illegal digging, over exploitation of resources for ornamental and commercial uses, destruction or deterioration of habitats due to land reclamation, development in coastal areas and changes in land use. Recently, the negative effects associated with land use changes have began to stabilize due to a decrease in reclamation of forested, agricultural and coastal areas for urban uses as

compared to level evidence during the previous period of high economic growth. The coastal areas have been subject to severe environmental stresses such as land reclamation, water pollution, interruption or reduction of water flow from rivers to estuaries and coastal waters due to large concentrated populations and many industries.

Marine ecosystems are disturbed by the introduction of alien species, waste, harmful chemical substances and oil spills from ships and boats. In addition to this, coral bleaching induced by climate change is aggravating and the negative impact on biodiversity, especially the marine biodiversity has become very visible in the recent times. The Japan's legal framework for biodiversity conservation is in the form of guidelines on access to genetic resources and fair and equitable sharing of benefits arising from their utilization which was introduced in 2017. So, the Japanese national framework for biodiversity regulation for implementing the principles of conventional and biological diversity and the Nagoya protocol is in the form of these guidelines. The guidelines clearly defines the genetic resource and it also defines the scope of the regulation.

The information concerning genetic resource such as nucleic acid based sequences, synthetic nucleic acids, biochemical compounds that do not contain functional units of heredity, all these are exempted from the definition of genetic resource and are thus outside the scope of the regulation issued by the government of Japan. So, whatever we call as digital sequence information or dematerialized form of genetic resource is not coming within the scope of the regulations or guidelines issued by the government of Japan. So, subsequent to the 2022 COP decision, Japan may have to amend their regulation or include these digitalized form of genetic resource also into the purview of the regulation. The regulation provides for establishing user country measures. Establishing of user country measures is one of the important requirements under the Nagoya protocol.

So, it requires the member countries to enact legislation or administrative measures to ensure that whenever the utilization of genetic resource which is of foreign origin happens within the territory of a country, the country has to make sure that it is in compliance with the national legislation of the provider country. So, user country measures also requires instituting checkpoints. The guidelines issued by the government of Japan requires the users of genetic resources to furnish information along with IRCC unique identifier. IRCC is internationally recognized certificate of compliance. So, the guidelines give effect to the IRCC at national level.

So, any party which is utilizing the resource which is of foreign origin inside the territory of Japan will have to comply with the guideline and provide this information to the appropriate authorities. So, the appropriate information includes IRCC number which is the internationally recognized certificate of compliance unique identifier. The guidelines

encourages reporting and also cooperation concerning an alleged violation of legislation in a provider country. So, the guideline also requires the government to cooperate whenever there is an alleged violation of legislation in a provider country. So, if the utilization of the material is happening within the territory of Japan which has originated from a foreign country and there is a non-compliance with the national legislation of the provider country, then the government of Japan will cooperate in case of such alleged violations.

The guideline also provides for allocation of benefits arising from the utilization of genetic resource for the purpose of conservation and sustainable use of biodiversity. So, the benefits which is arising from the utilization of genetic resource have to be used for the conservation and sustainable use of biodiversity. Under the guideline, the minister of environment is to provide information to the access and benefit sharing clearinghouse. So, with regard to the approvals granted and the information received under the user country measures, the government which is represented by the minister of environment has to give this information to the ABS clearinghouse. The dissemination of information by the minister by posting the said information on the website of ministry of environment is also another requirement under the guideline.

The organizations including industries related to utilization of genetic resource, how to make efforts to develop and update sectoral and cross-sectoral model contractual clauses. So, the guidelines encourages the development of model contractual clauses which can be used in case of access and benefit sharing. Organizations including industries which are related to utilization of genetic resource are to make efforts to develop and update voluntary codes of conduct, guidelines and best practices and standards. Malaysia is one of the world's mega diverse countries existing in the ASEAN region. The mainstreaming of biodiversity considerations has already occurred in various policies, strategies and action plans of Malaysia.

The wildlife protection in Peninsular Malaysia is regulated under the Wildlife Conservation Act of 2010 and for other regions there are different legislations. The law places greater emphasis on biodiversity conservation and strengthens the implementation through penalties. The legislation also has provisions to regulate or ban the entry of invasive alien species into the territory of Malaysia. It also complements the International Trade in Endangered Species Act which deals with the CITES list under the international convention. The main threats for biodiversity in Malaysia include threats to ecosystems and species such as land development, pollution, poaching and collection, encroachment, climate change and invasive alien species.

While invasive alien species affect all sectors based on past records the agriculture sector

has been most seriously affected because of this. The main drivers of this trend consist of economic growth, increased demand for food, agricultural products, goods and services, exotic wild meat, traditional and herbal remedies, wild animals for pets and wild ornamental plants. The legal framework for biodiversity regulation in Malaysia was introduced through the Access to Biological Resources and Benefits Sharing Act in 2017. The 2017 legislation has 10 chapters and 63 sections. This enactment provides for establishing a national competent authority.

The secretary general of the ministry responsible for natural resources and environment will be the chairman of the national competent authority. So, this national competent authority established under the 2017 regulation will also work as the competent national authority under the Nagoya Protocol. The act also provides for the powers and functions of the national competent authority. It also provides in detail the procedures for accessing biological resources of Malaysian origin. The procedures for grant of permits are also detailed in the legislation.

The act requires that a register of permits has to be maintained by the national competent authority. So, all the permits granted under this legislation will be entered in the register of permits. The act also provides the grounds and procedures for the revocation of permits. The measures for monitoring and tracing of the utilization of biodiversity is also given in the legislation. The 2017 legislation also provides for establishing a clearinghouse mechanism at the national level.

So, apart from the clearinghouse mechanism already established under the CBD secretariat, the Malaysian legislation provides for establishing a clearinghouse mechanism at the national level. The act also provides power relating to enforcement seizure and arrest. So, the act provides adequate powers for the enforcement authorities. It also provides for appointment of enforcement officers in order to ensure proper implementation of the legislation. The non-compliance with the provisions of this act is a punishable offence with imprisonment and fine.

So, non-compliance with the 2017 legislation is considered as a serious offence in the territory of Malaysia. The power for compounding these offences is also given in the legislation. The act provides for rewards for any person who has surrendered services in connection with the detection of an offence. To conclude, the development of a national legislation to give effect to the principles of CBD and Nagoya protocol is part of an international commitment. Bhutan, Malaysia and Japan are some of the examples where countries have taken steps to develop a national regime for biodiversity governance.

This also depicts the different models available for the parties of Convention on Biological

Diversity to follow. So, after the signing of the Convention on Biological Diversity and subsequently after the coming into force of the Nagoya protocol, many countries have enacted national legislations. Some of the countries have also taken effort and modified their national legislation in order to accommodate the principles of Nagoya protocol. The Malaysia, Japan and Kingdom of Bhutan are three examples which gives us an idea of three different models which are available for the parties of the CBD to follow. The references of this lecture can be seen here.

Thank you very much for listening to the lecture. I hope you are enjoying the course.