Report of

The Task Force on

SOCIAL AND ECONOMIC ASPECTS OF CONSERVATION FOR THE ENVIRONMENT AND FORESTS SECTOR

FOR THE ELEVENTH FIVE YEAR PLAN (2007-2012)



Government of India Planning Commission

New Delhi

Report of

The Task Force on SOCIAL AND ECONOMIC ASPECTS OF CONSERVATION FOR THE ENVIRONMENT AND FORESTS SECTOR

FOR THE ELEVENTH FIVE YEAR PLAN (2007-2012)



Government of India Planning Commission

New Delhi

CONTENTS

Chapter			Page
I.	Introduction	:	1
II.	The Indian Context and Situation	:	3
III.	Experience with Participatory Management	:	6
IV.	Socio-Economic Aspects of Conservation	:	8
V.	Matters of Long-term Strategy	:	10
VI.	Policies for Conservation with Development	:	11
VII.	Recommendations	:	16
	Annexure (Constitution and Terms of Reference)	:	17

Introduction: Relevant Articles of the Convention on Biological Diversity (CBD) and Social, economic and conservation aspects of the Biological Diversity Act

The Biological Diversity Act (BDA) of 2002 states its objective to be 'to provide conservation of biological diversity, sustainable use of its components and fair and equitable sharing of the benefits arising out of the use of biological resources, knowledge and for matters connected therewith or incidental thereto'. This objective is knitted around the objectives of Convention on Biological Diversity (CBD), adopted at Rio de Janeiro in 1992 which India ratified in 1994 summarized as 'conservation of biological diversity, sustainable use of its components and fair and equitable sharing of the benefits arising out of utilization of genetic resources'.

In the CBD, Articles 8(j) and 10(c) most clearly reflect the links between the socioeconomic and conservation objectives of the CBD.

Article 8(j) states "Subject to its national legislation, 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;"

Article 10(c) states "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's Conference of Parties at its 7th meeting in February 2004, agreed to a Programme of Work on Protected Areas in which the right of involvement and benefit-sharing of local communities living within and around protected areas is guaranteed. Specifically, the Programme of Work on Protected Areas, which India is legally bound to implement, commits each country to:

Goal 2.1: To promote equity and benefit-sharing

Target: Establish by 2008 mechanisms for equitable sharing of both costs and benefits arising from the establishment and management of protected areas.

Goal 2.2: To enhance and secure involvement of indigenous and local communities and relevant stakeholders

Target: Full and effective participation by 2008, of indigenous and local communities, in full respect of their rights and recognition of their responsibilities in the management of existing, and the establishment and management of new, protected areas. The said

Programme of Work also "*Recalls* the obligations of Parties towards indigenous and local communities in accordance with Article 8(j) and related provisions and *notes* that the establishment, management and monitoring of protected areas should take place with the full and effective participation of, and full respect for the rights of, indigenous and local communities consistent with national law and applicable international obligations". Finally, it also notes that protected areas should contribute to the alleviation of poverty.

Clearly, on a substance basis, the two objectives, Goals 2.1 and 2.2, match quite well. But when it comes to implementation, some major India specific issues emerge which need to be addressed to operationalize the Indian Biological Diversity Act.

It should be specifically understood that:

- The Indian people have had a long history of a close link with Indian biological resources for over thousands of years. A large part of such resources are original to India.
- According to National Biodiversity Strategy & Action Plan (NBSAP), about 134,000 flora and fauna species are found in India today.
 - Second, a large chunk of population are directly dependent on these resources even today. They are the tribal and traditional communities. Even within protected areas, a study shows that 56% of national parks and 72% of sanctuaries had settlements of human population within the protected area, 83% of parks and 87% of sanctuaries had population adjacent to the protected area, 43% of parks and 68% of sanctuaries accorded and accepted rights of local communities such as to grazing by livestock, harvesting of timber and collection of minor forest produce. (IIPA, 1989, "National Parks and Sanctuaries: A Status Report").
 - Third, more than the timber and other conventional produce, the forests of India provide a large number of services. Studies from Himachal Pradesh and Karnataka show that timber and major products constitute just about 10% of the direct products and services that forests provide. The rest is directly linked to social economic and cultural livelihood status of the dependent population around the forests. The major ones are traditional medicines, fuel, fodder, NTFPs and so on.
 - Finally, the eco-system services that Indian forests provide are essentially due to conservation efforts by the traditional communities. After all forest management under the state control has been for less than 150 years. Studies in North Eastern States have indicated a clear relationship between culturally valued local species and their being keystone ecological species. Indigenous biodiversity knowledge transcends sectoral boundaries. Indian communities have also maintained rich agrobiodiversity rooted in local ecosystems as also knowledge of acquatic diversity in both inland wetlands/riverine ecosystems and coastal ecosystems. Unfortunately, there has been near total delegitimization and non-recognition of the wealth of local biodiversity knowledge in government development programmes.

