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# **ACCESS AND BENEFIT SHARING TO GENETIC RESOURCES AND INTERNATIONAL POLICIES AND CONVENTION**

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Farhat Ali, PhD Scholar, Department of Law AMU, Aligarh, Uttar Pradesh

## **ABSTRACT**

Genetic resources are having so tremendous practical and historical significance for the human life from daily survival to generating the wealth of nation nevertheless their crucial role in supporting human society is frequently overlooked and undervalued. Genetic conservation is an integral part of much broader activity concerned with protecting the many plants, animals, microorganisms or communities of the organisms that help to mold and stabilize the environment and maintain the quality of air, water, soil.

Conservation ensures that future generations will benefit from earth's biological resources. Now it has become important to know about genetic resources so that we may more clear about the genetic resources and importance of its protection, the research will provide certain definition of genetic resources and also mentioned certain example though this will not sufficient yet it would clarify the somehow the concept of genetic resources. The access and benefit sharing is one of the process which make a peaceful environment at the world level in the area of genetic resources. It creates a balance regarding use of various genetic resources which have been collected from different part of countries. This has led to the development of increasingly complex and controversial legal frameworks concerning the rules that should govern access to genetic resources and related knowledge. Issues concerning access arise at the international level where they focus mostly on the north- south relations. Therefore it has become important for us to know about the international policies and convention for the governing of regulatory mechanism of access and benefit sharing.

## **Introduction**

Genetic resources are having so tremendous practical and historical significance for the human life from daily survival to generating the wealth of nation nevertheless their crucial role in supporting human society is frequently overlooked and undervalued. Genetic conservation is an integral part of much broader activity concerned with protecting the many plants, animals, microorganisms or communities of the organisms that help to mould a stabilize the environment and maintain the quality of air, water, soil.

Conservation ensures that future generations will benefit from earth's biological resources. Now it has become important to know about genetic resources so that we may more clear about the genetic resources and importance of its protection, the research will provide certain definition of genetic resources and also mentioned certain example though this will not sufficient yet it would clarify the somehow the concept of genetic resources.

## **Genetic Resources**

It means genetic material of actual and potential value

Now genetic material means any material of plant, animal, microbial or other origin containing functional units of heredity

Example- it includes Micro-organisms, plant varieties, animal breeds, genetic sequences, etc

Micro-organisms like bacteria, fungi, protozoa etc

Environment is incomplete without micro-organisms as we know with every breath human beings take various microscopic- organisms, besides this they are crucial part of ecosystem and take part in activities like protection of minerals like nitrogen gases, oxygen , carbon-dioxide, taking care of dead and decaying material etc

## **Plant Genetic Resources**

According to FAO- the entire generative and vegetative re-productive material of the species with economical and social value especially for the agriculture of the present and future with special emphasis on nutritional plants

## Animal Genetic Resources

It includes all species, breeds, strains that are of economic, scientific and cultural interest to agriculture, now in future common species

Include like sheep, goats, cattle, horses, pigs, buffalo etc

But many other domesticated animals such as camels, donkeys, elephants, rabbits are important for the different cultures and regions of the world.

Animals accounts for 19% of the world's food directly they also provide drought power and fertilizers for the crop productions, bringing their overall contribution up to 25 percents.

Now here I am going to make more clarification about genetic resources why because a common man is unable to understand these resources due to confusion and this confusion is created due to presence of agriculture products and other animal products, here this confusion is obvious as if we consider agriculture and direct animal and organisms then what will be need of access and benefit doctrine and the laws on that since they are protected by certain other norms and laws of the nations already in existence. Therefore it has become important to clear the genetic resources which are cover under the access and benefit doctrine in a lay man language.

The word mentioned in the **biological diversity act 2002** that is **genetic resources** means biological materials which has **actual or potential value**

Take the word actual and potential value which means the hidden value of the resources which come into existence, when any agriculture product or plant or animal product converted into another form and make a new thing, now it has become an actual and potential value.

Example- if we take **alluvira** it is plant product but by mixing it make soaps, or other medicinal product, now it's actual and potential value come into picture so similar to this certain other examples.

Since we are not much aware about such use of our product due to lack of knowledge in the field or due to lack of resources or means which could make them more productive, therefore developing countries were only to be stand passerby and nothing else. If we saw from the

historical evidence basis we found that in modern Indian history the Englishmen were exploited our resources because of lack of education and technologies. We have skill no doubt but proper understanding and education not present. Dada Bhai Nauroji had given the theory of Drain of Wealth.

Our awareness started in 1992 when the work began at international level in the form of CBD i.e Convention on Biological Diversity. However this convention rest the option with countries to make their own laws and govern but at international level it did not provide strict sanction against bio-piracy or misuse of it.

