Biodiversity Protection, Farmers and Breeders Right

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Lecture 20 : CBD & relation to other international treaties related to environment & organization.

Welcome to the course on Biodiversity Protection, Farmers and Bredise Right. This lecture will be about the Convention on Biological Diversity and its relation with other international treaties. The concept that will be covered in this lecture are the Convention on Biological Diversity, the trade related aspects of intellectual property rights, the TRIPS agreement, the International Union for Protection of New Varieties of Plants that is the UPOV convention, then the International Treaty on Plant Genetic Resources for Food and Agriculture that is ITPGRFA, then the Convention on International Trade in Endangered Species of Wild, Fora and Fauna, so that is CITES agreement, then the United Nations Convention to Compact Desertification or the UNCCD.

The keywords are given here. So, this lecture will be mainly covering the interrelationship of the Convention on Biological Diversity with other treaty regimes. So, as we understand the international cooperation is essential for the conservation of biological diversity. So, genetic resources or biodiversity comes under the ampit of several international agreements.

So, there are several international agreements which are generally called as MEAs or multilateral environmental agreements which aims at the conservation of biological diversity. So, multilateral environmental agreements are international agreements that are intended to promote international cooperation to address global environmental challenges that the world is facing like climate change, biodiversity laws, pollution and waste control. The Convention on Biological Diversity is the first global agreement to comprehensively cover all aspects of biological diversity. But at the same time, it does not negate the relevance of other multilateral agreements related to genetic resource. So, if you take the example of biodiversity or genetic resource, it is regulated under different treaty regimes.

So, it becomes the subject matter of regulation under various international agreements, most of which are related to environment, but there are also certain agreements which are not related to agreement. So, if you take genetic resource or biodiversity, it is regulated as a subject matter under many international conventions, it is not just under CBD and most of these international agreements are related to environment. So, they come under the term multilateral environmental agreements, but there are also agreements which are not related to environment, but which regulate aspects related to genetic resource. The multilateral

environmental agreements may be at international level or it can also be at regional level. So, there are several international agreements which comes under the term multilateral environmental agreements.

Some of these international agreements have specific focus like the Convention on Biological Diversity, which focuses on access and benefit sharing and recognizing the national sovereignty of countries and then the Convention on International Trade in Endangered Species of Wild Flora or Fauna, the Convention on Conservation of Migratory Species of Wild Animals, the International Treaty on Plant Genetic Resources for Food and Agriculture and the International Plant Protection Convention Basel Convention on Control of Transboundary Movements of Hazardous Waste and their Disposal etc. Sometimes it can also have broad themes like the Convention on Biological Diversity. So, apart from access and benefit sharing, it has other objectives like conservation of biodiversity and sustainable use. And there are also several provisions, which are intended to cover a broad theme which is conservation of biodiversity. Similar is the United Nations Framework Convention on Climate Change or the United Nations Convention to Combat Desertification.

So, the multilateral environmental agreements may be either regional or international level and it can have a specific theme or it can have a broad theme. Sometimes the agreement may be having a mix of these things as well. And there are also several regional agreements, which specifically focuses on region specific issues as well. But if you take genetic resource or a specific component of biodiversity, then there are four main treaty systems, which regulate aspects related to it. So, one is TRIPS, which we have covered in detail in another lecture.

Then there is UPOV, which is a specific treaty regime. And then there is International Treaty of Plant Genetic Resources related to food and agriculture, which is ITPGRFA. And then there is also Convention on Biological Diversity. So, the Convention on Biological Diversity focuses on its three objectives, that is conservation of biodiversity, which includes genetic resource or the diversity with related to genetic resources. And then there is sustainable utilization of biodiversity, which also includes genetic resource.

And then there is access and benefit sharing in relation to the utilization of genetic resource. So, the CBD focuses on these three objectives, while the TRIPS focuses on standardization of intellectual property norms all across the world. So, it provides for acquiring intellectual property rights over research or innovations related to genetic resource. UPOV's focus is plant breeders right. So, if a new variety is developed, then that will be protected under the plant breeders right, which is given, which is coming under the UPOV.

Then there is International Treaty for Plant Genetic Resources for Food and Agriculture. So, ITPGRFA's focus is to promote cooperation with regard to sharing of plant genetic resource for the purpose of food and agriculture. So, the Convention on Biological Diversity, which was covered in detail in another lecture, focuses on access and benefit sharing. So, it is an internationally legally binding treaty, which was adopted in the year 1992. And then there is also a protocol called Nagoya Protocol under the CBD, which came into force in 2014.