II The Indian Context and Situation: Role of Local Bodies

There exist serious concerns that both the Biodiversity Act and Rules do not reflect the empowerment of indigenous and local communities in the conservation of biodiversity mandated by the CBD.

Section 41 of the Act states:

"Sec 41(1) Every local body¹ shall constitute a Biodiversity Management Committee within its area for the purpose of promoting conservation, sustainable use and documentation of biological diversity including preservation of habitats, conservation of land races, folk varieties and cultivars, domesticated stocks and breeds of animals and microorganisms and chronicling of knowledge relating to biological diversity".

Rule 22 of the Biodiversity Rules, 2004 expands on the constitution and role of Biodiversity Management Committees, and states:

- Every local body shall constitute a **Biodiversity Management Committee** (BMCs) within its area of jurisdiction....
- The *main* function of the BMC is to prepare People's Biodiversity Register (PBR) in consultation with local people (this is a comedown from the broader role envisaged in Sec 41 of the Act. The Register is supposed to contain comprehensive information on availability and knowledge of local biological resources, their medicinal or any other use or any other traditional knowledge associated with them.
- The other functions of the BMC are to advise on any matter referred to it by the State Biodiversity Board or Authority for granting approval, to maintain data about the local vaids and practitioners using the biological resources.

Therefore, the role for BMCs defined in the Biodiversity Rules are a complete comedown from what was envisaged in the Biodiversity Act, which itself had its own set of problems. Some of the critical problems both with the Act and Rules are:

Constitution of the Biodiversity Management Committees (BMC)

- 1. The definition of local body is problematic, *as it leaves out gram sabha or other village assemblies*. Since the local body (commonly understood as only the elected representatives) has to appoint/select the BMC, the political affiliation and relationship between a village and the panchayat body will play an important role in the constitution and functioning of the BMC.
- 2. The process of local body constituting BMC, is by *nomination*. Rules 22(2) & (3) expressly mention that the members will be NOMINATED by the local body & the

¹ (h) "local bodies" means Panchayats and Municipalities, by whatever name called, within the meaning of clause (1) of article 243B and clause (1) of article 243Q of the Constitution and in the absence of any Panchayats or Municipalities, institutions of self-government constituted under any other provision of the Constitution or any Central Act or State Act

Chairperson will be ELECTED by the committee, then the BMC could become another power center and might not actually function to conserve biodiversity or protect community rights.

Focus of work and functioning.

- 1. The Act clearly spells out a list of functions for the BMC, among which are promoting conservation and maintaining a PBR. The Rule dilutes this and states that it's *main* role is to merely maintain PBR.
- 2. Peoples Biodiversity Register: The Peoples Biodiversity Register (PBR) is a document that records the diversity of species of flora, fauna, crops, livestock etc. As on date, there is no legal protection available for the knowledge recorded in the PBR. This is problematic when it comes to the question of access to this document. Even though communities create and maintain a database of their resources and knowledge, there is no requirement that their consent would be sought when it comes to accessing the information in the PBRs.

Though the Act has clearly spelt out criteria for rejecting applications, it has not listed community *consent* as one of them.

Thus there are serious concerns that both the Biodiversity Act and Rules do not reflect the empowerment of indigenous and local communities in the conservation of biodiversity mandated by the CBD. Instead of empowering them with control over local biodiversity and their indigenous knowledge about it, rule 22 limits their role to providing information to government agencies without the latter even being obliged to inform them about what it has done with the knowledge.