Moreover, this convention has not much emphasis on the access and benefit sharing, and then of course our awareness was much clear in the form of Cartagena Protocol on Bio-safety. But here also we were not more focusing upon the doctrine of access and benefit sharing. Therefore we have seen most clarity with come to existence of the Nagoya Protocol in 2010 which has mention three important objectives to achieve as follows:

Conservation of Biological Resources

Sustainable use of the biological resources

Fair and equitable sharing of genetic resources

### **Doctrine of Access and Benefit Sharing**

Access and benefit-sharing is a system or an agreement discussed under public international law with an aim to distribute benefits arising from genetic resources somewhat between the users of genetic resources with country providing. It typically arises concerning bio-prospecting where indigenous knowledge is used to focus screening efforts for commercially valuable genetic and biochemical resources.

It recognizes that bio-prospecting frequently relies on indigenous or traditional knowledge, and that people or communities who hold such knowledge are entitled to share of benefits arising from its commercial utilization. The over-reaching aim of doctrine of access and benefit-sharing (ABS) of genetic resources is to enable fair distribution of benefits between the users and providers for opening the doors for innovation and creating incentives for conserving biodiversity. Access to genetic resources is essential for research related to conservation of

plant genetic resources and Research and Development for evolved crops and agricultural products that can adapt to different weather conditions brought about by climate change. Hence, access to genetic resources and benefit sharing from that access is crucial for sustainable development to secure research and secure resource availability and environmental sustainability.

### **International Policies and Convention for Access and Benefit Sharing**

The existing international framework for ABS of genetic resources and associated TK is the Convention on Biological Diversity (CBD).

However, the time being member states have not managed to adopt a binding access and benefit sharing legal regime.

Another most important treaty at international governance of access and benefit sharing is **Plant Genetic Resources and Food and Agriculture** treaty it provide certain list of crops regarding the access and benefit sharing. Now there are certain important facts about the CBD as follows:

The CBD is one of the multilateral treaties that opened for signature at the 1992 United Nations Conference on Environment and Development in Rio de Janeiro, Brazil (hereafter the Earth Summit or UNCED). To date, the CBD has been ratified by 193 parties, making it nearly universal. Of the major user countries, the United States of America remains a non-party (and consequently not bound by its provisions), despite having signed the treaty in 1993.<sup>1</sup>

The treaty entered into force on 29 December 1993, and has three objectives namely

- The conservation of biological diversity;
- The sustainable use of the components of biological diversity and
- The fair and equitable sharing of the benefits arising out of the utilization of genetic resources.

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<sup>1</sup> Sustainable use – the use of components of Biological Diversity in a way and at a rate that does not lead to the long-term decline of biological diversity, thereby maintaining its potential to meet the needs and aspirations of present and future generations (Article 2, CBD).

Parties to the CBD have nominated national focal points, which act as the designated person representing a Party on all matters related to the Convention.

The CBD contains a large number of obligations which its signatories must abide by, including requirements for general conservation measures, *in situ* and *ex situ* conservation, incentives, and a range of other topics. The substantive provisions agreed to in the CBD with respect to the fair and equitable sharing of benefits arising out of the utilization of genetic resources is found in Articles 15, 16 and 19 of the treaty.

### **Convention on Biological Diversity 1992 and Traditional Knowledge**

This convention has been recognized the rights of the indigenous people over the genetic resources if we talk about the provisions of it, we find that article 1 and 8 (j) of the convention deals with the equitable sharing of benefit which has arise from the traditional knowledge. Therefore the local community will get the benefit when there is development of the novelty product through the utilization of the traditional knowledge. The novelty here means that there is new invention which has a significant potential in the dynamic era.<sup>2</sup>

As far as the article 8 (j) is concerned it deals with the preservation protection and maintenance of the knowledge, innovation, practices of the indigenous and local communities who actually make symbols of actual lifestyle relevant for the conservation and sustainable use of biological resources and encourage their wider application with the approval and involvement of indigenous and local communities through mutual agreements.<sup>3</sup>

The access and benefit sharing are the most important at international level under the biodiversity convention. Therefore the Bonn guidelines on access to genetic resources and fair and equitable sharing of the benefits arising from their utilization was adopted in conference of **Cop- 6** of the CBD. Resulting into that to access to genetic resources the consent of the local communities required. It will ensure that there is no exploitation of the genetic resources. The communities have also right to equitable benefit sharing whereby they are compensated for the use of the resources. Of course that may be monetary or non monetary.

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<sup>2</sup> See para. 44(o) of the Plan of Implementation of the World Summit on Sustainable Development, A/Conf.199/20 of 4 September 2002.

<sup>3</sup> Ibid

The sui generis system and the CBD ensure that a prior informed consent is obtained from the local community to utilize the same. But the same consent is not needed if the knowledge is in the public domain already.

