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H.P. State Biodiversity Board
UNEP-GEF MoEFCC ABS Project

PROCEEDINGS ON:

**Interactive Dialogue on “Biological Diversity Act, 2002 and its Access and
Benefit Sharing (ABS) provisions for Bar Association and Senior Advocates of
Himachal Pradesh High Court**

New Regency Hall, Hotel Holiday Home (HHH), Shimla

4th of September, 2017.

Interactive Dialogue on “Biological Diversity Act, 2002 and its Access and Benefit Sharing (ABS) provisions for Bar Association and Senior Advocates of Himachal Pradesh High Court

Biological diversity is a national asset of a country; hence the conservation of biodiversity assumes greater significance. The first attempt to bring the biodiversity into the legal framework was made by way of the biodiversity bill 2000 which was passed by the Lok Sabha on 2nd December 2002 and by Rajya Sabha on December 2002. A national biodiversity authority has been established by the Biodiversity Act, 2002 to regulate act implementing rules 2004 has been operationalised since coming in to force. Regulating access as well as pushing the officially sponsored, documentation of biological resources and traditional practices through people’s diversity registers at the local and data bases at the national levels, respectively is the heart of the BD Act, 2002. It further probes the extent to which the principles of conservation have realized.

The Ministry of Environment & Forests is primarily concerned with planning, promotion, coordination and overseeing the implementation of the various environmental and forestry policies and programmes. The Ministry also serves as the nodal agency in the country for the United Nations Environment Programme (UNEP) and is also entrusted with the issues relating to multilateral bodies such as the Commission on Sustainable Development (CSD), Global Environment Facility (GEF) and of regional bodies like Economic and Social Council for Asia and Pacific (ESCAP) and South Asian Association for Regional Co-operation (SAARC) on matters pertaining to Environment. Out of the many mandates and objectives of the Ministry, Conservation and Protection of environment, assistance to organizations implementing environmental and forestry programmes, promotion of environmental and forestry research, extension, education and training and creation of environmental awareness among all sectors of the country’s population, are in relation with Biological Diversity Act 2002, implementation in various States of the Country.

The need to spread Biodiversity awareness is enormous in the context of successfully addressing Biodiversity Conservation problems, Biological diversity Act 2002 and rules 2004 address the same. On the one hand, awareness on Biological Diversity Act, 2002 creates greater awareness in individuals and communities with respect to putting environmental resources to use even while conserving them. On the other hand, greater the awareness increases especially within the line departments of the government, the scope of sustainable use and conservation practices for protecting our valuable biodiversity also increases.



In order to conserve and sustain biodiversity of the State and to implement programmes and strategies related with biodiversity conservation at the state and national level it is realized that the Law departments of the state should be made aware about the provisions, scopes and role of Biological Diversity Act, 2002, so it was decided by HP State Biodiversity Board to make Bar Association, Senior Advocates, Advocate General, Additional Advocate Generals and Deputy Advocate Generals of Hon'ble High Court of Himachal Pradesh aware about the role and scope of Biological Diversity Act, 2002. In this connection a one day training workshop was organized at Hotel Holiday Home (HHH), Shimla under supervision of Sh. Kunal Satyarthi, Joint Member Secretary, Himachal Pradesh State Biodiversity Board. Hon'ble Justice Sh. Sanjay Karol, Acting Chief Justice, Hon'ble High Court of Himachal Pradesh was the Chief Guest, Advocate B.P. Sharma, President Bar Association, Hon'ble High Court of Himachal Pradesh, Sh, Saurabh Sharma, Advocate, Hon'ble Supreme Court of India was the special guest, Smt. Archana Sharma, Director, Environment Science & Technology, Govt. of HP, Sh. Ishwar Poojar, Project Manager, UNEP/GEF MoEF&CC ABS Project, National Biodiversity Authority, Chennai were present during the workshop. Scientists and officials from HP State Biodiversity Board also attended the workshop.

Hon'ble Justice Sh. Sanjay Karol, Acting Chief Justice, Hon'ble High Court of Himachal Pradesh took



initiative and himself started the proceedings after the inaugural ceremony. Hon'ble Justice Sh. Sanjay Karol said that Conservation of biodiversity involves multiple stake holders and a multi-sectoral approach is necessary for its conservation in all spheres of ecosystem. The law requires each ministry to monitor biodiversity, be aware of environmental impact of activities within the

sphere of responsibility and work together cooperatively. He mentioned that the law includes the issue of biosafety in the objectives by specifying to ensure environmental safety to all citizens as a guarantee of social, economic and cultural sustainability. He also said that Article 46 of the law deals with the issue of

biosafety and that the precautionary principle, to avoid the defence of scientific uncertainty has been explicitly put in place in Article 11 of the Act. During his talk Earth summit and CBD were discussed and three tier system of Biological Diversity Act, 2002 i.e. Conserving Biodiversity, Sustainable use of its component and Fair and equitable Sharing of Benefits was also briefly discussed.

Hon'ble Justice Sh. Sanjay Karol told everyone about how the BD Act,2002 was formed and why there



was a need for formation of such Act. He said that BD Act, 2002 aims at promoting the conservation and sustainable use of biological resources and the equitable sharing of the benefits arising out of such resources. The Act provides for the establishment of the National Biodiversity Authority at the Central level, State Biodiversity Boards at the State level and Biodiversity Management Committees at the level of

the local self- government in India. He also told about Access Benefit Sharing which he said can be described as the process when bio-resources or people's knowledge are accessed, the user/ accessor must compensate the provider community either in financial terms or acknowledge the source. However once access is allowed, then the challenges for regulatory mechanisms are to identify and claim a share of benefits and to ensure just and equitable sharing. Article 16 of the Convention on Biological Diversity states the ways in which the Access and Transfer of Technology should take place. He told that the Act centralises all the property rights either in the hand of state through sovereign appropriation or in the hands of private inventors through monopoly of intellectual property rights. It does not however provide a framework for the rights of all other holders of biological resources and related information. The consequence is that resources and knowledge are not allocated through intellectual property rights, the rest is freely available. He also briefly touched the Nagoya Protocol on access benefit sharing in Tokyo in 2001 and told that it is an agreement which aims at sharing the benefits arising from utilisation in a fair and equitable way, thereby contributing in the conservation and sustainable use of biodiversity.

Sh. Kunal Satyarthi, Joint Member Secretary, HP State Biodiversity Board imparted knowledge related to Biological Diversity Act, 2002, and its Access and Benefit Sharing Provisions to all participants. Sh. Kunal Satyarthi interactively presented many cases related to BD Act by showing news clipping from Times of India newspaper in which it was mentioned that in August 2012, two Czech nationals were arrested "for stealing insects" near the Singalila National Park in Darjeeling. In September, the two Prague-based entomologist Petr Svacha and his colleague Emil Kucera were convicted by a local court under provisions of Biological Diversity Act, 2002. Next in his presentation he showed some pictures of

different varieties of brinjal, rajmah (pulse) and rice that was once found in the State and showed his concern that today out of many varieties found once now only very few are available, which shows the loss that biodiversity of the State has faced.

By giving these examples he explained that biodiversity is not just associated with medicinal plants and herbs found in wild but it covers everything except Normally Traded Commodities (NTC's) and other



agriculture produce till the time some value addition is done e.g. cultivation of apple is not applicable under BD Act, 2002 but if someone or some industry or firm is engaged in value addition by making some commercial product like jam or wine from apple then they do come under BD Act, 2002. By giving these examples Sh. Kunal Satyarthi showed the scope, provision and power of Biological

Diversity Act, 2002 and these examples also acted as the foundation of the whole presentation for better understanding of the topic for Bar Association and Senior Advocates of Himachal Pradesh High Court. Next he briefed about the status of global biodiversity and also told about the alarming rate (150 varieties of different species being lost every day) at which biodiversity is being wiped off from the face of earth. Next he brought everybody's focus on Biological Diversity Act, 2002 and its provision.

Next he briefed about the inception of the BD Act how it came into force he mentioned that in 1987, the World Commission on Environment and Development enunciated the principle of "sustainable development" in its landmark report titled "Our Common Future" in which it observed that "humanity has the ability to make development sustainable to ensure that it meets the needs of the present generation without compromising the ability of the future generations to meet their own needs". "Sustainable development" became the theme of the United Nations Conference on Environment and Development (UNCED), held at Rio de Janeiro in June 1992. In November 1990, the United Nations Environment Programme (UNEP) began the first of seven negotiating sessions whose objective was to produce an international treaty on the conservation of biological diversity. The CBD was presented at the Earth Summit in Rio de Janeiro in June 1992, where it was signed by 153 nations including India. The CBD came into force from the 29th of December 1993.

