POLICY BRIEFING - I

Gene Campaign

International Instruments and Initiatives Protecting Indigenous Knowledge: Implications for Developing Countries

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POLICY BRIEF-1

The need to accord protection to the indigenous knowledge (IK) of local and indigenous communities at an international level, was acutely realized when a number of 'biopiracy' cases first occurred. Developing countries like India, which are rich in both biodiversity and its associated IK, have felt that it would be most cost- effective to establish an internationally accepted solution to prevent 'biopiracy', which would not only avert misappropriation but also ensure that national level benefit sharing mechanisms and laws are respected worldwide[1].

Several international instruments deal with IK and its protection. The Convention on Biological Diversity (CBD) signed in 1992, long before legal protection of IK became an international issue, casts an obligation on Member States to respect, preserve and maintain knowledge, innovations and practices of indigenous and local communities (Article 8 (j)). Other international initiatives such as the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGR) and the Model Law of the Organization of African Unity (OAU) also recognize and protect the IK of local communities, farmers and breeders. It has been realized that these systems need to be reconciled with the TRIPS Agreement, which considers intellectual property rights to be private rights.

This policy brief seeks to examine the provisions of the major international instruments and initiatives dealing with protection of IK, community rights and conservation of biological resources and their implications for a developing country like India. It would also enquire into the manner in which conflicts and differences between different instruments could be successfully reconciled, in the interest of IK protection and safeguarding the rights of the IK holders.

The Convention on Biological Diversity

The Convention on Biological Diversity (CBD) is the first international agreement that has a mandate for conservation of biological resources (Article 1) and at the same time, recognizes the contribution of the local and indigenous communities to biodiversity conservation and calls for respect and support of their knowledge, innovation and practices (Article 8(j)). The CBD provides for assertive protection of IK in the form of Articles 8(j) and Article 10(c). In the latter, directions are given to the contracting parties to "protect and encourage customary use of biological resources in accordance with traditional cultural practices that are compatible with conservation or sustainable use requirements".

The CBD is also the first international agreement which recognizes the sovereign right of the nation states to exploit their own biological and genetic resources which earlier, were considered as 'common heritage of mankind' (Article 15). This may be construed as conferring defensive protection to IK, with nation states having the authority to determine access to genetic resources. In addition, access is

1 The need to develop an international agreed instrument for IK protection was deliberated at the International Seminar on the Systems of Protection and Commercialization of Traditional Knowledge held at New Delhi on 3-5 April, 2002. It was convened by the Government of India and UNCTAD, with the participation of representatives from Brazil, Cambodia, Chile, China, Columbia, Cuba, Egypt, Kenya, Peru, Phillipines, Sri Lanka, Thailand, Venezuela and India.

also made subject to prior informed consent of the Contracting Party, which empowers the community and acts to check the menace of prospecting of biological resources.

The CBD subscribes to conservation theories which recognize the critical role played by communities in biodiversity conservation, incorporating specific provisions that explicitly recognize the role played by the indigenous communities in conserving biodiversity and the associated knowledge system. However, these provisions are watered down to some extent by the fact that they have been made subject to national legislation, with the result that different countries have pursued different strategies. While some have opted to empower the holders of the knowledge with regard to access to their knowledge and resources, others have made it the prerogative of the state agencies.

The TRIPS Agreement and Need for its Reconciliation with CBD

While the Agreement on Trade Related Aspects of Intellectual Property Rights (TRIPS) does not directly deal with IK, yet, it has many implications for IK. The very fact of non- recognition of IK by TRIPS indicates that it is an arbitrary unilateral declaration by developed countries, whereby one form of knowledge, inventions in the formal laboratory based system, have been granted the status of property while the other form, indigenous knowledge, a string of innovations developed in the non- formal system of forests and fields, has none[2]. TRIPS does not oblige its Members to protect IK nor does it prevent its Members from providing statutory protection to IK. It has been felt that non- recognition indirectly encourages biopiracy[3]. Since the Agreement does not recognize any rights over IK, the laws of developed nations permit the patenting of inventions based on these, thus misappropriating the IK of local communities in developing countries and making it the property of the patent holder. The requirement of "newness" required for grant of a patent under TRIPS facilitates patents based on IK. An 'invention' which is based on IK falls short of novelty since it might have been in existence for several hundred years.