<u>The Biodiversity Register should be truly made a Peoples' Biodiversity Register.</u> This is possible if local communities are empowered to declare genetically sensitive and important resources, and their views prevail upon scientific views. The BMCs constituted by the Panchayats need to be given the clear responsibility to compile and maintain the register, and also to act as a watch-dog on depletion and extinction of species. However, for this to function in the intended spirit of community empowerment, it is the Gram Sabhas of hamlets or groups of hamlets within Panchayats who must be mandated to select members of their respective BMCs and not just the elected representatives.

The recommendations of a workshop on PBRs organised by the National Biodiversity Authority (NBA) on June 22-23, 2006 addressed some of these contradictions and clarified that:

"People's Biodiversity Registers must be documents of the people, by the people and for the people. Given the diversity of life and ecosystems, of people and economy, over our vast country, PBR exercises have to be fine tuned to the local conditions, and must be based on the understanding that the original holders of the knowledge they will contain are the local communities and their members. For this reason, the process of compiling each PBR must begin with obtaining prior informed consent of the concerned community with active involvement of the diverse women and men knowledge holders with facilitative support of scientists, resource managers, teachers and students as appropriate. Each community shall control the PBR process and decide on which components of the information recorded are to be shared openly with the public, which components are to be shared under certain conditions specified by the knowledge holders, and which components should be accessible only to the community members. Since PBRs are documents formulated by communities and belong to them, PBRs of communities that do not wish to integrate any of the PBR information into the broader Information System would not be considered any less legitimate for purposes of conservation, legal protection, benefit-sharing, or other related purposes, than those that are willing to integrate some or all of the recorded information, either conditionally or unconditionally, into the larger Indian Biodiversity Information System."

(http://www.nbaindia.org/pbr/pbr_recommen(22_23_jun_06).htm)

The recently enacted Scheduled Tribes and other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 by both houses of Parliament also provides for "3(k) right of access to biodiversity and community right to intellectual property and traditional knowledge related to biodiversity and cultural diversity;" The legal implications of this also need to be worked out.

III. Experience with Participatory Management of Forests and Suggestions

Joint Forest Management and Watershed Development from 1990 onwards is a good example of a sustained effort at testing the efficacy of different institutions with respect to GO-NGO collaboration. Several institutions have been involved in these programmes.

The Union Ministry of Environment & Forests, in their Joint Forest Management (JFM) Scheme Guidelines of 1st June 1990, enjoined on all the State Forest Departments to involve village communities and committed NGOs and voluntary agencies in regenerating degraded forest lands through participatory management. In 1994, the department of land resources of the Ministry of Rural Development had circulated the Guidelines for Watershed Development(GWD). GWD aimed to bring local communities to the center stage and move the administration towards a facilitating role. It proposed a user-friendly organisational structure with Watershed Associations (WAs) and elected/nominated watershed committees undertaking field/village-level implementation of each watershed.

The Haryali Programme from 2001 made panchayat bodies sole managers of watershed development activities. Other institutions that had participated effectively in watershed management were completely sidelined. Moreover, Haryali guidelines have also reduced the budget for community development and capacity building.

Extensive studies on the GO-NGO interface have been undertaken in this context. A recent study (Ratna Reddy and Deshpande 2006) reviews these. The performance of NGO implemented watersheds has been found to be better in general but a good implementing agency is a necessary but not sufficient condition. Social and human capital at the village level is another critical need.

Experience has shown that *panchayat bodies have not always been efficient watershed managers largely because they are territorial units and not ecological entities and technically not equipped.* In places where the watershed area is coterminous with the gram panchayat (GP), PRIs have done well. However, if a GP has several watersheds, then each watershed area should have its own Watershed Association (WAs). This, of course, depends on the resources available to the concerned people.

Joint Forest Management with participation of local communities was another initiative started in the nineties under different D.O.s in different states. However, the clauses governing the setting up of the Committees often created an asymmetrical power structure with the government department's nominee having the power to dissolve the Committee. This actually gave responsibility for protection to local communities without empowering them effectively.

