

Access and Benefit Sharing: Case studies and International experience

Palpu Pushpangadan

palpuprakulam@yahoo.co.in

**Amity Institute for Herbal and Biotech Products Development
Peroorkada. P.O. Trivandrum, Kerala, India**

13.11.2009

**FICCI International Conference on Traditional Knowledge
New Delhi**

History of Human Civilization

The history of human culture and civilization is all about the management and utilization of natural resources around him. Living close to nature, the traditional societies in the third world have acquired unique knowledge about the use of wild flora and fauna and most of which are not known to the people who live away from the natural ecosystem (forests). This knowledge is so invaluable for developing new kind of food, cosmetics, drug and pharmaceuticals and other chemicals of industrial importance.

Convention of Biological Diversity (CBD)

Biodiversity was considered to be a common property till the end of 20th century. It was in the Earth summit held in 1992, at Rio that the first time the world first time agreed on the **sovereign rights of states over their bioresources and associated knowledge system**

Traditional Knowledge System (TKS) OR Indigenous Knowledge System (IKS)

Community-based functional knowledge developed, preserved and maintained over many generations by the local and indigenous communities through their continuous interaction, observations and experimentation with their surrounding environment.

- **Unique to a given culture or society.**
- **Result of co-evolution and co-existence of indigenous cultures and their traditional resource use.**

The fundamental conflicts between CBD and WTO

- **CBD recognizes the sovereign rights of nations over their biological resources and associated knowledge systems.**
- **Do not recognize any informal knowledge/ innovations of traditional communities for intellectual property rights.**
- **Do not insulate Traditional Knowledge (TK) from intellectual piracy.**

Convention of Biodiversity (CBD)

Relevant Provisions of CBD

- Article 3 recognizes the sovereign rights of States over their biological resources.
- Article 15 states that when access to genetic resources is granted, it shall be on mutually agreed upon terms and subject to Prior Informed Consent.
- Incentives to biodiversity-rich countries to conserve and sustainably use their genetic resources, including joint research, access to & transfer of technology (Articles 15,16).

Relevant Provisions of CBD

(Contd...)

- **Article 16.2** addresses issues surrounding the access to and transfer of technology, governed by patents.
- **Article 16.5** anticipates the difference in objectives between IPR regimes and the CBD and seeks to ensure that IPRs don't run counter to the CBD.
- **Article 8(j)** underlines the need to protect TK and points to the potential benefits to be realized from such knowledge through involvement of its holders and equitable benefit-sharing.

Relevant Provisions of TRIPs on Biological Resources

- Under Article 27, virtually all inventions are to be patented if they are new, involve an innovative/inventive step and are capable of industrial application.
- Exceptions to patentability include plants, animals (other than microbes) and biological processes for the production of the above. However plant varieties must be protected either by *sui generis* or by patenting (27.3(b)).

The Need to Amend the TRIPs Agreement

- It is far more cost effective in the long run to establish an internationally accepted solution through TRIPs for the prevention of **biopiracy**.
- TK associated patents have fetched large profits and it makes ethical and economic sense for TRIPs Agreement to recognize a need for **benefit sharing**.

BIOPARTNERSHIP: RELEVANCE OF Third World COUNTRIES

Third World Countries should come together to develop Strategies for:

- **Easy and regulated access to genetic resources & TK and biotechnologies**
- **Exchange of information pertaining to conservation and sustainable use of biogenetic resources and associated TK**
 - **Mutually Agreed Terms**
 - **Prior Informed Consent**
 - **Equitable Benefit Sharing Agreement**

Providing Leadership to Third World Countries: India's Strength

- **Adequate international and national legal and Policy frame works:**
- **International:**
 - **Convention on Biological Diversity (CBD, 1992)**
 - **WTO-TRIPS, 1994**
 - **CITES, 1975**
 - **UN Convention to Combat Desertification, 1994**

Contd.....