For example, the **Arogyapacha** was used by the **kani tribes** for centuries to help them during physical exertion in the Western Ghats in the state of Kerala. They used to eat the seed of Arogyapacha when they were exhausted. So the scientist who knew about this practice and wanted to investigate the same. A drug called **jeevani** based on this Arogyapacha was developed in 1995 and was thrown in the market. However the pharmaceutical industry has purchased it and developed the drug agreed to share 50% of gains with the Kani tribes as a license fee also 2% of royalty from the sale. Now we can say that this is one of the examples of benefit sharing.

Thus, the access and benefit sharing and prior informed consent are some of the important tools for the protection of important tools for the protection of genetic resources and traditional knowledge.

### **Bonn Guidelines and Proposed binding International Regime**

Actually what would be the basic governing principles with regard the access and benefit sharing this was the main issue of the debate for a number of years in the context of the biological diversity convention. Subsequently in 2002 there were certain guidelines adopted on the conference of the parties called Bonn guidelines with regard the access and benefit sharing of the genetic resources and traditional knowledge.<sup>4</sup>

Therefore these guidelines' provided a framework for the action by members states that are encouraged to use them to develop national legal frameworks. The main object of the Bonn guidelines is to increase transparency and certainty in access procedures so as to foster access by users of biological resources and traditional knowledge.

The Bonn guidelines has more emphasis the need to have clear institutional responsibility so that users of the system know how to go about the required process<sup>5</sup>

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<sup>4</sup> Bonn Guideline on Access and Benefit Sharing

<sup>5</sup> Ibid

Thus all the countries have to encourage the designate national focal points and to clarify the roles of the responsibility of all the stakeholders.

The guidelines seek to ensure that all relevant stakeholders are involved in the access procedure to ensure that there is no backtracking on the access decision after it has taken as some relevant actors have not been involved.

The guidelines are also suggested ways in which benefit sharing can be conceived. This include monetary and the non monetary benefits. On the other hand the monetary benefit covers access fees, the payments of royalties, research findings and joint ventures. While non monetary includes the sharing of the research and development result, participation in product development , training relating to the genetic resources and access to scientific information relevant to the conservation and sustainable use of the biological diversity.

These guidelines have not been solved the problems of the access and benefit sharing regarding the genetic resources. This is limited success led to calls for the development of a binding legal framework.

Two protocols have been adopted under the CBD to date, further elaborating the obligations of its signatories on specific issues.

As called for under Article 19(3), The Cartagena Protocol on Bio-safety to the Convention on Biological Diversity (the Cartagena Protocol) Regulates at the International Level the safe handling, transport and use of living modified organisms (LMOs) resulting from modern biotechnology that may have adverse effects on biological diversity, taking also into account risks to human health. The Protocol was adopted on 29 January 2000 and entered into force on 11 September 2003<sup>6</sup>.

### **Cartagena protocol on Bio-safety to the Convention on Biological Diversity 2000**

The conclusion of the Bio-safety Protocol has been hailed as a significant step forward in that it provides an international regulatory framework to reconcile the respective needs of trade and environmental protection with respect to a rapidly growing global industry, the biotechnology

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<sup>6</sup> Article 19.3(Cartagena Protocol on Biosafety to the Convention on Biological Diversity 2000)



industry.

The Protocol thus creates an enabling environment for the environmentally sound application of Biotechnology, making it possible to derive maximum benefit from the potential that biotechnology has to offer, while minimizing the possible risks to the environment and to human health.<sup>7</sup>

### **Object and Scope**

The objective of this Protocol is to contribute to ensuring an adequate level of protection in the field of the safe transfer, handling and use of living modified organisms resulting from modern biotechnology that may have adverse effects on the conservation and sustainable use of biological diversity, taking also into account risks to human health, and specifically focusing on trans-boundary movements.

This Protocol shall apply to the trans-boundary movement, transit, handling and use of all living modified organisms that may have adverse effects on the conservation and sustainable use of biological diversity, taking also into account risks to human health.

Article 2 provides about the general provisions

1. Each Party shall take necessary and appropriate legal, administrative and other measures to implement its obligations under this Protocol.
2. The Parties shall ensure that the development, handling, transport, use, transfer and release of any living modified organisms are undertaken in a manner that prevents or reduces the risks to biological diversity, taking also into account risks to human health.
3. It does not restrict the party to the convention to action that is more protective of the conservation and sustainable use of Biological Diversity.

### **Procedure for Living Modified Organisms Intended for Direct use as Food or Feed or for Processing (Art- 11)**

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<sup>7</sup> Ibid

It is the party to make a final decision regarding domestic use which includes placing on the market, of living modified organism that may be subject to trans-boundary movement for direct use as food or feed or for processing shall within fifteen dyes of making that decision, inform the parties through the bio-safety clearing house.