Joint Forest Management Committees (JFMCs) autonomy is undermined by

- i. No cost sharing by JFMC in JFM
- ii. Forester as Secretary, accountable to Forest Department (FD), appoints members of JFMC, including representative of local panchayat and operates JFMC bank account, jointly with President
- iii. Funding linked to number of trees whether natural or artificial re- generation whereas people's priority needs may be of augmenting availability of grass and non-timber forest product.

IV. Socio-economic aspects of conservation

The above experience with local bodies and the grass-roots situation makes a special case for recognizing the social and economic aspects of biodiversity conservation and the critical role of local and indigenous communities and users, while working out the operational mechanisms for the Biological Diversity Act.

The following major concerns relevant during implementation are presented here.

- <u>Ethical issue on transferring genetic material</u>. There is a need for an Ethical Committee within the Biological Diversity Authority, State Biodiversity Boards and also the BMCs. The Committees should see to it that the cultural and religious and other values of important biological resources and materials are not ignored while negotiating transfer of rights to national and international bodies and individuals. The Committees should see to it that genetic materials are not meant only for human benefits but have significant ecological values.
- <u>Consultation process with the local communities</u>. With the implementation of 73rd and 74th Amendments to the Constitution, the Panchayati Raj Institutions (PRIs) have been mandated to play a major role in decision making from the village to district levels. Since some of the forest and other biological resources come under the 29 functions to be decentralized to the Panchayati Raj Institutions under Schedule 11 of the Constitution, it is important now to develop the institutional and legal framework for involving their general body members in all major questions related to biodiversity conservation on principles of equity and sustainable use. For this, it is essential to move beyond 'representative demaocracy' to 'participatory democracy' under which the elected representatives only implement decisions taken by the general body of members.
- <u>It is also important to address the problem of a large number of parallel sectoral committees</u> such as JFM committees, water users associations, etc set up by different departments by by-passing the PRIs. All such committees/institutions need to be linked to the Panchayats with the sectoral departments working with and through the PRIs instead of directly with their general body members. In the process, some of the committees with overlapping functions could be merged or reconstituted to facilitate more holistic natural resource and biodiversity management. The Ministry of Panchayati Raj is now taking a firm stand against parallel committees controlled by different departments usurping the mandate of PRIs and this should be strengthened.
- Access and sharing benefits from the use of local biological resources (it's not just forests which harbour biodiversity) and genetic material, particularly traditional knowledge. At present, the CBD, the BDA, and more recently the Forest Rights Act recognize this but have not been able to operationalize the same at the grass root level.
- The Panchayats are constitutionally appointed bodies to manage resources at the village level. While they act as a watch-dog on depletion and extinction of

species, it is the Gram Sabhas of hamlets or groups of hamlets within Panchayats who must be mandated to select members of their respective BMCs. Such an arrangement shall ensure functioning in the intended spirit of community empowerment,

- There is a need to bridge the gap between the market and non-market prices of forest products, while negotiating trade on forest products. At present, the gatherers are generally the traditional dependents on forest and other forms of biodiversity. Studies in India show that the middle-men and international agencies walk away with lion shares of the value added from the biodiversity based products. Therefore, the process of bioprospecting should be linked to knowledge and skill identification within the village committees and appropriate rewards for existing local knowledge be devised through benefit sharing on a case by case basis.
- <u>The gap in knowledge about their value added utilities and traditional selective</u> <u>uses should be examined</u> by Specially Empowered valuation committees set up for different regions within the Biological Diversity Authority.
- The Committee should ensure that local communities receive the market prices. The market price itself should be based on sustainable rates of extraction, land use and water resource availability.

V. Matters of long term strategy on maintenance and conservation

Some additional expenditures are required on maintenance of biodiversity rich forest resources. These expenditures will have to be undertaken in the form of costs of putting in place the incentive and disincentive schemes identified above and to make the necessary legal and policy change. These are not directly on traditional forest department run conservation programmes. Biodiversity conservation can be both more effective and less resource consuming if stakeholders are involved in a meaningful way in the management of the biodiversity rich areas.

There exists the possibility of designing fiscal policies for effective conservation at low cost. There is also the crucial issue of clear recognition of rights and engaging communities in conservation by providing them greater stakes in the same.