Explaining the three tier system Sh. Kunal Satyarthi mentioned that the Biological Diversity Act's aim is to provide for the "conservation of biological diversity, sustainable use of its components and for the

equitable sharing of the benefits arising out of the use of biological resources.”This has to be done through approval of Indian Government for transfer of Indian genetic material outside the country



,regulating all Indian nationals for collection and use of biodiversity except the local community , undertaking measures to conserve and sustainably use biological resources, local communities to have a say in the use of their resources and protection of indigenous or traditional knowledge. This act also envisages setting up of Biodiversity Management Committees (BMC) at local village level, State

Biodiversity Boards (SBB) at state level, and a National Biodiversity Authority (NBA) which is the three tier system. Next he described the functions of State Biodiversity Boards (SBB), Biodiversity Management Committees (BMC) and National Biodiversity Authority (NBA) which were:

- BMCs: Prepare, maintain and validate People’s Biodiversity Register (PBR) in consultation with the local people. Advice on any matter referred to it by the State Biodiversity Board or Authority for granting approval, to maintain data about the local vairs and practitioners using the biological resources
- SBBs: Advise the State Governments, subject to guidelines issued by the Central Government, on matters relating to conservation of biodiversity, sustainable use of its components and equitable sharing of benefits arising out of utilization of biological resources. Regulate by granting approvals or otherwise request for commercial utilization or bio-survey and bio utilization of any biological resource by Indians.
- NBA: The National Biodiversity Authority is mandated to regulate use of India’s biological resources; facilitates/ enable conservation action and provides advice to Central and State Governments on issues of conservation, sustainable use and access and benefit sharing.

The objectives of the Act were described next by Sh. Kunal Satyarthi which were:

1. Conservation of Biological diversity
2. Sustainable use of its components
3. Fair and equitable sharing of the benefits arising out of utilization of biological resources.

He told that the Biological Diversity Act of 2002, and the Biological Diversity Rules, 2004 are implemented by National Biodiversity Authority (NBA) at the national level, State Biological Board

(SBB) at state level and Biodiversity Management Committees (BMC's) at local levels. To assist NBA at centre and to advise them on matters exclusive and of particular interest to the biodiversity of the State, similar Boards have been established in States under Section 22 of the said Act. The powers and functions of the State Biodiversity Boards have been listed down in Section 24 and Section 23 of the Act. Some of the major functions of these authorities were discussed which are as follows:

- To regulate activities of, approve and advice the Government of India on matters relating to the conservation of biodiversity, sustainable use of its components and equitable sharing of benefits.
- To grant approval under Sections 3,4 and 6 of Biodiversity Act,2002
- To notify areas of biodiversity importance as biodiversity heritage sites under this act and perform other functions as may be necessary to carry out the provisions of the Act.
- To take measures to protect biodiversity of the country as well as to oppose the grant of intellectual property rights to any country outside or any biological resources obtained from India.

It was told that the National Biodiversity authority (NBA) deals with the requests for access to the biological resources as well as transfer of information of traditional knowledge to foreign nationals, institutions and companies. Through this way piracy of Intellectual Property Rights in and around India is prevented and it also saves the indigenous people from exploitation. Next Sh. Kunal Satyarthi explained everyone about the role and functions of Himachal Pradesh State Biodiversity Board (HPSBB). He said that HPSBB was constituted in the year 2006 and its administrative body consists of a Chairman, 5 ex-officio members, 5 expert members and secretarial staff. Next role and functions of Biodiversity Management Committee (BMC) was discussed. He described the role of BMC's which is also to conserve Biological diversity, ensure sustainable use of its components and lastly there should be fair and equitable sharing of the benefits arising out of utilization of biological resources. In the following presentation he went on describing about need and importance of Peoples Biodiversity Register (PBR); which are legal documents and database on biodiversity of any given area and he also described about Local Biodiversity Funds (LBFs). He described how PBRs as a legal document could play an important role in maintaining records on biodiversity related to a specific area and he also mentioned how LBFs would help in motivating and channelizing the whole process of making of PBRs. Next Biodiversity Heritage Site provision under the Biological Diversity Act, 2002, was discussed and how this would be able to help locals conserve their heritage site which they already have been doing from generations (Sacred Grooves) or they were not able to because of lack of initiative or incentive. Certain exemptions

under Biological Diversity Act, 2002 and normally Traded Commodities (NTCs) were also discussed and explained.

Penalties related to breach to Biological Diversity Act, 2002, were discussed next and it was stated that: Firstly whoever contravenes or attempts to contravene or abets the contravention of the provisions of section 3 or section 4 or section 6 shall be punishable with imprisonment for a term which may extend to five years, or with fine which may extend to ten lakhs rupees and where the damage caused exceeds ten lakhs rupees such fine may commensurate with the damage caused, or with both. And secondly whoever contravenes or attempts to contravene or abets the contravention of the provisions of section 7 or any order made under sub-section (2) of section 24 shall be punishable with imprisonment for a term which may extend to three years, or with fine which may extend to five lakhs rupees, or with both. In addition it was told that the offences under this Act shall be cognizable and non-bailable. This clause stipulates that the Central Government may give directions to the State Governments for execution any of the provisions of this Act.

Next Sh. Ishwar Poojar, Project Manager (UNEP/GEF MoEF&CC ABS), NBA Chennai, presented his lecture on The Biological Diversity Act, 2002: The Access and Benefit Sharing Perspective. He started



his presentation by giving examples of Billion Dollar Pharma Industries using Bio-resources like: *Vespa mandarinia japonica* - Giant Japanese Hornet: The hornets feed on crop pests, besides the workers feed on the flight muscles of others insects, they produce a liquid called Vespa Amino Acid Mixture (VAAM), can increase athletic performance. Fried hornets are delicacy at country side of

Japan. *Illicium verum* – Chinese Star Anise: In 2009 Swine Flu outbreak lead to huge demand for anti influenza drug – tamiflu around the world. Which needed shikmic acid a primary precursor in pharma synthesis. Derived from Chinese Star Anise, extracted from its seed at tenth stage. By citing these examples he mentioned that how from these two bioresources only companies engaged in producing its formulations earns billions of dollars every year.

Next he told everyone about the enactment of Biological Diversity Act, 2002 and the Convention on Biological Diversity (CBD). He mentioned that in 1992- The CBD became an international legally-binding treaty and 196 Parties (countries) till date have signed the agreement. He briefly touched on 2003

Cartagena Protocol and 2010 Nagoya Protocol when ABS was first conceived and later came into force on 12.10.2014. He also mentioned that Nagoya - Kuala Lumpur and Supplementary Protocol on Liability and Redress to the Cartagena Protocol on Biosafety. He stated that Biological Diversity Act was enacted in 2002 on the lines of CBD to implement the provisions of the BD Act, the National Biodiversity Authority was established in October 2003 at Chennai with following objectives:-

- Conservation of biodiversity,
- Sustainable use of its components,
- Fair and equitable sharing of benefits arising out of the use of bioresources

He said that the Act extends to the whole of India and that the Act covers foreign nationals and entities, Indian nationals and entities and NRIs. NBA, SBBs and BMCs together form the institutional framework for biodiversity legal regime in India vis-à-vis International compliance. Each of them work in co-ordination with the other under the Act to perform their roles and functions. Next Sh. Ishwar Poojar discussed Section 3 comprising Foreign Companies accession the bioresources of the country and what provisions BD Act, 2002 has for them, provision regarding transfers of results were discussed under Section 4 and Intellectual Property rights and issues related were discussed under Section 6. He mentioned that cases pertaining to Sections 3, 4, and 6 of the BD Act, 2002 are directly handled by National Biodiversity Authority (NBA) Chennai whereas Section 7 of the Act comprising of Access and Benefit Sharing Provisions is looked after by concerned State Biodiversity Boards and Section 21 again engages NBA regarding ABS issues. Section 53 gives power to SBBs to look after benefit sharing provisions.

Next exemptions from ABS under BD Act were discussed. It was told that under Section 5 exemptions are provided for collaborative projects for research purposes and where no commercialization is being done. He also added that Section 7 exempts local practitioners, Vaidas, Hakims, Amchis etc. for accessing the bioresources and using them in fact the Act encourages the Traditional Knowledge associated with bioresources found in a community from generations to be documented and conserved under Peoples Biodiversity Registers (PBRs).