### **Risk Assessment<sup>8</sup>**

Risk assessment carried out in scientifically sound manner. Such risk assessments shall be based at a minimum formation provided in accordance with **article 8** and other available scientific evidence in order to identify and evaluate the possible adverse effects of living modified organisms on the conservation and sustainable use of biological diversity taking also into account risks to human health.

2. The Party of import shall ensure that risk assessments are carried out for decisions taken under Article 10. It may require the exporter to carry out the risk assessment.
3. The cost of risk assessment shall be borne by the notified if the Party of import so requires.

### **Risk Management<sup>9</sup>**

**1.** The Parties shall, taking into account **Article 8 (g)** of the Convention, establish and maintain appropriate mechanisms, measures and strategies to regulate, manage and control risks identified in the risk assessment provisions of this Protocol associated with the use, handling and trans- boundary movement of living modified organisms.

**2.** Measures based on risk assessment shall be imposed to the extent necessary to prevent adverse effects of the living modified organism on the conservation and sustainable use of biological diversity, taking also into account risks to human health, within the territory of the Party of import.

**3.** Each Party shall take appropriate measures to prevent unintentional trans-boundary movements of living modified organisms, including such measures as requiring a risk assessment to be carried out prior to the first release of a living modified organism.

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<sup>8</sup> Art. 15 Supra Note 9,p,42

<sup>9</sup> Art. 16- Ibid

4. Without prejudice to paragraph 2 above, each Party shall endeavor to ensure that any living modified organism, whether imported or locally developed, has undergone an appropriate period of observation that is commensurate with its life-cycle or generation time before it is put to its intended use.

5. Parties shall cooperate with a view to:

(a) Identifying living modified organisms or specific traits of living modified organisms that may have adverse effects on the conservation and sustainable use of biological diversity, taking also into account risks to human health; and

(b) Taking appropriate measures regarding the treatment of such living modified organisms or specific traits.

Thus these are the some important provisions dealt with the access and benefit sharing genetic resources and traditional knowledge but it has not completed the whole purpose of the access and benefit sharing at international level. Therefore a challenge has faced by the countries as the protocol is only provide the guidelines' that how to reach to the genetic resources in various countries but it does not provide a binding force.

### **Nagoya Protocol on Access to Genetic Resources and Benefit Sharing**

The second protocol adopted under the CBD is the *Nagoya Protocol on Access to Genetic Resources and the Fair and Equitable Sharing of Benefits arising from their Utilization to the Convention on Biological Diversity (the Nagoya Protocol)*.<sup>10</sup>

The Nagoya Protocol sets out the rules and mechanisms for access to genetic resources and supports the fair and equitable sharing of benefits arising from their utilization, and, along with the basic provisions of the CBD on ABS, forms the central body of law that defines how the ABS system operates.

Many of the provisions of the Nagoya Protocol borrow from the Bonn Guidelines on Access to Genetic Resources and Fair and Equitable Sharing of the Benefits Arising out of their

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<sup>10</sup> Nagoya Protocol 2010

Utilization, a set of voluntary non-binding guidelines on access and benefit sharing endorsed by the CBD Conference of the Parties (COP) at its Sixth Session in 2002.

The Nagoya Protocol was adopted by the 10th COP to the CBD in Nagoya, Japan on 29 October 2010, and opened for signature for one year from February 2011, finally receiving 92 signatures, amongst them 22 European Union (EU) Member States and the EU.

When the period for signatures ended, the Nagoya Protocol had two ratifications. The treaty has now been ratified by over 50 countries, and will come into effect as from 12 October 2014. For countries that have ratified the CBD and the Nagoya Protocol, domestic ABS legislation will be shaped by the relevant provisions of the CBD and the Nagoya Protocol, as treaty implementation relies to a large extent on national legislation to put the access and benefit sharing provisions into effect.

The decision making bodies of the CBD and its Protocols are serviced by the CBD Secretariat, located in Montreal, Canada, which is administratively part of the United Nations Environment Programme (UNEP).<sup>11</sup>

### **Key Points**

The CBD enjoys nearly universal acceptance as the most comprehensive source of international law to date on issues of biological diversity. The CBD established the basic principle that States have sovereign rights over their own biological resources.

The Nagoya Protocol, the text of which was agreed in October 2010, sets out the system to implement those rights and obligations on ABS of genetic resources which on the basis of CBD Article 8(j) also cover traditional knowledge associated with genetic resources. The Nagoya Protocol received 92 signatures and awaits 50 ratifications to enter into force.