Following the mandate given by the Doha Ministerial Declaration, the TRIPS Council has been engaged in efforts to harmonize the different approaches between the provisions of the two multilateral treaties- the CBD and TRIPS[4]. Developing countries have advocated the need to provide for a mutually supportive relationship between the two in the interest of IK protection. They believe that that it can only be accomplished by amending the TRIPS Agreement to accommodate the principle elements of the CBD and that a failure to do so will be detrimental to the objectives of both instruments. It has been suggested that Article 27.3 (b) of the TRIPS Agreement should be amended so as to oblige all Members to exclude life forms and parts thereof from the purview of patents. At the very least, patents for those inventions based on IK and essentially derived products and processes should be excluded specifically. It has been proposed that the TRIPS Agreement should be amended in order to incorporate a disclosure requirement on the patent applicant. Brazil[5] has recommended that Article 27.3 (b) should be amended in order to include the possibility of Members requiring, whenever appropriate, as a condition to patentability: (a) the identification of the source of the genetic material; (b) the related IK used to obtain that material; (c) evidence of fair and equitable benefit sharing; and (d) evidence of prior informed consent from the Government or the community for the exploitation of the subject matter of the patent.

India's[6] position has been that harmonisation between the TRIPS and CBD is possible only if commercial exploitation of innovations based on IK is encouraged on the condition that the innovators share the benefits through material transfer agreements/ transfer of information agreements. A material transfer agreement would be necessary where the inventor wishes to use the biological material and a transfer of information agreement would be necessary where the inventor wishes to use IK for the invention. Such an obligation, according to India, could be incorporated through inclusion of provisions in Article 29 of the TRIPS Agreement which should require a clear mention of the biological source material and the country of origin in a patent application. Article 29 deals with conditions on patent applicants. Upon filing, this part of the patent application should be open to full public scrutiny. This would permit countries who wish to challenge the application to state their claims in time. At the same time, India has pointed out that domestic laws on biodiversity could ensure that the prior informed consent of the country of origin and the knowledge holder in the case of a patentable invention would facilitate the signing of material transfer agreements or transfer of information agreements, as the case may be.

2 Gene Campaign (undated), Intellectual Property and Indigenous Knowledge- A Case of Unjust Discrimination.

3 ibid.

4 Status of Work Programme in the TRIPS Council on the Relationship between the TRIPS Agreement and the Convention on Biological diversity and the Protection of Traditional Knowledge.

5 Submission of Brazil before the TRIPS Council, 2000, "Review of Article 27.3 (b)", IP/C/W/228.

6 Communication from India to the TRIPS Council, 2000, IP/C/W/195.

In the context of such disclosure requirements, Venero[7] has pointed out that "these steps are essential if the international patent regime is to be reformed in a sustainable and fair manner. The current system recognizes only the contribution made by those developing inventions on the basis of biological materials or traditional know-how. However, it is also necessary to recognize the contribution made by countries that supply the biological materials and by the indigenous peoples who supply their indigenous knowledge. To fail to recognize the latter contribution makes the recognition of the former unfair and inequitable".

The International Treaty on Plant Genetic Resources for Food and Agriculture

Another key treaty bearing relevance to the protection of IK is the International Treaty on Plant Genetic Resources for Food and Agriculture (ITPGR), signed in November 2001. The "first legally binding multilateral agreement on sustainable agriculture"[8], the ITPGR seeks to "bridge food security, biodiversity and intellectual property rights". It tries to reconcile the notion of national sovereignty over plant genetic resources, as proclaimed by the CBD, and industrialized nations' UPOV view of plant genetic resources as the heritage of mankind, property to be held in common and freely accessible to all.

The ITPGR facilitates access to plant genetic resources (PGR), but also tries to introduce benefit sharing through the Multilateral System (MS). It applies the principle of a limited commons by limiting the scope of the MS to the major food crops as determined by previous international negotiations. The remaining items of food and agriculture remain under national sovereignty while treaty provisions with respect to conservation apply to all PGR. Through the Multilateral System (MS), access is provided under certain conditions; via a Material transfer Agreement (MTA), to be signed by the recipient of the PGR and the provider. Benefit sharing may take the form of information exchange, capacity building, technology transfer and monetary shares of commercialization through partnership with developing countries' private and public sectors of research and technology development. However, these remain suggestions and are not specifically identified for inclusion in the MTA.

The ITPGR has provisions pertaining to farmers' rights, which have been left to the discretion of national governments, hence falling far short of universal enforcement.