Sh. Ishwar Poojar also discussed and explained about the Prior Informed Consent (PIC) and Mutually Agreed Terms (MAT) procedures. Next he discussed offences and penalties under section 3, 4, 6, 7 and 24 (2) of the Act. Exemption of Certain Biological Resources under the BD Act were discussed and it was told that any items including Biological Resources which are being used as Normally Traded as Commodities are exempted from the Act. Act provides exemption of certain activities from its purview were to local people and community for free access to use bioresources within India, to growers and

cultivators, vaid and hakims (practitioners of traditional medicinal systems) to use bioresources, to biological resources, normally traded as commodities notified by the Central Government under section 40 of the Act, to collaborative research through government-sponsored institutes subject to conformity with guidelines and approval of the Central / State Governments and finally for research done by Indians within geographical boundaries of India are exempted. Guidelines on Access to Biological Resources and Associated Knowledge and Benefits Sharing Regulations, 2014 were discussed next and it was said that . Guidelines on Access to Biological Resources and Associated Knowledge and Benefits Sharing Regulations, 2014 have been notified on 21st November, 2014. The Regulation provides for legal certainty clarity and transparency simplified procedure to the Indian researchers / Govt. institutes to carry out basic research outside India, options of benefit sharing for different users, graded benefit sharing establishing supply chain from source to manufacturer upfront payment on high economic valued bioresources (Red sanders, Sandal etc.) and apportioning accrued benefits to the community/BMC. Benefit Sharing Component comprising commercial utilization, Transfers of results of research and Intellectual property rights were discussed next and it was told that entities commercially utilizing bioresources and earning gross ex-factory sale of upto rupees 1,00,00,000 are liable to share 0.1% of their benefit with the concerned BMC/BMCs, from rupees 1,00,00,000 to 3,00,00,000 the percentage share of benefit increases to 0.3% of their total earning gross ex-factory sale and if the benefit earned is more than 3,00,00,000 then the percentage share of benefit further increases to 0.5% of their total earning from gross ex-factory sale. In case of Transfer of results of research, the benefit sharing obligation is 3.0 to 5.0% of the monetary consideration. In the final section of presentation Benefit Sharing component with alternative option for commercial utilization was discussed and it was noted that Alternative option for commercial utilization where the trader sells the biological resource purchased by him to another trader or manufacturer, if he is a trader – the buyer to pay 1.0 to 3.0% of the purchase price and if he is a manufacturer – the buyer to pay 3.0 to 5.0% of the purchase price. If the buyer submits proof of benefit sharing by the immediate seller in the supply chain, the benefit sharing obligation on the buyer shall be applicable only on that portion of the purchase price for which the benefit has not been shared in the supply chain. It was further added that in cases of biological resources having high economic value such as sandalwood, red sanders, etc. - the benefit sharing may include an upfront payment of not less than 5.0%, on the proceeds of the auction or sale amount, as decided by the NBA or SBB, as the case may be. Finally if the sale is through auction, the successful bidder or the purchaser shall pay the amount to the designated fund, before accessing the biological resource.

Next Sh. Saurabh Sharma, Advocate Hon'ble Supreme Court of India and Legal Initiative for Forest and Environment (LIFE), New Delhi was requested to present his lecture. Sh. Saurabh Sharma started his talk

by showing a video clip from NDTV news channel showing the case where in August 2012, two Czech nationals were arrested “for stealing insects” near the Singalila National Park in Darjeeling. In September, the two Prague-based entomologist Petr Svacha and his colleague Emil Kucera were convicted by a local court under provisions of Biological Diversity Act, 2002. By showing this clip he mentioned how powerful the BD Act, 2002 is how varied the scopes of this particular Act are.

During his talk he mentioned that India promulgated the Biological Diversity Act, 2002 (BD Act, 2002) on 05th February 2003 to operationalize the CBD, 1992. The objectives of the statute are as follows:

- Conservation of Biological Diversity
- Sustainable Use of its components
- Fair and Equitable Sharing of Benefits arising out of the use of biological resources and knowledge associated
- Matters connected and incidental thereto



Sh. Saurabh Sharma next described some important definitions under various sections and provided legal prospective, he stated that in Section 2(b): Biological Resources Means plants, animals, and micro organisms or parts thereof, their genetic material by products (excluding value added products) with actual or potential use or value, but does not include human genetic material, under Section 2 (f):

Commercial Utilization means the end uses of a biological resource for commercial use such as Drugs; Industrial Enzymes; Food Flavours; Fragrance; Cosmetics; Emulsifiers; Oleoresins; Colours; Extracts; and Genes used for improving crops and livestock through genetic intervention. Conventional breeding and traditional practices in use in any agriculture, horticulture, poultry, dairy farming, animal husbandry or bee keeping are not commercial utilization as per Section 2(f) of the Act.

Another important definition he mentioned was Section 2(d): Bio-Survey & Bio-Utilisation which means that the survey or collection for any purpose of species, sub-species, genes, components and extracts of biological resources for any purpose is bio-survey and bio-utilization. This also includes characterisation, inventorization and bio-assay of biological resources and their components.

3-tier Institutional structure was described stating that at apex level is the National Biodiversity Authority (NBA) at State Level is the State Biodiversity Boards (SBB) and at local body level is the Biodiversity Management Committees (BMC). Functions of NBA under section 18 were described which were :

- ✓ Regulate grant of approval to foreign nationals and companies for access to bio-resources and associated knowledge
- ✓ Take measure to oppose the grant of IPR in any country outside India on any bio-resource obtained from India or knowledge associated with such bio-resource which is derived from India.
- ✓ Advise Cent Govt. on conservation, sustainable use and fair and equitable benefit sharing
- ✓ Advise State Govt. in selection of Biodiversity Heritage Sites
- ✓ Any activity necessary to carry out provisions of the Act

Functions of SBBs under Section 23 were described as under:

- ✓ Advise State Govt. on matters relating to conservation, sustainable use and fair and equitable sharing of benefits
- ✓ Regulate by granting approvals or requests for commercial utilization/bio-survey/bio-utilization for commercial utilization
- ✓ Any activity necessary to carry out provisions of the Act

Constitution of the BMC was described next and was said that BMC is to be constituted at the level of every local body within the area of its territorial jurisdiction Section 41 (1) of the BD Act, 2002 which is to be read with Rule 22 (1) of the BD Rules, 2004

Structure of the BMC was elaborated next mentioning that a BMC should comprise of Chairperson and not more than 6 persons nominated by the local body Chairperson to be elected by the BMC members in a meeting chaired by the Chairperson of the local body under Rule 22 (2) and Rule 22 (3) of the BD Rules, 2004

Main Responsibility of BMC was told next which was preparation of a People's Biodiversity Register (PBR) in consultation with local people which contains comprehensive information on availability and knowledge of local biological resources, their medicinal or any other use or any other traditional knowledge associated with them under Rule 22 (6) of the BD Rules, 2004

It was also mentioned that Collection of fees from any person accessing/collecting any biological resources within their territorial jurisdiction of BMC can be done. Mandatory Consultation with the BMC

by NBA & SBB while any decision relating to the use of biological resource within their jurisdiction pertains to Section 41 (3) of the BD Rules, 2004 and Section 41 (2) of the BD Act, 2002

The PBR Process was described next mentioning NBA Guidelines on PBR Preparation 2013 which incorporates 7 steps as under:

1. Formation of Biodiversity Management Committee (BMC)
2. Sensitization of the public about the study, survey and possible management
3. Training of members in identification and collection of data on biological resources and traditional knowledge
4. Collection of data.
5. Analysis and validation of data in consultation with technical support group and BMC
6. Preparation of People's Biodiversity Register (PBR)
7. Computerization of information and resources

Next in his talk Sh. Saurabh Sharma mentioned Regulating Access to Biological Resources & Persons covered. It was stated that Indian citizens, body corporates, associations or organisations which are registered or incorporated in India and not covered under Section 3 obtaining any biological resource Commercial utilization, bio-survey and bio-utilization for commercial utilization are covered under the Act.

For procedural provisions it was mentioned that persons covered under Section 7 shall have to give prior intimation to the concerned SBB, the form for such prior intimation may be prescribed by the State Government to the SBB further this form for prior intimation will be found in the State Rules and finally the SBB has powers to prohibit or restrict any such activity if its is detrimental to the provisions of the Act.