Additional incentives that are required to make the local communities to take the responsibilities on them selves are listed below.

 agricultural land user fees individual reduction and restructuring of agricultural support public or grant- aided land fines for purchase wetland reserves environmental coven- liability performance cost-sharing/ habitat forestry offsets ecost-sharing/ habitat species management agreements schemes customary customary international 	Positive Incentives	Disincentives	Indirect Incentives	Removal of Perverse
set-aside schemes• non- compliancetransfer-able fishing quotasrestructuring of agricultural support harmful to biodiversity• public or grant- aided land purchasefines for damages• tradable development rights• introduction of agricultural conservation compliance measures• wetland reserves• environmental liability• property-right mechanisms• introduction of agricultural conservation compliance measures• coven- ants/conservation• performance bonds• biodiversity prospecting deals• reform of public forestry concession pricing, licence fees,• cost-sharing/ management management schemes• habitat methanise• forestry offsets reforestry offsets• full appraisal of forest benefits• species enhancement biodiversity• marine pollution schemes• effluent discharge entitlements• full appraisal of forest below-cost timber sales• customary cultivation of biodiversity• marine pollution transfers• wetlands mitigation• full cost pricing for water services• international biodiversity• joint implementation• appraisal of biodiversity impacts in the transport sector• incentive payments for organic farming• international franchise• costing of biodiversity iloss in energy investment appraisal				Incentives
• eco-labeling	set-aside schemes public or grant- aided land purchase wetland reserves coven- ants/conservation easements cost-sharing/ management agreements species enhancement schemes customary cultivation of biodiversity international biodiversity transfers incentive payments for organic farming taxation and	 non-compliance fees fines for damages environmental liability performance bonds habitat mitigation schemes marine pollution 	 transfer-able fishing quotas tradable development rights property-right mechanisms biodiversity prospecting deals forestry offsets air emission trading effluent discharge trading tradable water entitlements wetlands mitigation banking joint implementation debt-for-nature swaps international franchise agreements 	 reduction and restructuring of agricultural support harmful to biodiversity introduction of agricultural conservation compliance measures reform of public forestry concession pricing, licence fees, reforestation fees, and royalties full appraisal of forest benefits discontinuation of below-cost timber sales reform of tax structures full cost pricing for water services appraisal of biodiversity impacts in the transport sector road pricing costing of biodiversity loss in energy investment

VI. Policies for Conservation with Development:

A PLAN FOR ACTION

Institutions need to be set up both in the context of conservation within protected areas and outside of them to ensure the integration of plans for conservation with livelihood generation in a meaningful manner. Some methods of doing this are spelt out below:

1. The nodal organisation is exemplified by the Gram Sabha to focus on neighbourhoods/hamlets/subcommittees of the local panchayat or urban municipality as the case may be in order to give it a legal standing. It has to be defined for bio diversity rich area (including protected areas, wetlands etc. as described in the Peoples' Biodiversity Register). It should have representatives of:

- (a) all persons who have an interest/stake in it: in particular local populations who have traditionally been using the area and the managers, such as the Forest Department/ Van Panchayats/other local managers. The role of the FD should be confined to working out broad guidelines for ensuring sustainable use in consultation with the communities and monitoring the same.
- (b) all plan or project implementing departments in the area whose activities may impinge on the ecological health of the area and
- (c) representatives of any existing or planned units for value addition based on biological resources. These may be in the government, private or the NGO sector.

2. The above Committee has to work in collaboration with local scientists, local knowledge holders, conservation and livelihood NGOs and universities to determine whether a convergence exists between indigenous perceptions and scientific knowledge. At times, this collaboration may have to be worked out with institutions outside the area.

3. Plans for biodiversity conservation, management and use evolve from the deliberations of these local level institutions and are presented and discussed at the appropriate state and central government ministries. Here they are viewed in the larger context the conservation and development needs of the nation. It is important that at these levels as well, all development implementing agencies of the government are fully represented and involved.

It may be useful to aim at setting up these procedures for a few sites initially, possibly those where information or experience exists. A phased plan for all regions could then be drawn up.