National implementation of ABS legislation, while required by the CBD, is slow and generally tends to focus more on access issues and much less on benefit sharing. As a result, it becomes

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<sup>11</sup> As of the 3 September 2014, 52 countries have either ratified or acceded to the Protocol. For an updated list, readers may consult (<http://www.cbd.int/abs/nagoya-protocol/signatories/default.shtml>). COP-12 of the CBD, scheduled for October 2014 in Korea, will also be the first meeting of the Parties to the Nagoya Protocol

important to examine other legal instruments in order to determine how best to shape national IP legislation to further the goals of the CBD.

### **Nagoya Protocol Provisions on Access and Fair and Equitable Benefit Sharing<sup>12</sup>**

1. In accordance with Article 15, paragraphs 3 and 7 of the Convention, benefits arising from the utilization of genetic resources as well as subsequent applications and commercialization shall be shared in a fair and equitable way with the Party providing such resources that is the country of origin of such resources or a Party that has acquired the genetic resources in accordance with the Convention. Such sharing shall be upon mutually agreed terms.

2. Each Party shall take legislative, administrative or policy measures, as appropriate, with the aim of ensuring that benefits arising from the utilization of genetic resources that are held by indigenous and local communities, in accordance with domestic legislation regarding the established rights of these indigenous and local communities over these genetic resources, are shared in a fair and equitable way with the communities concerned, based on mutually agreed terms.

3. To implement para-1 above, each Party shall take legislative, administrative or policy measures, as appropriate.

4. Benefits may include monetary and non-monetary benefits, including but not limited to those listed in the Annex.

5. Each Party shall take legislative, administrative or policy measures, as appropriate, in order that the benefits arising from the utilization of traditional knowledge associated with genetic resources are shared in a fair and equitable way with indigenous and local communities holding such knowledge. Such sharing shall be upon mutually agreed terms.

### **Access to Genetic Resources<sup>13</sup>**

1. In the exercise of sovereign rights over natural resources, and subject to domestic access and benefit-sharing legislation or regulatory requirements, access to genetic resources for their utilization shall be subject to the prior informed consent of the Party providing such resources

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<sup>12</sup> Art 5 Supra Note 10, P45

<sup>13</sup> Art 6 Ibid

that is the country of origin of such resources or a Party that has acquired the genetic resources in accordance with the Convention, unless otherwise determined by that Party.

**2.** In accordance with domestic law, each Party shall take measures, as appropriate, with the aim of ensuring that the prior informed consent or approval and involvement of indigenous and local communities is obtained for access to genetic resources where they have the established right to grant access to such resources.

**3.** Pursuant to paragraph 1 above, each Party requiring prior informed consent shall take the necessary legislative, administrative or policy measures, as appropriate, to

**(a)** Provide for legal certainty, clarity and transparency of their domestic access and benefit-sharing legislation or regulatory requirements;

**(b)** Provide for fair and non-arbitrary rules and procedures on accessing genetic resources;

**(c)** Provide information on how to apply for prior informed consent;

**(d)** Provide for a clear and transparent written decision by a competent national authority, in a cost-effective manner and within a reasonable period of time;

**(e)** Provide for the issuance at the time of access of a permit or its equivalent as evidence of the decision to grant prior informed consent and of the establishment of mutually agreed terms, and notify the Access and Benefit-sharing Clearing-House accordingly;

**(f)** Where applicable, and subject to domestic legislation, set out criteria and/or processes for obtaining prior informed consent or approval and involvement of indigenous and local communities for access to genetic resources; and

**(g)** Establish clear rules and procedures for requiring and establishing mutually agreed terms. Such terms shall be set out in writing and may include, *inter alia*:

**(i)** A dispute settlement clause;

**(ii)** Terms on benefit-sharing, including in relation to intellectual property rights;

**(iii)** Terms on subsequent third-party use, if any; and

(iv) Terms on change of intent, where applicable

National legislation must therefore provide a means of ensuring that those who seek to access genetic resources and associated TK for utilization have the PIC of the country or indigenous peoples and local community (hereafter ILC) concerned. Parties to the Protocol may specify the instances where PIC is required for access, which may include: Genetic resources from areas under national jurisdiction. In case they are countries of origin, including such genetic resources in *ex-situ* collections.

On the other hand, the Protocol specifies various procedural requirements, which must be complied with. These include the requirement to formulate fair and non-arbitrary rules and procedures for access, information on how to apply for PIC, the issuance of permits as evidence of PIC, the requirement to provide written decision by the competent national authority within a reasonable period of time and the like.

National legislation must also provide a way to ensure that the results of research and development (hereafter R&D) and the benefits arising from the commercial and other utilization of genetic resources are shared in a fair and equitable manner, based on MAT.

The Nagoya Protocol establishes a compliance system for ABS. As noted above, Parties need to ensure that genetic resources utilized from the area under national jurisdiction have been accessed based on PIC and MAT as required by the provider country.