Access to Biological Resources and Associated Knowledge and Benefit Sharing Regulations, 2014 were described next. Benefit Sharing between the Applicant and the SBB says that the share of benefit as paid by the Applicant depends on the level of Annual Gross ex-factory Sales:

- ❖ Up to Rs. 1,00,00,000: 0.1%
- ❖ Between Rs. 1,00,00,000 and Rs. 3,00,00,000: 0.2%
- ❖ Above Rs. 3,00,00,000: 0.5%

Benefit Sharing between the SBB and BMCs

Share of the SBB: Maximum 5% of the benefits accrued towards their administrative charges

Share of the BMCs or benefit claimer where identified: Minimum 95% of the accrued to benefits

In case BMC/benefit claimer not identified: Funds to be used to support conservation & sustainable use of biological resources & support local livelihoods of the local people where bio-resources are accessed.

Penalties pertaining to the violation of BD Act, 2002 were described next and was stated that: Provisions of Section 55 (1) states that: Whoever contravenes or attempts to contravene or abets contravention the provisions of Section 3 or Section 4 or Section 6 shall be punishable with imprisonment for a term which may extend to 5 years or with fine which may extend to 10 lakhs rupees such fine may commensurate with damage caused, or with both. In addition whoever contravenes or attempts to contravene or abets contravention of the provisions of Section 7 or any order made under sub Section (2) of Section 24 shall be punishable with imprisonment for a term which may extend to 3 years, or with fine which may extend to five lakh rupees, or with both.

Appeals under Section 52 A were explained mentioning that:

- ❖ Any person aggrieved by a determination of benefit sharing or an order of the National Biodiversity Authority or a State Biodiversity Board under the Biological Diversity Act, 2002 may appeal before the National Green Tribunal, established under the National green Tribunal, 2010.
- ❖ All appeals to NGT shall be made as per provisions of the National Green Tribunal Act, 2010.

It was also stated that the notifications can be carried out by NBA regarding officers authorized to file Complaints under Section 61 (a). it was also mentioned that no court shall take cognizance of any offense under this Act except on a complaint made by-The Central Government or any authority or officer authorized in this behalf by that Government; or any benefit claimer who has given notice of not less than 30 days in the prescribed manner, of such offense and of his intention to make a complaint, to the Central Government or the authority or officer authorized as aforesaid.

Threaten Species (TS) Section 38 was also covered and it was said that Section 38: The Central Government in consultation with the State Government, may from time to time notify any species which is on the verge of extinction or likely to become extinct in the near future as a threatened species and prohibit or regulate collection thereof for any purpose and take appropriate steps to rehabilitate and preserve these species

In the final part of his presentation Sh. Saurabh Sharma gave examples of cases and writ petitions files under BD Act, 2002. He started with the classic example of The Czech Nationals Case

Facts of the Case:

- ✓ In July 2008, two Czech nationals Petr Svacha and Emil Kucera arrested for collection of beetles and butterflies from the Singalila National Park, West Bengal
- ✓ In possession of more than 1500 specimens of butterflies and beetles, including the endangered *Delisa sanaca* at the time arrest.
- ✓ Violation of the Law:
- ✓ The Wildlife (Protection) Act, 1972: Sections 27, 28, & 29
- ✓ The Biological Diversity Act, 2002: Sections 3 read with Section 19
- ✓ Verdict in the Case:
- ✓ Petr Svacha was given a fine of Rs. 20,000
- ✓ Emil Kucera, was sentenced to 3 years imprisonment by the Chief Judicial Magistrate of Darjeeling & fine of Rs. 50, 000

Another case of BMC Keoti Matter O.A. No. 06/2014 (CZ) was discussed and the facts of the case are as under:

- ✓ The BMC of Keoti Gram Panchayat, Rewa district had filed a case in the NGT, Central Bench making the following prayers:
- ✓ Declaration of Keoti Gram as a Biodiversity Heritage Site (BHS) u/s 37 of the BD Act, 2002 due to
- ✓ Ecological Fragility of the area, presence of dense forest, water fall and diversity of medicinal plants.
- ✓ Ecological value at stake: Illegal mining & construction in the name of 'tourism' – Environmental damage to Keoti Village Forests due to construction of Biodiversity Parks by State Govt.
- ✓ Immediate Stoppage of Construction activity and demolish construction already carried out .
- ✓ Notification of Species of Samavalli/Somlata, Morshikha and Patthar Chattha as Threatened Species (TS) u/s 38 of the BD Act, 2002: Payment of fees from those accessing/collecting biological resources from the Keoti Gram Panchayat u/s 41 (3) of the BD Act, 2002

Tribunal's Observations in this particular case was that there are no guidelines framed by the State Govt. for identification and declaration of areas as Biodiversity Heritage Site (BHS) and the manner in which the BMC can levy the charges by way of collection fees and how the funds are to be utilized for benefit sharing. Hence Tribunal's Directions were that given the absence of Guidelines, the Tribunal had

reiterated its earlier directions that no mining of any sort, construction or alteration of habitat in any manner will be allowed in the area and the State to ensure the compliance of this direction strictly.

The State Government to devise comprehensive strategies to identify biodiversity rich sites and to protect and conserve such sites.

Next case discussed was of *M/s Som Distilleries Pvt. Ltd. Vs. M.P. State Bio Diversity Board & Ors.* (O.A. 62/2013, CZ). It was told that Madhya Pradesh State Biodiversity Board (MP SBB) in March-April 2013 had written to the NBA to issue uniform ABS guidelines to be used by the SBBs to regulate the collection of biological resources by Indian companies; thereby ensuring that companies pay benefit sharing to the SBB as well as BMC. However, with no clear response from the NBA, the Board issued notices to all companies using biological resource from their jurisdiction: Herbal Industries; Forest /Minor



Forest Produce based industries; Sugar Mills, Distilleries, All Food Processing Industries, Soya Industries, Spinning/Gining/Textile Mills, Other Agro and Bio based Industries, Coal Mining Industries (Government. Semi Government and Private) and Industries using Coal Bio-resource (e.g. Cement and Steel Industries). The MP SBB had also written to the Forest Development Corporation, Minor

Forest Produce Federation and Fisheries Department in the same regard. The notices highlighted that said company's extraction of raw material counts as "obtaining 'biological resources' for 'commercial utilization' as defined under the Act and thereby as per Section 7 read with Section 24 (1) requires the company to intimate the MP SBB through FORM 1 as prescribed in the MP Biological Diversity Rules, 2004 and pay Rs. 1000 as fees. Most importantly, in each of the notice it had asked to deposit 2% of their gross sales or gross revenue on financial year basis towards benefit-sharing in the Biodiversity Fund of the state. Given the absence of prescribed guidelines, the Board had used the similar formula as adopted by NBA in of the agreements signed by it in 2009.

Given the issuance of notices by the MP SBB, 13 companies filed a case challenging the said notices issued by MP SBB in the NGT, Central Zone. Given that the major ground of contention was that the SBB had issued the notices without the ABS Guidelines being issues by the Central Government/NBA, the Tribunal had thereby directed the MOEF&CC and NBA to lay down standardised guidelines for ABS. Given the order of the Tribunal, the Guidelines on Access to Biological Resources and Associated Knowledge and Benefits Sharing Regulations, 2014 came into force on 21.11.2014

The decision held was that given the Guidelines dated 21.11.2014 framed by the MOEF&CC and NBA, the Tribunal vide its final order dated 17.12.2014 had set aside the earlier notices issued by the MP SBB and gave them the liberty to determine the case of each individual Applicant/Appellant afresh after taking into account the scheme of the Act, Rules as well as Regulations issued by the National Bio Diversity Authority under Section 64 of the Act of 2002.

The most interesting of all cases was the case by Eklahara BMC mentioning that coal is a 'bio-resource. Details of the case were: - Case by Eklahara BMC (O.A. No. 28/2013 (CZ) & O.A. No. 17/2014 (CZ) Coal is governed by MMDR Act, 1957 (Is coal a Bioresource). Given the arguments made by the BMC, the coal companies submitted that coal is governed by the provisions of Mines and Mineral (Development & Regulation) Act 1957 (MMDR Act 1957), which gives the Central government the sole statutory power to make rules regarding coal and levy charges. Given the above, the state government and its authorities have no competence and jurisdiction to levy any charges; such that, the state government can only levy royalty on the grant of mining lease and not in any other form. Given the provisions of MMDR Act 1957, categorisation of coal as a biological resource, would lead to a contradiction between the two statutes.