4 **Biodiversity Legislation** Provisions of the CBD should be given complete legal recognition and implemented effectively at a national level;

- a. Article 8(j) of the CBD should be implemented under national legislation by:
 - granting ownership of 'biological' material to local communities;

- recognising and protecting of the traditional knowledge of these communities, and traditional modes of resource use regulation and dispute resolution under customary law;
- ensuring the consent and involvement of these communities in the wider use of their knowledge and practices;
- mandating a series of equitable benefit-sharing measures; Rules should be enacted under the law laying down broad and inclusive criteria for identifying a "community". An essential criterion for such identification of a community should be direct dependence on a natural resource for subsistence;
- b. The legislation should require, for both domestic and international access to biodiversity, prior informed consent, mutually agreed terms, and burden of proof on the applicant;
- c. The legislation should cover not only biological taxa but also biochemicals and other parts derived from such taxa;
- d. The appropriate national biodiversity agencies should scrutinize:
 - market approval for products/ processes coming under the "mail-box" applications;
 - patent application for anything derived from biological resources/ knowledge of local community; and
 - other relevant commercial applications from the point of view of:
 - i.) whether there is any threat to biological diversity, the environment, or human health (the precautionary principles should be applied in case of uncertainty); and
 - ii.) whether there are any adverse implications on the rights of local communities;
- e. Rules should be formulated under the legislation for equitable benefit sharing;
- f. Appropriate institutions should be created or, where already existing, empowered to handle the provisions of the legislation;
- g. The legislation should recognize that the appropriate local authority shall have the right of veto over any application referred to the National Authority and/or have the power to specify any special terms and conditions for regulating such access, which should be mandatory on the national Authority to incorporate into the scheme that it may formulate for the specific application;
- h. All information relevant to the legislation should be available for public scrutiny;
- i. The biodiversity legislation should come into force prior to the plant variety legislation;
- j. Benefits derived from IPR-related legislation, and from access regulations, should be plowed back into conservation of biodiversity, and towards providing

incentives for local communities to continue lifestyles and practices relevant to conservation and sustainable use. The majority share should go directly in the hands of the concerned communities instead of officials or others managing community funds on behalf of communities.

B. Protection of Folklore

1. Current laws for Copyright protection are unsuitable for protection of folklore. Measures should be therefore taken for the development of a sui generis legislation for protection of folklore based on an understanding of 'folklore' as inclusive of the following elements: folk knowledge/practices/expressions of art, craft, music, scientific belief, architecture, agriculture, medicine, and conservation of natural resources.

The Costa Rica model

Case: the Costa Rica model

National Institute of Biodiversity of Costa Rica (INBio) and the pharmaceutical major Merck Sharp and Dohme headquartered in the United States¹.

The agreement entered into by the two organisations in 1991 was the first formal attempt to include benefit sharing arrangements while commercialisation of genetic resources took place.

This model can be studied and made applicable with relevant provisions to ensure that it is consistent with equitable benefit sharing with communities and other stakeholders.

Case: Benefit sharing arrangements with the Kani tribes of Kerala

Case: KaniTribals

This case study relates to benefit sharing arrangements arrived at between Tropical Botanical Garden and Research Institute (TBGRI) a publicly funded research institute based in Trivandrum and the Kani tribals of Kerala, involving the medicinal plant called *arogyapaacha (Trichopus zeylanicus)*¹. The Kani tribals were using this plant in their traditional medicine. Within the Kani tribe the customary rights to transfer and practice certain traditional medicinal knowledge have been held by tribal healers, known as *Plathis*. The knowledge related to the medicinal plant in question was divulged by three Kani tribal members to the scientists of TBGRI.

2. Detailed scientific investigation of the plant was subsequently carried out, including chemical screening to isolate the active ingredients, and pharmacological screening.

The TBGRI scientists developed a drug "Jeevani" by adding three other medicinal plants as ingredients.