The provisions of the ITPGR have considerable bearing on the protection of IK. The ITPGR by providing for state sovereignty over natural resources (which is in line with the CBD) opens the door to the strategic use of sui generis models of intellectual property rights to protect IK.[9] Article 12.3(f) envisions a role for national governments with respect to intellectual property rights. It states that access to PGR protected by IPR and other rights shall be in accordance with international and national laws. Again, this provides the opportunity for a strong sui generis system under Article 27.3 (b) of TRIPS to protect IK. The ITPGR also leaves room for States to protect IK by using national laws to regulate access to plant genetic resources, an area where governance is necessary to defend against biopiracy. It also provides for national laws to play a significant role in protecting IK by regulating in situ access, in accordance with national legislation, or where none exists, in accordance with standards created by the Governing Body (Article 12.3h).Here, nation states have the opportunity to create laws regulating access to their PGRs.

Article 12.3(e) also recognizes farmer's role in developing PGR. It states that access to PGR under development shall be at discretion of the developer, including farmers. This essentially recognizes farmers' as developers of PGRs, not just breeders, as traditionally has been the case under UPOV.

Despite all this, the sober reality is that the US, one of the main actors in biopiracy and unauthorised use of biological resources and IK, has elected to remain outside the ambit of the ITPGR, by not ratifying it. The ITPGR also suffers from certain weaknesses with respect to intellectual property rights for IK. Firstly, farmer's rights does not include explicit intellectual property over their plants, although the ITPGR recognizes farmer's right "to participate in decision-making regarding...use of plant genetic resources for food and agriculture". Article 12.3(d) states that recipients shall not claim intellectual property rights or other rights over PGR or their parts in the form received from the Multilateral System that limits their facilitated access. This means that farmers are still susceptible to others who patent on their developments. Another point of weakness is evident in Article 13.2.d.ii's voluntary language with respect to equitable benefit sharing. Although it mandates that language in the Material Transfer Agreement shall require

7 Aguirre, Begoña Venero, "Addressing the Disclosure Requirement at the International Level- The Role of the TRIPS Agreement" in Dialogue on Disclosure Requirements: Incorporating the CBD Principles in the TRIPS Agreement on the Road to Hong Kong, WTO Public Symposium, Geneva, April 21, 2005.

8 H. David Cooper, The International Treaty on Plant Genetic Resources for Food and Agriculture, 11 REV. EUROPEAN COMMUNITY & INT'L ENVTL. L. 1, 15 (2002).

9 Gheorghiu, V.A., 2005, "Sailing the Seas of Treaties: Biopiracy in the Wake of the ITPGR", Briefing Paper written for Gene Campaign as part of the project Protection of Indigenous Knowledge of Biodiversity.

equitable benefit sharing to the Multilateral System, benefit sharing is merely encouraged if the recipient who developed the PGR for commercialization provides that PGR for research and breeding without restriction. This reflects a bias towards the purpose of the ITPGR as securing free access to PGR for breeders, as opposed to the CBD's emphasis on equitable benefit sharing as a matter of fair compensation to the IK holders. A final flaw in the ITPGR with respect to IPR is that the responsibility to realize Farmer's Rights still rests with the national government. While measures explicitly include the protection of relevant IK, it is conspicuously silent on using Intellectual Property Rights as method of protection.

Nevertheless, though some weaknesses exist, there are points for positive use to protect IK in the ITPGR. However, this inherently necessitates monitoring of the Interim Committee deliberations that have strayed from the true spirit of the ITPGR, that of harmonizing the UPOV and CBD. Monitoring the development of the implementation of the ITPGR has revealed that its twins aims of facilitated access and equitable benefits sharing have been have been partially treated. The twin of facilitated access has developed well, whilst the twin of benefit sharing has remained stunted in its growth.[10]

The root of this bias lies at the foundation upon which the ITPGR is being built. While the Governing Body has been charged with adopting procedures for compliance, financial rules, the Standard Material Transfer Agreement, and procedural rules, it is the Interim Committee that is actually doing the work and compiling influential research prior to the first session of the Governing Body. Comparing the composition of the Interim Committee to that of the Governing Body reveals the political drivers behind the developments in implementation. According to the Treaty, the Governing Body shall be composed of one delegate per country or institution of the contracting parties. Contracting parties are those that have ratified the ITPGR. In contrast, the Interim Committee is composed of anyone and everyone with an interest in the outcome of the ITPGR, whether they agreed with the original benefit sharing provisions and other elements like CBD harmonization or not. Thus, parties who have not ratified the ITPGR in its pure form (like the United States), are actively involved in the Interim Committee, constructing the operational mechanisms that will provide the basis of implementing the ITPGR. Such a situation results in the outcome of the Interim Committee fashioned by their agenda, and not that of the original Contracting Party's intentions with the ITPGR.