Coal is not a biological resource:

Given the primary contention of BMC that coal contains plant genetic material; the coal companies submitted that given the meaning of genetic material under Convention of Biological Diversity. i.e. "material of plant, animal, microbial or other origin containing functional unity of heredity"; the half-life of DNA (functional unit of heredity) is 521 years under ideal conditions (dried state, vacuum packed and frozen at about -80 C) and that coal traces its origin to 63-300 million years and its formation under conditions of under high temperature and pressure led to its conversion into a fossil and thereby has no plant genetic material present in them.

Arguments made by MOEF and NBA:

MOEF further presented opinions from Secretariat of Convention on Biological Diversity, Geological Survey of India and Zoological Survey of India to highlight that coal is not a biological resource.

The CBD has stated that biological resources as defined in the CBD deals with living organisms and that coal by no means is one. GSI stated that given the process of formation of coal, it is a geological resource rather than a bio-resource. The ZSI has reiterated the statement made by the CBD that in context of coal being a bio-resource, though the definition of biological resources is not exhaustive, the CBD and BD Act define bio-resources in terms of living resources and not of biological materials of dead or fossilised in nature. Further, it is stated by the ZSI that though Nagoya Protocol emphasizes fair and equitable sharing of benefits arising out of utilisation of genetic resources and that coal has a biological origin, it is devoid

of any heritable genetic material, metabolic reactions and genetic expressions. Therefore, Coal doesn't fall under access and benefit sharing.

The contention made by the Applicant BMC and MP SBB that Coverage of coal under MMDR Act 1957 does not take away the right of the BMC to claim their right under BD Act 2002.

The Tribunal had concluded that:

Coal although indisputably of plant origin, does not in a fossilised form, after millions of years being buried under the earth, retain any genetic characteristics which can be linked to the plants, or to the vegetation from which the coal was originally formed. There is no scientific study to date which suggests that coal has a genetic structure and that it is similar to that of plants. It is a fossilized form though some of the chemicals like carbon are similar to those present in plants and that alone is not enough to suggest that coal by any stretch of imagination is biological in its character and configuration on the ground. That coal does not have any genetic structure and, therefore, is neither a genetic material nor a genetic resource and accordingly does not qualify to be called a biological resource, therefore, given that Coal is not a biological resources, the Coal companies are not liable to pay any fees for accessing or collecting coal from the area falling within the territorial jurisdiction of the BMC.



Dr. Murari Lal Thakur from State Biodiversity Board gave presentation on Access and Benefit Sharing (ABS) mechanism and its relevance in Himachal Pradesh. Conception and enactment of the Biological Diversity Act, 2002 was initially discussed. CBD its objective and objectives of the BD Act, 2002 were informed to the participants. Nagoya Protocol on ABS was discussed which is based on the fundamental

principles of prior informed consent (PIC), Mutually agreed terms (MAT), official checkpoint. Benefit-sharing obligations were discussed which were:

- Domestic-level benefit-sharing measures will provide for the fair and equitable sharing of benefits arising from the utilization of genetic resources, as well as subsequent applications and commercialization, with the contracting Party providing genetic resources.
- Utilization includes research and development on the genetic or biochemical composition of genetic resources.
- Sharing is subject to mutually agreed terms.
- Benefits may be monetary or non-monetary such as royalties and the sharing of research results

Traditional knowledge associated with genetic resources with provisions on access, benefit sharing and compliance were also discussed. Next in the presentation information on ABS provisions under BD Act, 2002 were discussed. Afterwards Benefit Sharing Options and Economic Importance of Bioresources present in the State of Himachal Pradesh were informed to the participants. A brief information regarding Bio-resource based industries and their global market share was discussed. Next determination of benefit sharing, PIC & MAT options, certain activities or persons exempted from approval of NBA or SBB, Fair and equitable benefit sharing options and non-monetary benefits of ABS provisions were discussed. in the final part of presentation some examples of ABS from India were discussed.

Glimpses of the Event











सत्यमेव जयते



जहाँ है हरियाली ।
वहाँ है खुशहाली ॥



H.P. State Biodiversity Board
UNEP-GEF MoEFCC ABS Project

PROCEEDINGS ON:

*“One day Training workshop on Biological Diversity Act, 2002,
and its Access and Benefit Sharing Provisions”*

11th July, 2017
At: FTI, Sundernagar, Mandi H.P.

Himachal Pradesh State Biodiversity Board (HPSBB) in coordination with the National Biodiversity Authority (NBA), Chennai is implementing a project, sponsored by UNEP/GEF MoEFCC (GoI) on “Strengthening the implementation of Biological Diversity Act, 2002 with focus on its Access and Benefit Sharing (ABS) provisions” under the Act. The Ministry of Environment & Forests is primarily concerned with planning, promotion, coordination and overseeing the implementation of the various environmental and forestry policies and programmes. The Ministry also serves as the nodal agency in the country for the United Nations Environment Programme (UNEP) and is also entrusted with the issues relating to multilateral bodies such as the Commission on Sustainable Development (CSD) and Global Environment Facility (GEF) on matters pertaining to Environment. Out of the many mandates and objectives of the Ministry, Conservation and Protection of environment, assistance to organizations implementing environmental and forestry programmes, promotion of environmental and forestry research, extension, education and training and creation of environmental awareness among all sectors of the country’s population, are in relation with Biological Diversity Act 2002, which is being implemented in various States of the Country.

The need to spread Biodiversity awareness is enormous in the context of successfully addressing Biodiversity Conservation problems, Biological Diversity Act 2002 and rules 2004 address the same. It is also linked to biodiversity education for conservation so as to sustainably use and protect valuable bioresources. On the one hand, awareness on Biological Diversity Act, 2002 creates greater awareness in individuals and communities with respect to putting environmental resources to use even while conserving them. On the other hand, greater the awareness increases especially within the line departments of the government, the scope of sustainable use and conservation practices for protecting our valuable biodiversity also increases. In order to conserve and sustain biodiversity of the State and to implement programmes and strategies related with biodiversity conservation at the state and national level it was realized that the line departments of the state should be made aware about the provisions, scopes and role of Biological Diversity Act, 2002 and also highlighting responsibilities and duties of the associated Line departments in implementation of Biological Diversity Act, 2002. Protecting biodiversity on the sustainable principle has been a strategic approach in worldwide conservation plans and management as a result it was decided by HP State Biodiversity Board to make line departments aware about the role and scope of Biological Diversity Act, 2002. In this connection a training workshop for officials of HP Forest Department was organized at Forest Training Institute, Sundernagar, Mandi on 11th July, 2017, under supervision of Sh. Kunal Satyarthi, Joint Member Secretary, Himachal Pradesh State Biodiversity Board.



Sh. H.S. Dogra (APCCF, R&T) was the Chief Guest and participatory officials in the “One day Training workshop for Forest Officials on Biological Diversity Act, 2002, and its Access and Benefit Sharing Provisions” included Divisional Forest Officers (DFOs), Assistant Conservator Forests (ACFs) and Range Forest Officers (ROs) from Kullu circle, Mandi circle, Bilaspur circle and Wildlife Circle Great Himalayan National Park (GHNP). Scientists and Officials from Himachal Pradesh State Biodiversity Board (HPSBB) were also present during this one day workshop.



Sh. Kunal Satyarthi, Joint Member Secretary, HP State Biodiversity Board delegated and started his presentation informing and by imparting knowledge related to Biological Diversity Act, 2002, and its Access and Benefit Sharing Provisions to all participants from Divisional Forest Officers (DFOs), Assistant Conservator Forests (ACFs) and Range Forest Officers (ROs) from Kullu circle, Mandi circle, Bilaspur circle and Wildlife Circle Great Himalayan National Park (GHNP). During the informative presentation cum lecture, Sh. Kunal Satyarthi interactively presented many cases related to BD Act by showing news clipping from Times of India newspaper in which it was mentioned that in August 2012, two Czech nationals were arrested “for stealing insects” near the Singalila National Park in Darjeeling. In September, the two Prague-based entomologist Petr Svacha and his colleague Emil Kucera were convicted by a local court under provisions of Biological Diversity Act, 2002. Next in his presentation he showed some pictures of different varieties of brinjal, rajmah (pulse) and rice that was once found in the State and showed his concern that today out of many varieties found once now only very few are available, which shows the loss that biodiversity of the State has faced.