The importance of the Convention on Biological Diversity is that it is nearly universal, it has more than 197 parties. So, that means, almost majority of the countries in the world are party of CBD. It recognizes that countries have sovereign right over their own biological resources. And they have sovereign right to exploit their own resources and regulate activities carried out within their jurisdiction. Under Article 15, the authority to determine access to genetic resource rests with the national government and the subject of national legislation.

The Nagoya Protocol requires the member countries to adopt several legislative, administrative and policy measures, which are intended to make the objectives of CBD a reality. So, it includes that the access to genetic resource or traditional knowledge associated with genetic resource. The utilization of this shall be subject to prior informed consent of the party providing such resource. The members shall also adopt legislative, administrative and policy measures to ensure that benefits are shared in a fair and equitable manner. The genetic resources utilized within the national jurisdiction have to be in accordance with prior informed consent and mutually agreed terms as required by the domestic ABS legislation of the provider country.

So, every member country has to ensure that the utilization of genetic resources happening within their territory shall be in accordance with the legal regulations of the provider country. Nagoya Protocol also requires the parties to establish user country measures to achieve this objective and also designate checkpoints. So, overall the CPD and the Nagoya Protocol framework intends to regulate the utilization of genetic resources with an objective that it will facilitate conservation, sustainable utilization and equitable sharing of benefits. The TRIPS agreement was negotiated at the end of Uruguay Round of the General Agreement on Tariffs and Trade, which is popularly known as GART and TRIPS is administered by the World Trade Organization. It establishes minimum standards for regulation of different forms of intellectual property rights.

The TRIPS agreement introduced intellectual property law into multilateral trading system for the first time and it remains even now as the most comprehensive multilateral

agreement on intellectual property. It obligates the parties to follow standardized norms regarding intellectual property rights and thus necessitates a change in their national IP legislations. So, every member country had to change their national legislation in order to meet the requirements under the TRIPS agreement. The TRIPS agreement is dealt in detail in another lecture. So, thus the TRIPS agreement comprehensively covers the various aspects related to intellectual property rights and calls for homogenization of intellectual property norms across the world.

So, the main forms of intellectual property rights related to genetic resource are plan variety protection and patents. So, in case of innovations or inventions which are based on genetic resource, patenting would be possible. Plan variety protection refers to new varieties which are developed using existing genetic material. So, during the TRIPS negotiation there was several discussions regarding the intellectual property protections with regard to genetic resources. So, with regard to plan variety protection also, there was difference of opinion between the developed countries and the developing countries.

Developed countries like US articulated for patent protection for plans. This was supported by countries like Japan. They took the view that patent protection is indispensable for new technology solutions in agriculture. So, their argument was that for incentivizing innovations in agriculture sector, patent protection for plan varieties is indispensable. But this was opposed by European countries who took the view that patent plan should be excluded from patents and they argued that UPOV model is more desirable.

UPOV model refers to another treaty framework which will be dealt in detail in later part of this lecture. The developed countries argued that some form of intellectual property protection is required for new varieties. But developing countries had opposition to this view. To some extent, they supported the European position that plan variety protection would detrimentally affect their national goals of poverty and hunger eradication. But finally, this culminated into article 27(3)(b) which requires that member states shall provide for protection of plan varieties either by patents or by an effective sui generis system or by any combination thereof.

So, finally, the countries get an option either to follow patent protection like what was argued by US and Japan or a sujanary system like the UPOV model which is followed by European countries or by any combination thereof. So, UPOV is another treaty system which have direct relationship with plant genetic resources. So, this is International Union for Protection of New Varieties of Plants which was adopted in 1961. So, before 1961 itself, European countries generally encouraged private commercial breeding. So, there were several national certification schemes in different European countries.

So, there was a need for integration which was felt by the European countries. UPOV, the adoption of UPOV was resulting from the initiative taken by the French government along with 12 other Western European countries. So, they argued for harmonization of plan variety protection regime in the European countries and finally, it culminated into the International Union for Protection of New Varieties of Plants in 1961. The UPOV was subsequently revised in 1972, 78 and 1991. The treaty secretariat of UPOV is headquartered in Geneva Switzerland.