A national competent authority must be established to implement the ABS system, where it will be possible to register ABS agreements and any other documentation that can potentially serve as evidence of PIC and MAT (Nagoya Protocol, Article 13).

The competent authority grants a permit for access when it is satisfied that PIC and MAT requirements under national law have been met.

### **World Trade Organization**

The world trade organization has taken some steps to protect the traditional knowledge at the international level. Trade related an aspect on intellectual property rights has failed to recognize the importance of traditional knowledge. So there are demands to review the **Article 27.3(b)**

and also review of the whole agreements. It is required only for the member countries to protect the plant varieties by a sui generis system.<sup>14</sup>

The sui generis system would recognize the traditional knowledge relating to the genetic resources and promote access and benefit sharing. The protection under the sui generis system has extended even if it is in the form of oral information.

The sui generis system adopted by various countries as they felt that the present intellectual property rights regime would do no good to traditional knowledge in terms of safeguarding and protecting them. India, Philippines, Thailand, Peru and Cost Rica are some of them who have worked on protecting the rights of the indigenous communities and their traditional knowledge and also evolved the legislation for them.<sup>i</sup>

### **WIPO and Access to Genetic Resources** <sup>15</sup>

World intellectual property organization's involvement with the issue of access to genetic resources commenced in 1999 with study, commissioned jointly with the United Nations environment programmed on the role of intellectual property rights in the sharing of benefits arising from the use of biological resources and traditional knowledge. These matters were arisen at the third session of standing committee on the law of patents.

Later on this committee has requested to international bureau to include the issue of protection of biological and genetic resources on the agenda of working group on biotechnological inventions to be convened at world intellectual property organization in 1999.

Therefore the working group has ready to prepare the questionnaires for the purpose of the gathering information about the protection of biotech enological inventions including certain aspects regarding the intellectual property and genetic resources.

At the third session of the world intellectual property organization standing committee on the law of patents in September 1999 the delegation of Colombia proposed as a means of achieving

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<sup>14</sup> Emerging issue in IP, Trade, Technology, Market Freedom, Guido West Kanip, Queen Mary Studies in IP, Edward Elgan

<sup>15</sup> Ibid



some global harmonization of patent registration procedures. Certain important points provided under the treaty law as follows,<sup>16</sup>

1. All industrial protection shall guarantee the protection of the country's biological and genetic heritage. Consequently the grant of patents or registrations that relate to elements of that heritage shall be subject to their having been acquired made legally.
2. Every document shall specify the registration number of the contract affording access to genetic resources and copy thereof whereby the products or process for which protection is sought have been manufactured or developed from genetic resources or products thereof of which one of the member countries is the country of origin.

Moreover on September 14, 2000 the permanent mission of the Dominican Republic to the United Nations in Geneva submitted two documents on behalf of the group of countries of Latin America and the Caribbean as part of the debate.

Therefore in order to clarify the future application of intellectual property to the use and exploitation of genetic resources and biodiversity and also traditional knowledge. It has also suggested that the committee clarify certain things.

- That the notion of the public domain and private domain.
- The appropriateness and feasibility of recognizing rights in traditional works and knowledge currently in the public domain and investigating machinery to limit and control certain kinds of unauthorized exploitation.
- Recognition of the collective rights.
- Model provisions and model contracts with which to control the use and exploitation of genetic and biological resources and machinery for the equitable distribution of profits in the event of a patentable product or process being developed from a given resources embodying the principles of prior informed consent and equitable distribution of profits in connection with the use, development and commercial exploitation of the material transferred and the invention and technology resulting from it.
- The protection of undisclosed traditional knowledge

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<sup>16</sup> Supra Note 11,p, 49

Finally it was suggested that in concert with the secretariat of union protection of plant varieties the committee could embark on the exploitation of possible options for defining of the sui generis systems for the protection of genetic resources and biodiversity.

However there were identified three interrelated themes to inform the deliberations of the committee and intellectual property issues that arise in the context of as;

- Access to genetic resources and benefit sharing
- Protection of traditional knowledge, whether or not associated with those resources
- The protection of expression of the folklore

### **International Labor Organization**

Due to efforts of this organization a convention entered into on indigenous and tribal peoples. It tries to protect the rights of indigenous peoples.

Another important draft which protects the rights of indigenous people is united nation draft. In other words the human rights commission establishes the end note of the united nation draft.

### **The International Treaty on Plant Genetic Resources for Food and Agriculture's regime**

As far as this treaty is concerned, it has more value in the context of the genetic resources and benefit sharing of it. When the development of access and benefit sharing was continuous with regard to the biodiversity convention, the more recent this treaty includes a complete binding access and benefit sharing regime.<sup>17</sup>

The basic principle regulating access is member states' sovereign rights over their plant genetic resources for food and agriculture and the right to regulate access to these resources. Moreover this treaty has accompanied as in the biodiversity convention of a commitment to facilitate access.