For the ITPGR to contribute to protecting the interests of farmers and indigenous people of the developing countries, it is necessary to challenge the Interim Committee's watering down the ITPGR and return to its true spirit.

WIPO'S Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore

The Intergovernmental Committee on Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore (IGRTKF) of the World Intellectual Property Organisation (WIPO) is a specialized forum for negotiations for evolving an international framework for the protection of IK. WIPO had clearly stated that in order to make systems and standards for the protection of IK clear, practical and accessible to the knowledge holders, there should be agreement on the principles and objectives of IK protection[11]. With regard to the application of existing standards to protect IK subject matter, it has indicated that the intellectual property tools of trademarks, geographical indications, patents, copyright and related rights and unfair competition could be used to protect IK. Together with the above means of protecting IK, the Intergovernmental Committee in its 3rd session deliberated in meticulous detail on the components of a sui generis system. It has been pointed out that there are already elements available in existing mechanisms of intellectual property protection, both in IK context, and outside it, that could be transported into a sui generis system for the protection of IK and any reference to a sui generis system does not mean that a legal mechanism must be entirely construed from scratch[12]. Given its holistic nature and the need to respond to the cultural context, the sui generis system should not require the separation and isolation of the different elements of IK but rather take a comprehensive approach.

Report of the Crucible Group

With respect to national laws for protection of IK regarding biological resources, the 2nd report of the Crucible Group[13] came out with certain recommendations which are worth taking into consideration. It says that no single policy option is sufficiently comprehensive to protect, promote and

10 Gheorghiu, V.A., op.cit..

11 "Matters Concerning Intellectual Property and Genetic Resources, Traditional Knowledge and Folklore- An Overview" (WIPO/GRTKF/IC/1/3).

12 "Elements of a Sui Generis System for the Protection of Traditional Knowledge" (WIPO/GRTKF/IC/3/8).

13 The Crucible Group, 1994, People, Plants and Patents: The Impact of Intellectual Property on Trade, Plant Biodiversity and Rural Society, Canada: IDRC.

conserve knowledge. Thus, it is essential for the Government to develop integrated policy options - principles of coordination, consultation and representation. It further suggests that there should be stocktaking of existing policies and regulatory bodies that affect indigenous and local knowledge holders, review of existing customs and practices of indigenous communities that affect their knowledge and networking of existing relevant regulatory bodies to create indigenous and local knowledge. Regarding the purpose and scope of a sui generis legislation to protect knowledge of communities, it should be characterized by the following:

(i) Vest property rights in indigenous and local knowledge holders.
(ii) Provide means to the indigenous and local knowledge holders to prevent unwarranted reproduction
(iii) Ensure equitable distribution of the benefits
(iv) Prevent loss of indigenous and local knowledge
(v) Self determination and
(vi) Conserve biological diversity

The WIPO-UNESCO Model Provisions

Folklore is of particular importance for developing countries, which recognize it as a means of self-expression and social identity. In these countries, folklore is a living and still developing tradition, rather than just a memory of the past.[14] The WIPO-UNESCO Model Provisions may be regarded as a first step in establishing a sui generis system of intellectual property type protection for expressions of folklore.

There are many distinguishing features and principles of the Model Provisions which are worth replicating in legislation and policy pertaining to protection of IK on a general plane. First one is the acceptance that typical intellectual property tools like copyright (in the instance of folklore) or for that matter, patent (in the context of a biotechnological product derived from IK) is inadequate or do not fit the context when it comes to the protection of folklore or IK respectively and thus, needs sui generis protection. The next principle which deserves mention is that the Model provisions try to create an atmosphere where folklore can flourish by not imposing too severe restrictions on the community. It has been expressed in many circles of the urgent need to protect IK which is fast eroding; thus, it falls on any law to protect IK to create conditions where it can thrive with the adequate involvement of the community. Another remarkable aspect of the Model provisions is the impetus they give to individual creativity and innovation and the way in which the Provisions have strived to strike a balance between these and the rights of the community. The Model Provisions do not hinder in any way the creation of original works based on expressions of folklore.

Again, the Model Provisions give ample scope for regional and national variations and the unique requirements of each situation to prevail and influence the protection of expressions of folklore. This is evident in the provisions pertaining to 'authority entitled to authorize', recognizing the fact that the question of ownership of folklore varies from country to country and that legislation should respect this fact. Also, the Model Provisions leave the matter of sanctions for offences to be decided in accordance with the penal law of the country concerned.