During the informative presentation cum lecture, Sh. Kunal Satyarthi interactively presented many cases related to BD Act by showing news clipping from Times of India newspaper in which it was mentioned that in August 2012, two Czech nationals were arrested “for stealing insects” near the Singalila National Park in Darjeeling. In September, the two Prague-based entomologist Petr Svacha and his colleague Emil Kucera were convicted by a local court under provisions of Biological Diversity Act, 2002. Next in his presentation he showed some pictures of different varieties of brinjal, rajmah (pulse) and rice that was once found in the State and showed his concern that today out of many varieties found once now only very few are available, which shows the loss that biodiversity of the State has faced.



Brinjal varieties



Rajmah Varieties



Rice Varieties

By giving these examples he explained that biodiversity is not just associated with medicinal plants and herbs found in wild but it covers everything except Normally Traded Commodities (NTC's) and other

agriculture produce till the time some value addition is done e.g. cultivation of apple is not applicable under BD Act, 2002 but if someone or some industry or firm is engaged in value addition by making some commercial product like jam or wine from apple then they do come under BD Act, 2002. By giving these examples Sh. Kunal Satyarthi showed the scope, provision and power of Biological Diversity Act, 2002 and these examples also acted as the foundation of the whole presentation for better understanding of the topic for HP Forest Officials.

Next he briefed about the status of global biodiversity and also told about the alarming rate (150 varieties of different species being lost every day) at which biodiversity is being wiped off from the face of earth.

Next he brought everybody's focus on Biological Diversity Act, 2002 and its provision. Next he briefed about the inception of the BD Act how it came into force he mentioned that in 1987, the World



Commission on Environment and Development enunciated the principle of “sustainable development” in its landmark report titled “Our Common Future” in which it observed that “humanity has the ability to make development sustainable to ensure that it meets the needs of the present generation without compromising the ability of the future generations to meet

their own needs”. “Sustainable development” became the theme of the United Nations Conference on Environment and Development (UNCED), held at Rio de Janeiro in June 1992. In November 1990, the United Nations Environment Programme (UNEP) began the first of seven negotiating sessions whose objective was to produce an international treaty on the conservation of biological diversity. The CBD was presented at the Earth Summit in Rio de Janeiro in June 1992, where it was signed by 153 nations including India. The CBD came into force from the 29th of December 1993.

The objectives of the Act were described next by Sh. Kunal Satyarthi which were:

1. Conservation of Biological diversity
2. Sustainable use of its components
3. Fair and equitable sharing of the benefits arising out of utilization of biological resources.

He told that the Biological Diversity Act of 2002, and the Biological Diversity Rules, 2004 are implemented by National Biodiversity Authority (NBA) at the national level, State Biological Board (SBB) at state level and Biodiversity Management Committees (BMC's) at local levels. To assist NBA at centre and to advise them on matters exclusive and of particular interest to the biodiversity of the State, similar Boards have been established in States under Section 22 of the said Act. The powers and functions

of the State Biodiversity Boards have been listed down in Section 24 and Section 23 of the Act. Some of the major functions of these authorities were discussed which are as follows:

- To regulate activities of, approve and advise the Government of India on matters relating to the conservation of biodiversity, sustainable use of its components and equitable sharing of benefits.
- To grant approval under Sections 3,4 and 6 of Biodiversity Act,2002
- To notify areas of biodiversity importance as biodiversity heritage sites under this act and perform other functions as may be necessary to carry out the provisions of the Act.
- To take measures to protect biodiversity of the country as well as to oppose the grant of intellectual property rights to any country outside or any biological resources obtained from India.

It was told that the National Biodiversity authority (NBA) deals with the requests for access to the biological resources as well as transfer of information of traditional knowledge to foreign nationals, institutions and companies. Through this way piracy of Intellectual Property Rights in and around India is prevented and it also saves the indigenous people from exploitation. Next Sh. Kunal Satyarthi explained everyone about the role and functions of Himachal Pradesh State Biodiversity Board (HPSBB). He said that HPSBB was constituted in the year 2006 and its administrative body consists of a Chairman, 5 ex-officio members, 5 expert members and secretarial staff. Next role and functions of Biodiversity Management Committee (BMC) was discussed. He described the role of BMC's which is also to conserve Biological diversity, ensure sustainable use of its components and lastly there should be fair and equitable sharing of the benefits arising out of utilization of biological resources. In the following presentation he went on describing about need and importance of Peoples Biodiversity Register (PBR); which are legal documents and database on biodiversity of any given area and he also described about Local Biodiversity Funds (LBFs). He described how PBRs as a legal document could play an important role in maintaining records on biodiversity related to a specific area and he also mentioned how LBFs would help in motivating and channelizing the whole process of making of PBRs. Next Biodiversity Heritage Site provision under the Biological Diversity Act, 2002, was discussed and how this would be able to help locals conserve their heritage site which they already have been doing from generations (Sacred Grooves) or they were not able to because of lack of initiative or incentive. Certain exemptions under Biological Diversity Act, 2002 and normally Traded Commodities (NTCs) were also discussed and explained.

Penalties related to breach to Biological Diversity Act, 2002, were discussed next and it was stated that: Firstly whoever contravenes or attempts to contravene or abets the contravention of the provisions of section 3 or section 4 or section 6 shall be punishable with imprisonment for a term which may extend to five years, or with fine which may extend to ten lakhs rupees and where the damage caused exceeds ten lakhs rupees such fine may commensurate with the damage caused, or with both. And secondly whoever

contravenes or attempts to contravene or abets the contravention of the provisions of section 7 or any order made under sub-section (2) of section 24 shall be punishable with imprisonment for a term which may extend to three years, or with fine which may extend to five lakhs rupees, or with both. In addition it was told that the offences under this Act shall be cognizable and non-bailable. This clause stipulates that the Central Government may give directions to the State Governments for execution any of the provisions of this Act. In the last part of presentation questions were taken up by Sh. Kunal Satyarthi which were asked by Forest officials. During this discussion cognizance of offence was elaborately discussed and forest officials were made aware about their powers to make an arrest without a warrant and to start an investigation with or without the permission of a court under certain provision and section of Indian Forest Act, 1927.

Dr. Murari Lal Thakur from State Biodiversity Board gave presentation on Access and Benefit Sharing (ABS) mechanism and its relevance in Himachal Pradesh. Conception and enactment of the Biological



Diversity Act, 2002 was initially discussed. CBD its objective and objectives of the BD Act, 2002 were informed to the participants. Nagoya Protocol on ABS was discussed which is based on the fundamental principles of prior informed

consent (PIC), Mutually agreed terms (MAT), official checkpoint. Benefit-sharing obligations were discussed which were:

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- Utilization includes research and development on the genetic or biochemical composition of genetic resources.
- Sharing is subject to mutually agreed terms.
- Benefits may be monetary or non-monetary such as royalties and the sharing of research results

Traditional knowledge associated with genetic resources with provisions on access, benefit sharing and compliance were also discussed. Next in the presentation information on ABS provisions under BD Act,

2002 were discussed. Afterwards Benefit Sharing Options and Economic Importance of Bioresources present in the State of Himachal Pradesh were informed to the participants. A brief information regarding Bio-resource based industries and their global market share was discussed. Next determination of benefit sharing, PIC & MAT options, certain activities or persons exempted from approval of NBA or SBB, Fair and equitable benefit sharing options and non-monetary benefits of ABS provisions were discussed. In the final part of presentation some examples of ABS from India were discussed.

Dr. Pankaj Sharma from State Biodiversity Board presented his presentation on Biodiversity Management Committees (BMCs), its role and responsibilities in implementation of Biological Diversity Act, 2002 in Himachal Pradesh. In his presentation Constitution of Biodiversity Management Committees was discussed first and it was told that The Biodiversity Management Committee is constituted as per the Sub-rule (1) and it shall consist of Chairperson and not more than 6 persons nominated by the Local Self Government, of whom not less than one third should be women and not less than 18% should belong to the Scheduled Caste/Scheduled Tribes. Time period for Operationalization, Office of the BMC and Tenure of BMCs were discussed. Mandate of BMC's were discussed followed by role, duties and functions of the BMCs.

Lastly Dr. Dinesh Gupta from State Biodiversity Board gave his very interactive presentation on People's Biodiversity Registers (PBRs). He started his presentation by telling everyone about the need and scope of PBRs followed by examples of many valuable bio-resources specific to the state of Himachal Pradesh. He also provided information on documentation and conservation of Traditional Knowledge associated with these bioresources, he also signified the importance of preparing a document such as PBR. Next he gave example of Turmeric and how India had to fight for its patent on global arena. Next Dr. Dinesh elaborated on the main functions of the BMC in order to prepare People's Biodiversity Registers in consultation with local people and it was also told that the Peoples Biodiversity Register shall 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. In the final segment of his presentation he gave general description on the 32 different formats of PBR and it was told that it is a mandate of BMC to maintain and validate PBR.

