Capacity Building Workshop on the Biological Diversity Act, 2002 at Banjar, Himachal Pradesh 24 January 2018

Legal Initiative for Forest and Environment
New Delhi
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HIMACHAL PRADESH STATE BIDIVERSITY BOARD

2018

One Day Training Workshop was organised on 24 January 2018 jointly by the Himachal Pradesh State Biodiversity Board (HP SBB) and Legal Initiative for Forest and Environment (LIFE). The event was held at the Community Training and Tourist Centre, Sai Ropa in the Kullu district of Himachal Pradesh.

The training workshop targeted the BMCs at the Gram Panchayat level to raise awareness among them with respect to their roles and responsibilities and powers.

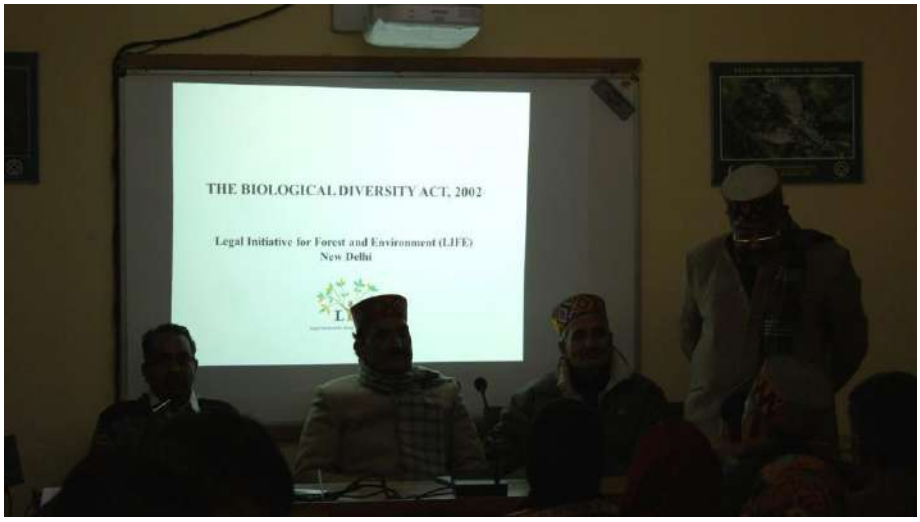
Interested villagers from 8 BMCs from Banjar and Sainj Valley in Kullu district participated in the training. The programmed involved five resource persons: Dr. M.L. Thakur, State Project Coordinator, Himachal Pradesh State Biodiversity Board; Dr Joginder Thakur, Botany Professor, Government Degree College, Banjar; Mr Chuni Lal, Grassroots Trust India, Kullu; Advocate Saurabh Sharma, LIFE and Mridhu Tandon, Researcher, LIFE.

Resource persons addressed the participants highlighting the provisions of the Act, challenges with respect to biodiversity conservation as posed by illegal trade in medicinal plants; the need to change local farming system by re-introducing the traditional varieties of food crops thereby ensuring local agro-biodiversity; the need to strengthen constitution of BMCs at the gram panchayat level, ensuring their proper working and functioning, raising awareness among them with respect to their powers, roles and responsibilities and building their capacities to generate their own finances.

Programme

Welcome

Mr. Bhupinder, Range Officer, Tirthan Wildlife Range, Sai Ropa, Great Himalayan National Park welcomed the participants.



Address by Dr. M. L. Thakur, State Project Coordinator, HP SBB

Dr. ML Thakur, Project Coordinator, HP SBB gave a brief introduction to the genesis of the Biological Diversity Act, 2002 (BD Act, 2002) starting from the Convention on Biological Diversity, 1992 (CBD) which reaffirms the sovereign rights of the host country over its biodiversity. In the pre CBD era, biodiversity was considered the common heritage of mankind, however this got changed as there was opposition from the BRIC Countries (speaking on the behalf of African nations) that the ownership rights over the biological resources is vested with the country from where it originates. Therefore, the CBD now is based on the line of thought that Countries have sovereign rights over biological resources that originate from their country. Taking the line of thought forward, the biological resources that are found in a state, that particular state has sovereign rights over those resources. Similarly, the gram panchayat has complete sovereignty with respect to rights over the biological resources that are found in their jurisdiction. To enforce the CBD, India promulgated the BD Act, 2002. The Act is based on: Conservation of biodiversity; sustainable use of the components so that regenerative capacity is maintained and Fair and equitable sharing of benefits from commercial utilisation of the same.