OAU Model Law

The African Model Law for Protection of Rights of Local Communities, Farmers, Breeders and Regulation of Access to Biological Resources serves as a framework instrument to provide African Union Member States with guidance in formulating domestic legislation to regulate access to biological resources and protect the related rights of local communities, farmers and breeders.

The Model Law reiterates the concept of sovereign rights of the State, enshrined in the CBD. It is based on the principle that knowledge, technologies and biological resources of the local communities are a result of age-old practices over generations held in trust by the present generation. The state has a responsibility to protect such resources as well as rights therein. The Model law ensures that the rights of communities over their IK and biological resources are not affected on account of the IPR regime envisaged under TRIPs. With respect to community rights, the main provisions of the Model Law are Article 16 which recognizes the collective rights of local communities; and Article 17 and 23.2, which place the responsibility of determining what constitutes those rights upon the local communities themselves. It also provides for a detailed framework (based on the CBD) for access to, and benefit sharing from biological resources in a manner that ensures their conservation and sustainable use.

The provisions of the Model Law are worth emulating considering the fact that while ensuring the conservation, evaluation and sustainable use of biological resources, they aim at protecting the rights of communities over their biodiversity and the knowledge therein. Its salient features relating to food security, community rights, state sovereignty, community knowledge and technology, participation in decision making, regulation of access to bio resources, prior informed consent and fair and equitable sharing of benefits

14 WIPO, Intellectual Property in Asia and the Pacific, January- June 1998, No. 56/57 [ISSN 1014-336X, WIPO Publication No. 435 (E)].

could be probable elements of an ideal sui generis legislation designed to protect IK.

CoFab

As an alternative to UPOV (premised on the protection of plant breeders in industrialised countries rather than the needs of users in developing countries), Gene Campaign and the Centre for Environment and Development have drafted the Convention of Farmers and Breeders (CoFaB). This treaty seeks to provide a forum for developing countries to implement both Farmers and Breeders Rights. It has an agenda appropriate for developing countries and tries to secure their interests in agriculture and fulfil the food and nutritional security goals of their people.

CoFab has many distinctive features which deserve mention in the context of IK protection. It provides for strong farmers' rights, with each contracting state recognising the rights of farmers by arranging for the collection of a Farmers Rights fee from the breeders of new varieties. The Farmers Rights fee will be levied for the privilege of using land races or traditional varieties either directly or through the use of other varieties that have used land races and traditional varieties, in their breeding program. Farmers Rights will be granted to farming communities and where applicable, to individual farmers. Revenue collected from Farmers Rights fees will flow into a National Gene Fund (NGF) the use of which will be decided by a multi-stakeholder body set up for the purpose. The Rights granted to the farming community under Farmers Rights entitles them to charge a fee from breeders every time a land race or traditional variety is used for the purpose of breeding or improving a new variety.

It also provides for Plant Breeders Right, granted to the breeder of a new plant variety. Prior authorisation of the breeders shall be required for the production, for purposes of commercial and branded marketing of the reproductive or vegetative propagating material, as such, of the new variety, and for the offering for sale or marketing of such material. At the time of application for a Plant Breeders Rights, the breeder of the new variety must declare the name and source of all varieties used in the breeding of the new variety. Where a land race or a farmers' variety has been used, this must be specially mentioned (which is important to protect the IK of the farmers).

To give primacy to the goals of food security, it has been provided in CoFaB that the right of the breeder will be forfeited if he is not able to meet the demand of farmers, leading to scarcity of planting material, increased market price and monopolies. If the breeder fails to disclose information about the new variety or does not provide the competent authority with the reproductive or propagating material, his right will be declared null and void.

Conclusion

It has been the realisation of developing countries that the above mentioned international instruments and initiatives have a significant role to play in the protection of IK, without which national regimes for its protection are negated. IK is a valuable global resource having the potential of being translated into commercial benefits and hence, international efforts to secure its protection should be actively encouraged. Given that the TRIPS Agreement requires countries with indigenous communities to provide intellectual property protection for a broad range of subjects, it is only just and equitable that IK is given legal protection. International recognition and protection of IK would help sustain local farming communities and ensure their food security, sustain the richness and diversity of indigenous cultures and contribute significantly to the fulfillment of development objectives[15].

15 TRIPS Secretariat, 2002, "The Protection of Traditional Knowledge and Folklore: Summary of Issues Raised and Points Made", IP/C/W/370.

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