Glimpses of Event:







सत्यमेव जयते



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वहाँ है खुशहाली ॥



‘State level interactive workshop for Media on Biological Diversity Act, 2002’



5/11/2017
HP State Biodiversity Board
UNEP/GEF MoEFCC –ABS Project

'State level interactive workshop for media on Biological Diversity Act, 2002':

Biological Diversity Act, 2002 and documentation of People Biodiversity Register (PBR) aims to give the Access & Benefit control over biological resources to the local bodies. For implementation of Biological Diversity Act, 2002, it is recognized that media will play a very crucial role. Media is extremely relevant to the society in contemporary times. The outreach of both print and electronic media has grown manifold in the last two decades. Time and again media has played a very vital role in strengthening the society and hence acts as mirror of the modern society. Media has lot of influence on society as it helps citizens by informing about the latest issues, information and knowledge and keeps everyone updated within and beyond geographical boundaries. Keeping in view the critical role played by media (both print & electronic), in providing information and conservation of biological resources and environment, Himachal Pradesh State Biodiversity Board (HPSBB), organised a half day 'State level interactive workshop for



media on Biological Diversity Act, 2002' on 11th May, 2017 at Hotel Holiday Home, Shimla from 10:00 am to 2:30 pm. Sh. Tarun Kapoor, worthy Additional Chief Secretary (Env., Science & Technology), Govt. of H.P. graced the occasion as Chief Guest. The meeting was attended by Joint Director, Information and Public Relation Department, Smt. Archana Sharma, Director Department of Environment, Science and Technology, Sh. Kunal Satyarthi, Joint Member

Secretary, Smt. Geeta Thakur, Public Relation Officer, and Senior Scientists of HP State Biodiversity Board. Participants from various newspapers include: The Tribune, Indian Express, Times of India, The Statesman, The Hindu, The Pioneer, Dainik Jagran, Jansatta, Punjab Kesari, Amar Ujala, Dainik Bhaskar, Divya Himachal, Satya Swadesh, Daily Hindi Milap, Uttam Hindu, Himachal Times, Naya India, Apka Faisla, Viksit Bharat Samachar, Ajit Samachar, Naya Lok Yug, Hindustan Samachar, Desh Sewak, Jagwani, Himachal Dastak, Hindustan (Hindi), Himachal Sewa, Vir Pratap, Yugmarg, Dainik Savera Times, Hindu Janpath, Dainik Nyaya Setu, Aaj Samaj, Daily Post, PTI News Agency, AFP News Agency, IANS News Agency, UNI News Agency, UNN News Agency and EPA/DPA German Press Agency. Participants from various Electronic Media include: Doordarshan Shimla, All India Radio Shimla, ETV News Himachal, ANI News Agency, Zee Punjab Haryana Himachal, NDTV, TV100, MH One News 24, News World India and Live India. In addition participants also include editors of weeklies like: Himalaya Times, Vir Anand, Himachal Ki Pukaar, Him Kisaan, Shail Weekly, Monal Times, Gram Parivesh, Shoolini Samachar, Hills Guardian, Himalaya Surya, Himalaya Janta, Himalayan Dawn and Jan Kiran.

Proceedings of the Event:



Sh. Tarun Kapoor, worthy Additional Chief Secretary (Env. Science & Technology), Govt. of H.P. graced the occasion as Chief Guest and was welcomed by Sh. Kunal Satyarthi, Joint Member Secretary, HP State Biodiversity Board. Sh Kunal Satyarthi also welcomed all the dignitaries who were present on the event namely: Joint Director, Information and Public Relation Department, Smt. Archarna Sharma, Director Department of Environment, Science and Technology and Senior Scientists of HP State Biodiversity Board and participants from both electronic and printed media.



Sh. Kunal Satyarthi was requested next for welcome address and to brief up about the half day 'State level interactive workshop for media on Biological Diversity Act, 2002'. Sh. Kunal Satyarthi in his speech addressed all the participants from both print and electronic media and told them about the purpose of the workshop. He mentioned that this workshop was being organized with an aim to sensitize all the media personnel's about the provisions of Biological Diversity Act, 2002. He also mentioned about the critical role of media, that it can play, in providing information and knowledge to sensitize public about the provisions of Biological Diversity Act, 2002. He also laid stress on the importance of such



workshops which could not only provide media with better understanding of the related agendas but also bridges the gap between media and Government Administration. He said that after realizing the importance of media and keeping in view the critical role played by media (both print & electronic), in providing information that influences public opinion leading to social change which includes; conservation of biological resources and environment, it was decided to organize a workshop specifically aiming media personals for better implementation of Biological Diversity Act, 2002, in the State of Himachal Pradesh. Sh. Kunal Satyarthi also provided information about role and activities of the State Council for Science, Technology and Environment (SCST&E), Shimla. He stated that SCST&E was established on 16th December, 1985 which is an independent and autonomous body, registered under Societies Registration Act, has its own executive committee and has its own governing

council. He later on provided information about the four main mandates of SCST&E: First mandate is to advice State Government on topics related to Science and Techonlogy. Second mandate is related to demonstration and implementation of any technology developed, which could be beneficial and used in the State of Himachal Pradesh. Third mandate of SCST&E is Pooling and Exchange of Scientific Knowledge involving science education popularization. Fourth mandate is Research & Development (R&D). Next he gave information on activities under 14 wings of SCST&E namely: HP State Biodiversity Board (HPSBB) established in 2006, State Centre on Climate Change (CCC) established in 2012, State Remote Sensing Cell (RSC) established in 1988, Aryabhata Geo-informatics and Space Application Centre (AGISAC) established in 2011, Patent Information Centre (PIC) + GI's established in 1998, Environmental Information System (ENVIS) established in 2005, National Green Corps (NGC) + National Environmental Awareness Campaign (NEAC), Science popularization (CSC); Edusat; Popular lecture series; Science teachers training, Capacity building & Trainings (S&T skills), Research grants & Travel grants (RG & TG), Appropriate Technology Centre (ATC) established in 1995, Wetlands: Nodal office, Disaster preparedness and collaborations with IHBT, CBRI, HFRI, SASE NIH, IIT etc.

Next Smt. Archana Sharma, Director Department of Environment, Science and Technology was requested for special address. In her address she elaborated on the role of media and how media (both



print and electronic) can help in proper implementation of Biological Diversity Act, 2002 in the State of Himachal Pradesh. She stressed out on the well being of rural communities and livelihood options that may arise because of Access and Benefit Sharing provisions and through conservation of valuable bioresources. She also told that by conserving bioresources/biodiversity the options for earning and making rural population economically sound are many and the aim to achieve

such sound rural economic status is possible by implementing Biological Diversity Act, 2002 and Rules, 2004 and ABS provisions. She addressed the threats that are associated with the unsustainable use of valuable bioresources and pointed how sustainable use could bring a better future for generations to come. In the end she stated that information about all the provisions under the Biological Act, 2002 should reach to general public for which media has to play a crucial role.

Smt. Geeta Thakur, Public Relation Officer, was requested next to address the audience. In her speech she



emphasized on the role of Media (both print and electronic). She said that in the modern time it is not only the responsibility of concerned departments of State Government but is a responsibility of all to help conserve the valuable biodiversity of the State. With an increase in the population the limited resources and their sustainable use are very critical area for discussion and hence for future generations to live prosperously it is very important to aware everyone about the sustainable use of our bioresources. In

the end she pointed on how media can help the concerned State Government Departments, who are engaged in conservation activities, to help update and educate public about the benefits and need of conservation of our valuable biodiversity and its resources.

Next Sh. Tarun Kapoor worthy Additional Chief Secretary (Env. Science & Technology), Govt. of H.P. was requested for special address. In his speech he pointed out on the importance of Biodiversity and why



there is a need for its conservation. He said that in the state of H.P. 90% of population resides in the rural area and are well connected to their nature and environment but because of depleting knowledge on local plants and vegetables and also because of unsustainable use of our bioresources, biodiversity of the state is facing a threat today. It was told that according to recorded figures approximately 2500 metric tons of Non Timber Forest Produce is being extracted from the state every year and economic value of these bio-resources is in thousands of crores

of India rupees. He also mentioned that evaluation or calculation of the whole trade chain pattern from source to end user of bioresources is very difficult process but is also a need of hour. He stated that according to an estimate approximately 10,000 crore of Indian rupee worth of bioresources (horticulture, agriculture and forest) is being extracted annually from the State. He laid stressed on preservation, conservation and propagation of commercially important bioresources. He said the economy of the State of Himachal Pradesh could be changed just by conserving, preserving, propagating bioresources and also by channelizing the trade of our valuable bioresources of the State. In the end he said that to achieve this aim and to make our State economically sound, Himachal Pradesh State Biodiversity Board has a vital role to play and for this reason there should be a proper implementation of Biological Diversity Act, 2002 and everyone should be made aware about the provisions of the act.

