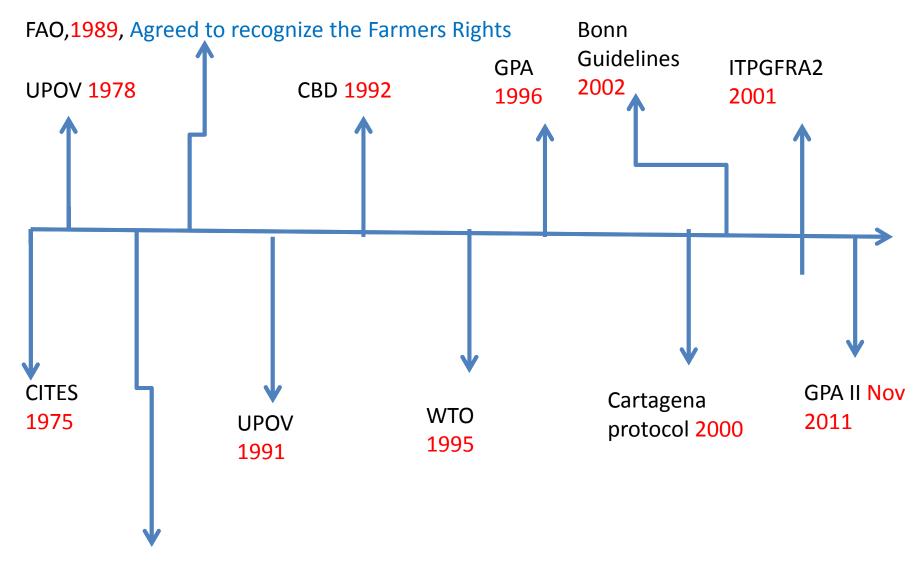
# International treatise to protect plant genetic resources

Presentation by

Group No. 5



FAO undertaking on plant genetic resources, 1983, as a foundation to ensure conservation, use and availability of genetic resources

#### **CITES**

- Convention on International Trade in Enlarged
  Species of Wild Fauna and Flora
- India joined it in 1976.
- Voluntary in nature.
- Ensures <u>international trade</u> in specimens of wild animals and plants which does not pose threat to their life.

#### **CBD**

- Convention on Biodiversity.
- It is an international legally binding treaty.
- Conservation of biological diversity.
- Sustainable use of its component.
- Fair and equitable sharing of benefits arising from genetic resources.
- 1992( Earth summit) 1993 (force, India)

#### CBD & IPR

- Preamble and Article15(1) states "National states have sovereign rights over the biological diversity within their territory and have the authority to determine access to these resources in accordance with national legislation".
- Article 15(4), 15(5) states "Access to genetic resources must be obtained with the prior informed consent of the CBD party and on mutually agreed terms".

 Article 15(7)" The CBD envisages the use of legal measures, that could feasibly include IPRs by calling on parties to take legislative, administrative or policy measures to ensure that the benefit arising from research, development and commercial use of genetic resources are shared in an equitable way with the provider of genetic resources".

• In Article 16(2) CBD refer to "the technologies that are relevant to conservation and sustainable use of biological diversity or make use of genetic resources and do not cause significant changes to environment and requires the parties to CBD to transfer the technologies to developing countries at fair & on most favourable (if possible at concessional or preferential terms) when mutually agreed".

- When Technologies are IPR protected, it requires that the technologies be provided on terms that are consistent with adequate and effective protection of those rights.
- In Article 16(3) CBD requires that "when a developing country has provided access to genetic resources, that country should be provided with technologies that make utilization of those resources".

- Whether the technology that is IPR patented or protected under system of sui generis for protection of plant variety are appropriate for conservation and sustainable use of diverse biological resources or make use of genetic resources and do not cause significant damage to environment?
- My answer is No .

- Market based IPR incentives often promote the development of technologies that are focused less towards the needs of the communities- to health, food security, environmentally sound technology and more towards the interest of private firms in Western World.
- Ex- Genetic Use Restriction Technology

 This technology has been used to produce plants that produce the sterile seed (terminal technology) or that requires chemical switch to be applied before they will exhibit certain characteristics, such as flowering (traitor technology). This undermines the right of the farmer to save and re-use seeds without dependence on corporate seed companies.

- TRIPS agreement includes obligations regarding <u>transfer of technology</u> in <u>Article 7</u> and <u>incentives</u> to be established to encourage technology transfer to <u>least developed</u> <u>countries</u> in <u>Article 66.2</u>.
- But hardly any step taken by developed countries in this regard.

 In case of <u>Pharmaceutical</u>, <u>Seed</u> and Agrochemicals minimum 36, 40 and 82 % of market share is accounted by top ten companies since 1999. This leads to challenges like exploitation and abuse of market power and patents obtained by this companies leading to exploitation of farmers and undermining their competitors.