- 3. The Governing Body of the TBGRI authorised the TBGRI Director to transfer technology for the manufacture of "Jeevani" to interested parties on payment of an appropriate licence fee. Negotiations for the same were conducted by a committee constituted for this purpose headed by the Chairman of the TBGRI Executive Committee who is also Chairman of the State Committee on Science, Technology and Environment, Government of Kerala. This committee recommended a transfer of the right to manufacture Jeevani to a commercial firm, Arya Vaidya Pharmacy (Coimbatore) Ltd., for a period of seven years at a licence fee of Rs. 10 lakh.
- 4. TBGRI was also to receive two per cent royalty on any future drug sales. This was done as per the guidelines of Council of Scientific and Industrial Research of the Government of India. In a separate resolution approved both by the Governing Body and the Executive Committee of the TBGRI, it was decided that the Kani tribals would receive 50 per cent of the licence fee, as well as 50 per cent of the royalties obtained by the TBGRI on sale of the drug, as part of the benefit sharing arrangement for divulging the information. In November 1997 with the assistance of TBGRI, a trust was registered, named the Kerala Kani Samudaya Kshema Trust. All the nine registered members of the Trust were Kani tribals. The president and vice-president of the Trust were the two Kanis who imparted the traditional knowledge to TBGRI regarding arogyapaacha. The objectives of the Trust are: (i) welfare and development activities for Kanis in Kerala, (ii) preparation of a biodiversity register to document the knowledge base of the Kanis, and (iii) evolving and supporting methods to promote sustainable use and conservation of biological resources.
- 5. The first tranche of Rupees 5 lakh and royalties of Rupees 19,000 of the benefit sharing formula were deposited in the account of Kani Samudaya Kshema Trust at Kuttichal Union Bank. The first meeting of the Trust after the transfer was held at the Kallar Mattammodhu Kani tribal settlement on March 19, 1999. In the meeting, it was decided to grant as special incentives, Rs. 20,000 to Mallan Kani, Rs. 20,000 to Kuthy Mathan Kani and Rs. 10,000 to Eachen Kani, who passed on the information to the scientists.
- 6. The above mentioned case involving the Kanis appeared to be the solution towards the evolution of a framework for benefit sharing whith traditional communities at the first instance. However, this case threw up its usual share of problems. The first and the most important of these was the claims for their share in the benefits that were made by the Kani tribals located in other districts of Kerala. This brought to light the fact that all the stakeholders had not been included as beneficiaries of the arrangement. A second issue was raised about the monetary benefits that the Kanis got from the arrangement. The Kerala Institute for Research, Training and

Development of Scheduled Castes and Tribes (KIRTADS), a research institute set up by the Kerala Government for promoting integrated rural development by involving the scheduled castes and tribes in Kerala, maintained that the Kanis had not been adequately compensated for sharing their knowledge. Finally, the most important dimension of the Kani experiment was that it was a publicly funded organisation that took the initiative for sharing benefits with the local communities. Whether this model can be replicated in case a commercial enterprise was involved is really the moot point.

7. The use of contracts for sharing of benefits suffers from at least two limitations, which need to be taken into consideration. In the first place, they are voluntary agreements between the parties concerned. Given its nature, contracts cannot be relied upon as a way of realising the objectives of the CBD. The second, and the more important limitation of contracts, one that could prevent fair and equitable sharing of benefits, arises when the parties involved are of vastly unequal bargaining strengths. This is most likely to happen in the context of the present discussion, as the parties would be the commercial entities, usually the large companies, having significant market power and the traditional communities, most of which are at the fringes of the market system. Institutional structures would therefore have to be established to provide the traditional communities an opportunity to partake to the benefits arising out of biological diversity and/or associated knowledge.