Further, Dr, ML Thakur explained the scope with respect to implementation of the provisions of the statute in the state of Himachal Pradesh with respect to concerns of illegal trade in medicinal plants. The state is the country's major producer of medicinal herbs; such that the state is the source of 80% of the ayurvedic medicines produced in India, apart from 46% of Unani and 33% of allopathic drugs. With respect to medicinal plants in the state of Himachal Pradesh, invariably it is the roots/rhizomes/tubers or the whole plant that is utilised which poses a high degree of threat to the medicinal species. The herbs are used in plant based pharmaceuticals industries and are mostly extracted from the natural habitats. The high valued species are the most threatened, especially, *Taxus Baccata*, an anti-cancer drug, which has been facing severe depletion in the Mandi and Sirmaur districts of the state. The case of *Trillium govanianum* (Nag Chhatri) is of particularly significant in the case of district Kullu, where the valuable medicinal herb has gone extinct from the natural forests. While threatening in-situ conservation of biodiversity due to unsustainable resource harvest, the illegal medicinal plant trade is also a cause of concern from the point of view of 'equitable sharing of benefits derived from the trade. To substantiate, while the local villagers get Rs. 1500-2000 for a Kg of *Trillium govanianum* (Nag Chhatri), its price in the international market reaches Rs. 1, 00, 000 per kg, therefore the gap of Rs. 98, 000 in the benefit earned from the trade in the plant which needs to be bridged and the locals ought to be given a fairer share in the same. Given the above concerns, it was further stated by Mr Thakur that under this Act the companies that use biological resources for commercial utilisation have to share the benefits earned by them such that 95% of the total benefits to be paid by the company goes to the BMC from where the resources are taken. Therefore, there is significant economic scope with respect regulating the trade in medicinal plants under the BD Act, 2002. It was further highlighted that in addition to the benefit sharing payable to the BMCs, they are also authorised under the Act to levy charges by way of collection of fees on those accessing/collecting biological resources from their jurisdiction. Example from Andhra Pradesh was given wherein a BMC had levy fees on collection of *tendu patta* from their territorial jurisdiction.

Given the above concern, the role envisaged for the BMCs is two-fold: first, regulate the trade in medicinal plants from their territorial jurisdiction and negotiate for a fairer price for the LBF and second, use the funds in LBF to cultivate the high medicinal plants to reduce pressure on the forest resources. The participants were also told of the Board's current initiative of starting contract farming between Dabur and farmers in the Lahul Valley. The

Board has been in conversation with the company asking the details with respect to the medicinal plants collected by them, quantity and source of collection. As per the Board, the company has collected species of medicinal plants whose conservation status is threatened/endangered.

A practical difficulty however, is with respect to the provisions of Section 38 of the BD Act, 2002 which the limits the collection of species to research and scientific purposes. However, in order to introduce contract farming between the farmers of medicinal plants and companies which utilise such species for commercial utilisation, which will lead to both livelihood opportunities for the locals as well as reduce the pressure on the wild with respect to medicinal plants, the Board has written to the State Government to keep such contract farming arrangements outside the purview of the Act.

Dr Thakur also touched upon the genetic modification of local varieties and that how as per the law companies that use the local varieties/landraces and produce the genetically modified varieties and then get them patent. Such IPR related use of biological resources is regulated under the BD Act, 2002 and that it is mandatory for the NBA/SBB to consult the BMCs while taking any decision relating to the use of biological resources and knowledge associated with such resource occurring within the territorial jurisdiction of the BMC.

Dr. Joginder Thakur, Professor, Government Degree College, Banjar

Dr. Thakur stressed on the importance of formation of BMCs at the village levels so that the local biodiversity can be conserved. It was highlighted that how in past locals were self-sufficient given their dependence on local biodiversity thereby ensuring that the local biodiversity remains conserved. With respect to cultivation of medicinal plants, it was clarified that cultivation of a specific species should take place in its relevant altitude and not shifted to a different altitude as local conditions have their integral role to play.

Mr. Chuni Lal, Technical Support, Banjar Block, District Kullu

The technical support group for the Banjar district initially described their own experience with respect to documentation of agrobiodiversity in the buffer of Great Himalayan National Park (GHNP). In 2007 the group has documented 45 traditional varieties of crops that were cultivated by the communities in the buffer of the GHNP. In 2010, again the mapping was done which revealed that only 21 varieties were left suggesting that in 2017-18 even lesser varieties were there. One of the reasons for this was improved road connectivity. In 2007, the connectivity was poor, people used to grow and sell traditional crops only. By 2010-12, roads connectivity has increased, and therefore given better access, communities have moved towards cash crops that can be easily sold in the market.

Given the results of the documentation exercise, their group Grassroots India Trust had made a plan with the GHNP authorities to ensure continued cultivation of traditional agricultural varieties which involved sensitising the farmers with respect to the benefits of cultivating the traditional varieties. Continued cultivation of tradition varieties will not only ensure conservation of the local agrobiodiversity; but is also beneficial to them given the higher nutraceutical value of such varieties (in relation to the hybrid varieties). The NGO has developed a seed bank for traditional varieties and these are being distributed free of cost to incentivise so as to start the exercise on a small scale, the germplasm of the seed is also given to the Universities so that these are preserved.