Another important role of this treaty, it is a multilateral treaty and the significant of the multilateral treaty is to make the access regime largely international since member states must

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<sup>17</sup> Peter K. Y, *Intellectual Property and Information Wealth*, Volume 4<sup>th</sup> 2007 p,88

conform to the provisions of the treaty regarding access , thereby giving them less leeway than under the biodiversity convention and providing more uniformity in the overall regime.

The International Treaty on Plant Genetic Resources for Food and Agriculture (the ITPGRFA) entered into force on 29 June 2004. The Treaty is overseen by a Governing Body composed of the 152 countries that have so far ratified it as of October 2014.

The Governing Body is supported by a secretariat, located in Rome, Italy, which is part of a UN specialized agency, the United Nations Food and Agriculture Organization (FAO). This secretariat is also the body which administers the common fund for benefit sharing under this treaty. Earlier it was confined to limited crops mentioned in annex 1 , but now it has covered various other crops at present **81 forage species from 29 genera and an undefined number of crop species from 51 genera** which is covering the vast majority of plant crops consumed by humans but with important exceptions such as **cocoa, coffee, cotton, soya or tomato**.<sup>18</sup>

This treaty has provided that in the absence of the law for accessing in situ resources, access will be governed by conditions set by the governing body.

Breeders and scientists who wish to utilize the plant genetic resources and improve on these varieties are required to seek access in accordance with a standardized material transfer agreement (MTA) **Article 12.4**.

Those who access genetic materials through the system are required not to claim any rights that limit the facilitated access to the plant genetic resources for food and agriculture or their genetic parts or components, in the form received. **Article 12.3(d)**

If plant genetic resources accessed from the multilateral system are commercialized so the recipient shall pay an equitable share of the benefits arising from the commercialization of that product, except whenever such a product is available without restriction to others for further research and breeding in which case the recipient who commercializes shall be encouraged to make such payment. (**Article 13.2(d) (ii)**)

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<sup>18</sup> Supra Note 12,p,88

This treaty has also requires parties to implement in their national legislation measures to protect farmer's rights.

### **Rights of the Farmers<sup>19</sup>**

1. The Contracting Parties recognize the enormous contribution that the local and indigenous communities and farmers of all regions of the world, particularly those in the centers of origin and crop diversity, have made and will continue to make for the conservation and development of plant genetic resources which constitute the basis of food and agriculture production throughout the world.

2. The Contracting Parties agree that the responsibility for realizing Farmers' Rights, as they relate to plant genetic resources for food and agriculture, rests with national governments. In accordance with their needs and priorities, each Contracting Party should, as appropriate, and subject to its national legislation, take measures to protect and promote Farmer's Rights including as,

a) Protection of traditional knowledge relevant to plant genetic resources for food and agriculture.

b) The right to equitably participate in sharing benefits arising from the utilization of plant genetic resources for food and agriculture, and

c) The right to participate in making decisions, at the national level on matters related to the conservation and sustainable use of plant genetic resources for food and agriculture.

3. Nothing in this Article shall be interpreted to limit any rights that farmers have to save use exchange and sell farm-saved seed and propagating material which are subject to national law and as suitable for it.

There are following conditions of the treaty,

- Access has provided merely for the research, breeding and training for food and agriculture as long as this does not include industrial uses.

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<sup>19</sup> Sec 9, International Treaty Plant Genetic Resources for Food and Agriculture 1999

- Access has to be free and the country of origin must make available all non confidential descriptive information.

Therefore there were various clauses added for the intellectual property rights which are as follows,

Firstly the recipients are prevented from claiming any intellectual property rights on the material accessed in the form received in the multilateral system.

Secondly there is no share material under the development for the developers including farmers.

Thirdly as the intellectual property protected the materials but such material was not as facilitate access so here the intellectual property rights will prevail.

However this treaty provides the facilitate access with regard the other member country so there is less scope of the non member states in the area of the access and benefit sharing of genetic resources.

Therefore there is free flow of the germplasm like access to varieties developed by the centers of the convention so here it would be considered an enough benefit for the international community and member states in the world of individual and sovereign appropriation of resources and knowledge. Apart from the access to benefit, the treaty provides certain list of different benefits includes exchange of information, access to and transfer of technology, capacity building and the sharing of the benefits arising from commercialization.

Exchange of information includes research results and information on relevant technologies subject to conditions that may exist under national law and subject to the capability of each country to provide information.

It lays accountability on the member's states to maintain the partnerships and also promote in research and development, try to foster access to improved varieties and genetic material developed through the use of accessions from the multilateral system.

Treaty also considers that access is intrinsically limited by intellectual property rights but a special provision made for the benefit of the developing countries.