Existing IPR system combined with national policies like subsidies, varietal preference etc. leads to destruction of bio-diversity by

- Encourage expansion of monocultures replacing existing biologically diverse traditional agricultural system.
- Removal of traditional varieties from circulation and making farmers dependent on corporate seed companies for seeds.

# Why we don't want TRIPs?

- TRIPs agreement <u>does not prohibit</u> members from granting patents over plant genetic resources. Thus it becomes unavailable for accessing through <u>system of Multilateral Access</u> under CBD and ITPGRFA.
- No mechanism in TRIPs agreement to ensure that the benefits derived from patent protection over genetic resources relating to food and Agriculture are collected and distributed fairly and equitably.

#### IPR IN COMPATIBILITY WITH CBD

- TRIPs agreement requires members to offer protection to innovations in all areas of technology, whether <u>product or process</u>, that are <u>new</u>, involve <u>an innovative step</u> and are <u>capable</u> <u>of industrial application</u>.
- Important exceptions are
- 1. When it is necessary to protect morality, including to human beings, animals and plants or their health or to avoid serious prejudice to environment.

- 2. Members are required to grant patents for microbial as well as non-microbial and essentially biological processes for the production of plants and animals but no patents for plants and animals.
- 3. Member may provide certain exceptions to the exclusive rights conferred by patents, subjects to certain qualification.
- 4. Member may permit use of patented invention without authorization of patent owner in certain circumstances.

# ABUSE OF THE POWER

- Basmati- US PTO granted patent to RiceTec, a Texas based company for Rice Variety named Texamati, a similar variety to Basmati (Traditional).
- Neem- European Patent Office granted patent to USDA and Corporation W.R. Grace for process of extracting oil from Neem tree.
- Turmeric- a patent granted to researchers of University of Mississippi Medical Centre for method of promoting healing of wound by administering turmeric to a patient afflicted with a wound.

• Rosy Periwinkle, a plant claimed to be indigenous to Madagascar. The anti-cancer agent Vincristine and Vinblastine were derived from these plant, discovered by Pharmaceutical major Eli Lilly and Co. in 1950's. The pharmaceutical companies have made billions of dollars but not even a single dollar is shared with Madagascar.

#### GPA I

- Global plan of Action (on conservation and sustainable use of plant genetic resources for food and agriculture)
- Adopted by 150 countries in 1996.
- Endorsed by FAO conference, the conference of the parties to CBD and various Govt. at World Food Summit.
- It seeks to create an efficient system for the conservation and sustainable use of plant genetic resources, through better co-operation, co-ordination, planning and through the strengthening of capacities.

#### **ITPGFRA**

- International Treaty on Plant Genetic Resources for Food and Agriculture
- Facilitating access to plant genetic resources held by contracting parties and those in international collections, for the common good.
- Recognising that these are an indispensable raw material for crop genetic improvement, and that many countries depend on genetic resources which have originated elsewhere

- This represents an implementation of the CBD principles taking account of the specific characteristics of plant genetic resources
- The ITPGRFA leaves it entirely up to national governments to implement Farmers' Rights.
   Thus, implementing specific Farmers' Rights is not an international obligation like that imposed under provisions in TRIPS.

- The ITPGRFA also recognises the contribution of farmers in
- conserving,
- improving and
- Making available these resources, and that this contribution is the basis of Farmers' Rights.
- It does not limit in any form whatsoever rights that farmers may enjoy under national law to save, use, exchange and sell farm-saved seed.
- It also sets out the right to participate in decision making about and to derive fair and equitable benefits from, the use of these resources.

#### **GPA II**

- An agreed set of Priority Activities that directly address the new developments, opportunities and challenges facing plant conservation, use in the 21<sup>st</sup> century.
- The priority activities of the GPA II addresses these developments to ensure that PGRFA continues to be available for current and future use for food security and sustainable agriculture.

#### GPA II aims to

- Promote cost efficient and effective global efforts to conserve and sustainably use PGRFA.
- Link conservation with for a greater use of germplasm.
- Strengthen crop improvement and seed systems to foster economic development.

- Create capacities, strengthen national programmes and widen partnerships for PGRFA management.
- Strengthen implementation of the ITPGRFA.

# **Bonn Guidelines**

- In order to assist the parties and stakeholders in implementation of access and benefit-sharing provisions of CBD, a set of guidelines known as " Bonn Guidelines" were adopted by Conference of Parties (COP) to CBD in April 2002.
- The guidelines bridge the gap between policy development and implementation by providing elements of transparent and predictable framework for both user and providers of genetic resources.

#### LMMC & WSSD 2002

 Like Minded Megadiverse Countries (LMMC), who holds a great majority of world's biological diversity, gave emphasis to fair and equitable sharing of benefits of genetic resources, which led to negotiation in Sep 2002 in World Summit on Sustainable development, later on endorsed by United Nation General Assembly.