Lastly with respect to the point made by the Dr. Joginder Thakur that cultivation of medicinal plants should be restricted to their natural altitudes, Mr. Chuni Lal shared their experience with respect to training farmers to cultivate medicinal plants and practical difficulties in the same. Due to climate change, apple farming has shifted in higher altitudes and is now practised in altitudes of above 6000 ft. and that while the present apple farming requires use

of pesticides and insecticides, medicinal plant cultivation requires traditional/natural farming methods (only when large scale cultivation takes place, fertilizers are used; however, they are biological in nature (bio-fertilizers/bio-pesticides/organic manure). The practical difficulty in cultivation of both apples and medicinal plants in higher altitudes as happened with a local famer who had cultivated *Aconitum hetero-phyllum* (Atish) was that though the produce was sold at a large scale, it had failed in the laboratory with respect to its medicinal value due to chemical traces in the plant. The farmers land in this case was at a comparatively lower altitude to the apple orchard and therefore the pesticide run-off from the crop had come in contact with the soil of the cultivated plot. The TSG had then recommended to change the plot and dug a trench (1.5 mt wide; 2 mt deep) so that the runoff from the crop doesn't enter the plot.

Apart from cultivating medicinal plant, there have also been efforts made to sensitize farmers in the middle and upper hills (5000-8000 ft.) to cultivate ornamental plants such as Rhododendrons (endangered in HP). The basic aim is to cultivate those species that are endangered, have value from the biodiversity point of view and most importantly what are locally consumed by people and cultivation of the same is not dependent on market as when market goes down, there is no incentive to grow the same crop the next season.

With respect to the working and functioning of the Biodiversity Management Committees (BMCs) in the Banjar block of Kullu district, the current focus is generation of the Local Biodiversity Fund (LBF) thereby ensuring financial independence of the BMCs. The plan of the TSG is that BMCs will start levying a permit fee on those accessing the gram panchayat (the territorial jurisdiction) strictly for tourism purposes, thereby not covering the local villagers, vaids/traditional knowledge holders and researchers, with an overall objective to generate local biodiversity fund to support cultivation of traditional agricultural crops and medicinal plants on a large scale.

Advocate Saurabh Sharma, LIFE

Advocate Saurabh Sharma gave a presentation with respect to legal provisions governing the constitution, role and responsibilities of BMCs and their primary responsibility as mandated in the statute: preparation of PBRs. After highlighting the provisions in the statute governing the constitution of BMCs, Advocate Saurabh Sharma highlighted the roles and responsibilities of BMCs as mentioned in the Guidelines issued by National Biodiversity Authority titled "*Operationalisation of Biodiversity Management Committees (BMCs)".* In addition to the preparation of a PBR, the roles and responsibilities of a BMC takes various forms such as eco-restoration of the local biodiversity, management of sacred groves and sacred water bodies, heritage sites including heritage trees, conservation of traditional varieties/breeds of economically important plants and animals; sustainable utilization of biological resources within its area of territorial jurisdiction, regulation of access to the biological resources and/ or associated traditional knowledge, for commercial and research purposes and stopping illegal access of bio resources from areas falling within its territorial jurisdiction.

It was further highlighted that the BD Act, 2002 grants BMCs independent powers to levy charges by way of collection fees from persons accessing or collecting biological resources for commercial purposes from areas falling within their territorial jurisdiction. Collection of fees by the BMC may enable it to build their own finances which can be utilised by them for carrying out the objectives of the statute.

Further highlighting the preparation of PBRs, it was highlighted PBR is a comprehensive document that comprehensive information on availability and knowledge of local biological resources (those falling within the areas of territorial jurisdiction of the BMC, which is same as that of its local body's), their medicinal or any other use or any traditional knowledge associated with them.

The process of PBR preparation is participatory in nature, requiring extensive and intensive consultation with the large number of the people who need to share their common as well as specialized knowledge. The documentation of people's knowledge about conditions and trends about changes taking place in their surroundings and the drivers of these changes reveals issues of natural resource management to be reflected in the management plan for the area, thereby acting as a basis for knowledge based system of resource management.

It was further explained that PBR is prepared as per the Guidelines issued by the NBA titled *"Guidelines on Preparation of People's Biodiversity Register (PBRs)"* according to which documentation of information involves Participatory Rural Appraisal (PRA) among the locals, focused group discussions with people having knowledge, information gathered from individuals through detailed questionnaire, and published secondary information.