- **Ramsar Convention on Wetlands, 1975**
- **Agenda 21: Programme of Action for sustainable development, UNCED, 1992**
- **World Heritage Convention, 1972**
- **International Treaty on Conservation and Sustainable Utilization of Plant Genetic resources for Food and Agriculture, FAO 2001**

The Biological Diversity Act, 2002 and Rule 2003

Clause 8 Establishment of National Biodiversity Authority (NBA)

- NBA to regulate access to genetic resources and TK by all foreign nationals/organizations/corporate bodies for any use without prior approval of NBA.
- NBA shall oppose grant of any IPRs world wide relating to biological resources or knowledge derived from India

TBGRI or Pushpangadan Model of Benefit Sharing

First World Model of Equitable Benefit Sharing – Implementing Article 8 j of CBD

Production of a Herbal Drug (Jeevani, based on Ethnobotanical lead from Kani Tribe of Kerala

***Trichopus zeylanicus* ssp. *travancoricus* – the source plant**

TBGRI transferred production technology of Jeevani to AVP

Contd.....

TBGRI shared 50% of royalty and license fee to Kani

Kanis formed a Trust

The Kani Trust implements community welfare programs

The TBGRI model receives the equator initiative prize at the World summit, Johannesburg in August 2002

Documentation of Traditional Knowledge - Indian Initiatives

- ▣ **Traditional Knowledge Digital Library (TKDL)**

- ▣ **Leader: DISM & H, Partners: CCRAS, BHU, NIC, CSIR & CG-PTM)**

- ▣ **Evolving Traditional Knowledge Resource Classification (TKRC)**

Similar to IPC-International Patent Classification

Contd....

ABS : International Policy and Legal Frameworks

- **Convention on Biological Diversity (CBD 1992)**
- **WTO – Trade Related Intellectual Property Rights (TRIPS 1995)**
- **WIPO – Inter Governmental Committee on Genetic Resources, TK and Folklore (2000)**

ABS : Like-Minded Megadiverse Countries(LMMC)

- **Cancun Declaration (February 2002)**
- **Cusco Declaration on Access to Genetic Resources, TK and IPR(November 2002)**
- **Kuala Lumpur Communiqué on Institutional Building (July 2003)**

DEVELOPING AN ABS REGIME : KEY ELEMENTS

- **Prior Informed Consent (PIC)**
- **Mutually Agreed Terms (MAT)**
- **Material Transfer Agreements (MTA)**
- **Equitable Benefit Sharing**
 - **Monetary Benefits**
 - **Non–Monetary Benefits**

ABS REGIME: LMMC STRATEGIES

- ✓ **Development of Uniform Model of MTA to ensure:**
 - **Sovereign Rights**
 - **Statutory Rights**
 - **Legal Rights**
 - **Customary Rights, if any, of participants/stakeholders**

ABS REGIME: LMMC STRATEGIES

✓ Claims of Country of Origin vis a vis Country Providing Genetic Resources : Constraints

- **Proof of Country of Origin/Centre of Origin of exotic species in *ex-situ* depositories**
- **Determination of Ownership and authority of PIC on Pre-CBD *ex-situ* collections**

Contd....

ABS Regime: LMMC Strategies

✓ LMMC submission to TRIPs

- Patent applications relating to Biological material shall provide:
 - Disclosure of the source and or origin of the biological resources and/or the TK used in the invention
 - Evidence of prior informed consent through approval of authorities under the relevant national regimes where applicable and
 - Evidence of fair equitable sharing under the the national regime fo the country of origin where applicable

ABS STRATEGY: LMMC Strategies

- **Claims of country of Origin ovis a vis country providing Genetic Resources : Constrains**
 - **Proof of Country of Origin/Centre of Origin of exotic species in ex-situ depositories**
 - **Determination of Ownership and authority of PIC on Pre-CBD ex-situ collections**
 - **Lack of accurate Accession data on records of ex-situ introduction of exotic and native species**
 - **Absence of evidence on Genetic Origin/Wild Ancestries of domesticated or cultivated species**

ABS REGIME: LMMC STRATEGIES

✓ **Claims of Country of Origin vis a vis Country Providing Genetic Resources : Constraints**

- **Lack of accurate Accession data on records of *ex-situ* introduction of exotic and native species**
- **Absence of evidence on Genetic Origin/Wild Ancestries of domesticated or cultivated species**

ABS STRATEGY: CONCERTED ACTIONS REQUIRED BY LMMC

- Assistance to Member Countries in determination of Sovereign Rights for Endemic Bioresources.
- Design of Contractual Agreements for ABS keeping in view of : -
 - Nature of Resources
 - Type of Access
 - Information asymmetry
 - Contingent Plans for changes ex-post, opportunistic behavior and so on

Thank You