Now, the two versions of UPOV, UPOV 78 and UPOV 91 versions are coexisting. So, the existing members are free to decide whether they want to ratify UPOV 91 or stay with UPOV 78 whereas, new members have to adhere to the more restrictive version which is the 1991 version. So, one of the main criticism against UPOV is that it is biased in favor of plant breeders, but countries like United States projects UPOV as a choice sui generis system. So, that means that under article 27 of the TRIPS agreement, the member states are getting a freedom to decide whether they want to follow patent protection or sui generis system or a combination of both with regard to plant variety protection. So, European, so the developed countries like US have adopted the patent regime whereas, European countries have followed the UPPO regime.

So, US projects that UPPO is a choice sujanary system and it urges even the developing countries to adopt the UPPO model for protecting plant varieties. ITPGRFA is another treaty system which is known as International Treaty for Plant Genetic Resources related to food and agriculture. The objective of this treaty is conservation and sustainable use of plant genetic resources for food and agriculture and the fair and equitable sharing of benefits arising from their use in harmony with conventional biological diversity for sustainable agriculture and food and food security. So, the objective of this convention is sustainable agriculture and food security. So, in order to promote sustainable agriculture and food security, the protection of plant genetic resources related to food and agriculture is extremely important.

So, ITPGRFA calls for international cooperation for sharing of plant genetic resources which are usable for food and agriculture. So, it requires countries to share the resources and it also provides for benefit sharing mechanism in case of use of genetic resources. ITPGRFA also recognizes the farmer's rights. Under ITPGRFA, farmers rights subject to national laws can protect traditional knowledge which is relevant to plant genetic resources for food and agriculture, the right to equitably participate in sharing benefits arising from utilization of plant genetic resource for food and agriculture, the right to participate in making decisions at national level on matters related to conservation and sustainable use of plant genetic resources for food and agriculture. So, it also provides for adoption of a farmer's right in national legislations.

ITPGRFA establishes a multilateral system of access and benefit sharing in order to facilitate plant germplasm exchanges and benefit sharing through standard material transfer agreements. So, it requires the countries to share plant genetic resources for the purpose of food and agriculture and in case of such sharing, there is also provision for benefit sharing. So, once the utilization happens, there is provision for benefit sharing which arises from the utilization of the genetic resource. But this sharing of benefits happens through a multilateral system of access and benefit sharing and it happens in accordance with a standard material transfer agreement provided under the ITPGRFA. ITPGRFA provides a list of 64 of important foods and forage crops essential for food security and interdependence.

The genera and species of these 64 crops are listed in annex 1 of the ITPGRFA. Another international agreement related to genetic resource is CITES or the Convention on International Trade in Endangered Species of Wild Flora and Fauna. This international agreement aims to ensure that international trade in specimens of wild animals and plants does not threaten the survival of species. CITES was drafted as a result of resolution adopted in 1963 at the meeting of members of the International Union for Conservation of Nature. The convention was opened for signature in 1973 and finally entered into force in 1975.

The protections under CITES covers more than 38,000 species. So, CITES specimen can include wide range of items including the all animal, plant or a product that contains part or derivative of the listed taxa such as cosmetics or traditional medicine. So, it covers the flora and fauna whether it be in dead or alive form and it can also cover its use in cosmetics or traditional medicines. So, the species which are covered under CITES are listed under the different appendixes. The CITES obligates the states to restrict international trade in specimens of listed species when they move across international borders.

The protected taxa or population protected under CITES is included in the three lists which are called as appendices. The appendix that list a taxa or population reflect the level of threat posed by international level and the controls that apply to that species. UNCCD or the United Nations Convention to Compact Desertification is another treaty related to genetic resources. It was adopted in 1994 and is an international agreement linking environment and development to sustainable land management. UNCCD aims to compact desertification and mitigate the effects of drought through national action programs that incorporate long term strategies supported by international cooperation and partnership arrangements.

The convention addresses specifically the arid, semi arid and dry sub humid areas known

as dry lands where some of the most vulnerable ecosystems and peoples can be found. The UNCCD has been ratified by European Union and 196 member countries. The convention is based on principles of participation, partnership and decentralization, the backbone of good governance and sustainable developments. The UNCCD is particularly committed to bottom of approach encouraging the participation of local people in compacting desertification and land degradation. To conclude, CPD is a comprehensive convention addressing various aspects of biodiversity and specifically focusing on conservation, sustainable use and equitable sharing of benefits.

But there exist, sorry, but there exist several other international agreements at bilateral, multilateral and regional levels to address various aspects related to biodiversity. A close cooperation and engagement between these treaty systems are essential to avoid conflicts. The references to this lecture are given here. Thank you very much for listening to the lecture. I hope you are enjoying the course.