The format of the PBR as mentioned in the Guidelines was shown to the participants on the projector and the entries in the format (s) were explained to them.

Lastly it was told to the audience that as per the Guidelines, post PBR preparation, an Action Plan is to be prepared by the BMC with the TSG's support. The Action Plan draws from the documentation in the PBR and outlines the steps for conservation of biological resources and the training needs identified for the BMC personnel.

Mridhu Tandon, Researcher, LIFE

Given the presentation on the legal provisions with respect to BMCs and PBRs, the last presentation highlighted a few examples where BMC had taken up conservation based activities. As an example from the Rewa district of Madhya Pradesh, BMC Keoti Gram (Keoti Gram Panchayat, Rewa district Madhya Pradesh) which had filed a petition in the Central Zone of National Green Tribunal raising the issue of illegal mining and illegal construction carried out in their area in the name of 'tourism' and the environmental damage caused to the Keoti Village Forests due to construction of Biodiversity Parks by the State Government. The BMC had prayed for immediate stoppage of any construction activity and demolish construction already carried out in the Keoti area comprising of dense forest and waterfall and for declaration of Keoti Gram as a Biodiversity Heritage Site (BHS) under the BD Act, 2002. The Tribunal during the course of its hearing had found that there were no criteria in place for identification of a site and its notification as a BHS and thereby had ordered that there won't be allowed any kind of developmental activity (including mining) in the Keoti Village. Upholding its earlier orders, the Tribunal made it clear that no mining of any sort, construction or alteration of habitat in any manner will be allowed in the area.

This was followed by a documentary on the initiatives taken by the BMC Piprai (Piprai Village, Morena district) in support of their TSG, Sujagriti Samaj Sevi Sanstha, Morena. The PBR prepared by the BMC with the technical support received from the NGO, revealed that

800 hectares of cultivable land is being transformed into ravines leading landlessness among the local farmers. In order to address the issues of loss of lands and livelihood to ravines, a multi-pronged approach was adopted by the BMC Piprai and their Technical Support Group, Sujagriti Samaj Sevi Sanstha (SSSS) by the following means: (1) Improvement of soil strength by re-introducing the thorny shrub *(Commiphora wightii)* Guggal. The PBR also revealed that gradually Guggal is being pushed towards extinction. The plant is known for the medicinal use of its resin. The oleoresin of Guggul plants has wide application in the treatment of numerous physical disorders and diseases like inflammation, obesity, cardiovascular disease, fracture of bones and lipid disorders. Thus the plantation and conservation of Guggul protect the ravines from expanding further, while simultaneously improving livelihood opportunities for the local population. (2) Construction of Dorbandi and Check dams resulting in conservation of land from ravine formation and increase in recharge of wells with attendant augmentation of agricultural production and effective management of water resource. Besides, 15000 natural occurring Guggal plants in 70 hectare of ravines have been conserved in-situ and in addition, the BMC had systematically planted with 10,000 Guggal plants. The BMC has also levies fees on companies such as Dabur that commercially utilise the resin of the Guggal plant for commercial purposes.

From Kerala, the example of conservation of Sasthamkotta Lake (a Ramsar Site and the largest freshwater body in Kerala) by a Joint BMC was given. A joint BMC was formed out of 3 village panchayats in Sasthamkotta Block: Sasthamkotta, West Kallada and Mynagapally owing to lake's geographical location in these villages. The Block level BMC has been acting as an environmental watch group in the locality and had raised its voice against excessive withdrawal of water by the Kerala Water Authority (KWA). The BMC president in May 2015 had written to the managing director of KWA highlighting the need to impose curbs on the unscientific exploitation of water which was resulting in drying of the lake thereby affecting the groundwater level in the neighbouring areas. The letter directed the KWA to reduce its water intake by 40% within a month and to pay the joint BMC a certain percentage of the value of extracted water to fund local biodiversity conservation. The joint BMC had threatened legal action in case the KWA failed to respond and take necessary action. Further, an example was given from the state of Arunachal Pradesh where BMC Sangti (Sangti Village, West Kameng district, Arunachal Pradesh) where had developed strict rules for their territorial jurisdiction. The notice board put up by the BMC laid the following rules: (1) Prohibition within the jurisdiction of the Sangti Village: (a) Hunting of wild animals; (b) Use

of chemicals, explosives and electrocution for fishing and (c) Unauthorised extraction of natural resources such as timber, NTFP, etc. (2) Violators will be prosecuted and penalised under Wildlife Protection Act, 1972 or as per regulatory norms of Biodiversity Management Committee (BMC) or village.

Participants at Training Workshop on the Biological Diversity Act, 2002
On 24 January 2018 at Community Training and Tourist Centre
Sai Ropa, Banjar (Kullu), H.P.