VII. Recommendations: The Way Forward

- 1. Action is required on three broad fronts: (i) putting in place well considered legislations and/or complementary arrangements that would protect and help address the needs of the holders of traditional knowledge, (ii) establishing the institutional structure needed for effectively implementing the legislations, and (iii) increasing coordination between the different actors who have an interest in traditional knowledge, including communities, commercial interests, civil society groups and the policy makers.
- 2. Making participation by local communities more effective during the implementation of the Biodiversity Act.
- 3. Establishing the institutional structure for ensuring fair and equitable sharing of benefits arising out of the commercial exploitation of knowledge related to biodiversity.
- 4. Consistent set of views needs to be developed with the utmost urgency as regards protection of traditional knowledge. Stakeholder dialogue needs to be initiated to ascertain whether or not conventional forms of intellectual property rights, in particular patents, would be the ideal way to approach the problem at hand.
- 5. Making Farmers Rights work effectively by setting out appropriate rules for the implementation of the Plant Breeders and Farmers Rights Act.
- 6. Review all participatory management efforts carefully to see that they do not perpetuate inbuilt asymmetries of power by setting up new committees. Rather, existing structures in the form of Gram sabhas, local communities and PRIs should be used to ensure participation.
- 7. Reviewing various legislations, enacted both by the Central Government and different State Governments, with a view to amending those that may undermine the rights of the traditional communities over the resources they have been using.
- 8. Delineation of the rights and responsibilities of the different tiers of governance on the issue of biodiversity conservation.
- 9. All the above can be enabled by appropriately empowered and informed users of resources. An augmentation of education, awareness and capability to ask for and get access to information needs to be encouraged to enable this to happen.

Annexure

M-13033/1/2006-E&F Planning Commission (Environment & Forests Unit)

Yojana Bhavan, Sansad Marg, New Delhi, Dated 21st August, 2006

Subject: Constitution of the Task Force on Social and Economic Aspects of Conservation and Restoration for the Environment & Forests Sector for the Eleventh Five Year Plan (2007-2012).

It has been decided to set up a Task Force on Social and economic aspects of conservation and Restoration for the Environment & Forests Sector for the Eleventh Five-Year Plan. The composition of the Task Force will be as under:

1.	Prof. Kanchan Chopra, IEG, Delhi University	Chairman
2.	Shri Achyut G. Gokhale, New Delhi	Member
3.	Prof. Gopal Kadekodi, Director, ISEC, Bangalore	Member
4.	Dr. Madhu Sarin, Chandigarh	Member
5.	Dr. Mahesh Rangarajan, New Delhi	Member

Terms of Reference of the Task Force will be as follows:

- 1. Deliberate on the various social, economic and conservation aspects of the Biological Diversity Act and suggest a roadmap for its implementation conforming to the socioeconomic and management objectives emanating from the Convention on Biological Diversity, *in particular the ecosystem approach, and the provisions for benefit sharing under article* 8(*j*).
- 2. Recommend a strategy for greater involvement of folk taxonomists and ecologists in forestry, wildlife and environment research and application of such research towards development of management plans.
- 3. Evaluate the role of local bodies, which have the responsibility for management of local natural resources, in promoting sustainable development.
- 4. Recommend ways of enhancing people's participation in sustainable management of water, fisheries and other related resources.
- 5. Examine ways of creating positive incentives for conservation and regeneration of biodiversity resources, and for sustainable management of natural resources through payment of service charges following the Costa Rica model for payment of service charges for watershed conservation services.
- 6. Examine the possibilities of extending programmes of joint forest management to protected areas.
- 7. Review the experience of the participatory forest management approach and recommend ways to consolidate the regime in order to generate empowered commitment among stakeholders for conservation and protection of forests. This may

include integration of local self governments, community institutions and delivery mechanisms through instruments of empowerment like *PESA*, the provisions for functioning of Biodiversity Management Committees under the Biological Diversity Act and the Right to Information Act.

- 8. Suggest ways and means of optimizing the symbiotic relationship between forest dwellers and forest by promoting efficient and quality value addition for realization of gainful employment opportunities through development and sustainable use of medicinal plants, bamboo and canes and other Non-timber forest produce (NTFP) by tribals and other forest dweller communities.
- 9. Ministry of Environment & Forests will provide basic information and data input to the Task Force as and when required.
- 10. The Chairperson of the Task Force will be free to co-opt any official / non-official as special invitee for its meeting.
- 11. The non-official members will be paid TA/DA by the Planning Commission as per SR 190 (a) for attending meetings of the Task Force.
- 12. The Task Force will submit its report to the Chairman, Working Group on Forests by 31.10.2006.
- 13. Shri M. Ravindranath, Joint Adviser (E&F), Room No. 301, Yojana Bhavan (Tel No. 23096536) will be the Nodal Officer for the Task Force for all further communications.

(Dr. S K Khanduri) Director (Forestry)

Copy forwarded to: <u>All Members of the Working Group</u>.