For example in the case of the technologies that benefits the farmers;

There is also capacity building in the form of scientific and technical education and training in conservation and sustainable use, the development of facilities for conservation and sustainable use of plants genetic resources for food and agriculture and the carrying out of scientific research is provided as separate form of benefit, mainly for the developing countries. Further, standard multilateral treaty agreement has mentioned the needs that an equitable share of the benefits arising from the commercialization of the products that registered material access through the multilateral system will have to be paid to the trust account set up under treaty.

Therefore the benefit arises firstly directed to farmers who conserve and sustainable use plant genetic resources for food and agriculture.

### **Key Points**

The treaty establishes a multilateral system to facilitate access to plant genetic resources for food and agriculture, which is regarded as a major component of sharing the benefits arising out of the use of these genetic resources in a fair and equitable manner. Under the treaty's multilateral system, parties to the Treaty agree to make freely available genetic diversity and related information stored in *ex-situ* collections concerning, at present, 81 forage species from 29 genera and an undefined number of crop species from 51 genera (covering the majority of major plant crops that are important for human food security). The system is operational through a standard material transfer agreement (MTA).

Those who access genetic materials through the system are required not to claim any rights that limit the facilitated access to the plant genetic resources for food and agriculture or their genetic parts or components in the form received.

If plant genetic resources accessed from the multilateral system are commercialized, the recipient is required to pay an equitable share of the benefits arising from the commercialization of that product except whenever such a product is available without restriction to others for further research and breeding, in which case the recipient who commercializes shall be encouraged to make such payment.

A pre-fixed percentage of the profits from commercialization are flow into a common fund and which have used to support future research, breeding and training projects. This system is

established as a means of benefit sharing under the treaty. The Nagoya Protocol having been negotiated after the treaty, has a provision that ensures that the latter treaty and not the Nagoya Protocol, convention on biodiversity plant genetic resources for food and agriculture covered by the treaty for those countries that have ratified it.

### **International Cooperative Biodiversity Groups (ICBG) Program**

The U.S. government, for its part, has developed similar partnerships with developing countries to promote pharmaceutical prospecting and biodiversity conservation alike. The National Institute of Health (NIH), the National Science Foundation, and the USAID established the five- year International Cooperative Biodiversity Groups (ICBG) programme in 1993. The programme funded partnerships between academics, companies, government agencies and local peoples and local institutions in source countries to engage in bio-prospecting efforts throughout Latin America and Africa.

It's funding accounts for FY95 \$2.35 million with capacity in 20 different institutions and training over 130 individuals. The ICBG program stresses three primary goals: drug discovery— conservation of the environment and genetic resources of the— source country, and development of sustainable economic activities for the people of the source country by adding economic value to biodiversity, therefore, this program aims to enhance the motivations surrounding environmental conservation to the economic, political and health care realms.

In late February 1997, representatives from each group convened at NIH for the first evaluation of the program by an outside review panel. Each of the five projects has developed its own intellectual right structure.

For instance, in one of the project, the U.S. side entered into a contract with forest people in Peru, offering a 'know-how' license to compensate them for assisting in American bio-prospecting efforts. A know-how license covers the intangible resources such as in-depth knowledge that leads to the collection of certain plants.

In exchange for annual payments, milestone payments and royalties, the forest people are giving the U.S. interests involved the right to use plant samples with their knowledge for a certain period of time. This evolving framework which takes into account intangible, Traditional Knowledge about yet undiscovered species through fair compensation will further

strengthen and validate the increasingly close relationship between pharmaceutical and biotech companies on one side and source countries and their indigenous peoples on the other.

## **Conclusion**

Thus Convention on Biological Diversity is the first international agreement acknowledging the role and contribution of indigenous and local communities in the conservation and sustainable use of biodiversity. The Convention imposes general obligations relevant to the conservation, sustainable use, sharing of information on, and equitable sharing of benefits derived from biodiversity.

Each party has an obligation (subject to their particular national circumstances) to develop national legislation as far as possible and as appropriate in order to: - respect, preserve and maintain knowledge, innovations and practices of indigenous and local communities embodying traditional lifestyles relevant for the conservation and sustainable use of biological diversity and promote their wider application with the approval and involvement of the holders of such knowledge, innovations and practices and encourage the equitable sharing of the benefits arising from the utilization of such knowledge, innovations and practices.

Thus it is clear that there is a general agreement within the international community that there is a need to recognize the traditional knowledge. The concern is to recognize it, take measures to ensure that communities are involved in the preservation and development of it and proper benefits return to them in case of commercial exploitation by others. But the method of achieving it is left to individual nations. But there are no uniform norms regarding the protection of different types of traditional knowledge owned by local communities. The reasons are being, the international community never had an occasion to look at the protection of traditional knowledge in its entirety.



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