Soon after the special address of chief guest of the event by Sh. Tarun Kapoor worthy Additional Chief Secretary (Env. Science & Technology), Govt. of H.P. tea break was announced and after the break sensitization of media persons was carried forward.

Sh. Kunal Satyarthi, Joint Member Secretary, HP State Biodiversity Board was requested next after the tea break for his presentation and to sensitize media about relevance and scope of Biological Diversity



Act, 2002. Sh. Kunal Satyarthi started his interactive presentation by showing an article published in a newspaper: Times of India on 7th September 2016 in which Baba Ramdev's firm Patanjali pledges to give 12 crore rupees to Uttarakhand Biodiversity Board for the bioresources they acquire from Uttarakhand for production of their products. He gave example of neighboring State of Uttarakhand stating that they have given notice to around 600 companies to comply with Biological

Diversity Act, 2002 and share their benefits with the State Biodiversity Board and in return State Biodiversity Board will share 95% benefit with the local Biodiversity Committee from where the bioresource has initially been procured. Next he showed another news clipping from Times of India newspaper in which it was shown that in August 2012, two Czech nationals were arrested "for stealing insects" near the Singalila National Park in Darjeeling. In September, the two Prague-based entomologist Petr Svacha and his colleague Emil Kucera were convicted by a local court under provisions of Biological Diversity Act, 2002. By giving these examples Sh. Kunal Satyarthi showed the scope, provision and power of Biological Diversity Act, 2002 and these examples also acted as the foundation of the whole presentation for better understanding of the topic for media personnel.

Next in his presentation he showed some pictures of different varieties of brinjal, rajmah (pulse) and rice that was once found in the State and showed his concern that today out of many varieties found once now only very few are available, which shows the loss that biodiversity of the State has faced.



Brinjal varieties



Rajmah Varieties



Rice Varieties

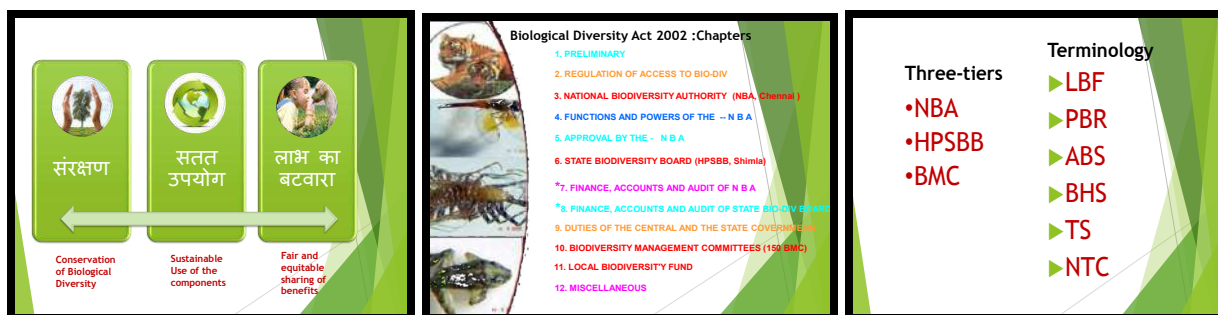
By giving these examples he explained that biodiversity is not just associated with medicinal plants and herbs found in wild but it covers everything except Normally Traded Commodities (NTC's) and other agriculture produce till the time some value addition is done e.g. cultivation of apple is not applicable under BD Act, 2002 but if someone or some industry or firm is engaged in value addition by making some commercial product like jam or wine from apple then they do come under BD Act, 2002. Next he briefed about the status of global biodiversity and also told about the alarming rate (150 varieties of different species being lost every day) at which biodiversity is being wiped off from the face of earth. Next he brought everybody's focus on Biological Diversity Act, 2002 and its provision. He briefed about how and why Biological Diversity Act was conceived he told that the international community's concern about the unprecedented loss of biodiversity emerged at the United Nations Conference on the Human Environment held in Stockholm in 1972.

In 1987, the World Commission on Environment and Development enunciated the principle of "sustainable development" in its landmark report titled "Our Common Future" in which it observed that "humanity has the ability to make development sustainable to ensure that it meets the needs of the present generation without compromising the ability of the future generations to meet their own needs".

"Sustainable development" became the theme of the United Nations Conference on Environment and Development (UNCED), held at Rio de Janeiro in June 1992. In November 1990, the United Nations Environment Programme (UNEP) began the first of seven negotiating sessions whose objective was to produce an international treaty on the conservation of biological diversity. The CBD was presented at the Earth Summit in Rio de Janeiro in June 1992, where it was signed by 153 nations including India. The CBD came into force from the 29th of December 1993.

Biological diversity Act, 2002 came into existence much later than the other existing laws on environment such as the Indian Forest Act, 1927, Wildlife Protection Act, 1972, Environment Protection Act, 1986 etc. Government of India in 2002 decided to release its own draft on National Biodiversity Plan. The Act of 2002, based on this plan was passed by the Lok Sabha on 2nd December, 2002 and Rajya Sabha on 11th December, 2002. The objectives of the Act were described next by Sh. Kunal Satyarthi which were:

1. Conservation of Biological diversity
2. Sustainable use of its components
3. Fair and equitable sharing of the benefits arising out of utilization of biological resources.



He told that the Biological Diversity Act of 2002, and the Biological Diversity Rules, 2004 are implemented by National Biodiversity Authority (NBA) at the national level, State Biological Board (SBB) at state level and Biodiversity Management Committees (BMC's) at local levels. To assist NBA at centre and to advise them on matters exclusive and of particular interest to the biodiversity of the State, similar Boards have been established in States under Section 22 of the said Act. The powers and functions of the State Biodiversity Boards have been listed down in Section 24 and Section 23 of the Act. Some of the major functions of these authorities were discussed which are as follows:

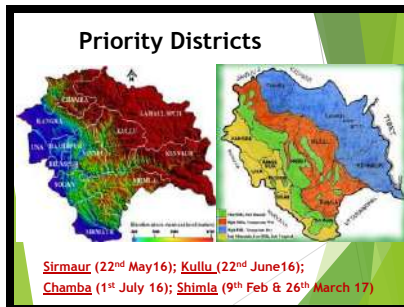
- To regulate activities of, approve and advise the Government of India on matters relating to the conservation of biodiversity, sustainable use of its components and equitable sharing of benefits.
- To grant approval under Sections 3,4 and 6 of Biodiversity Act,2002
- To notify areas of biodiversity importance as biodiversity heritage sites under this act and perform other functions as may be necessary to carry out the provisions of the Act.
- To take measures to protect biodiversity of the country as well as to oppose the grant of intellectual property rights to any country outside or any biological resources obtained from India.

It was told that the National Biodiversity authority (NBA) deals with the requests for access to the biological resources as well as transfer of information of traditional knowledge to foreign nationals, institutions and companies. Through this way piracy of Intellectual Property Rights in and around India is prevented and it also saves the indigenous people from exploitation. Next Sh. Kunal Satyarthi explained everyone about the role and functions of Himachal Pradesh State Biodiversity Board (HPSBB). He said that HPSBB was constituted in the year 2006 and its administrative body consists of a Chairman, 5 ex-officio members, 5 expert members and secretarial staff. Next role and functions of Biodiversity Management Committee (BMC) was discussed. According to section 41 of the Biological Diversity Act states that every local body shall constitute a Biodiversity Management Committee (BMC) at this point it was elaborated that the three tier system of the Act comprising of NBA at center, SBB at State level and BMC at local/panchayat level works independently, have their own roles and responsibilities. Next he described the role of BMC's which is also to conserve Biological diversity, ensure sustainable use of its

components and lastly there should be fair and equitable sharing of the benefits arising out of utilization of biological resources. In the following presentation he went on describing about need and importance of Peoples Biodiversity Register (PBR); which are legal documents and database on biodiversity of any given area and he also described about Local Biodiversity Funds (LBFs). He described how PBRs as a legal document could play an important role in maintaining records on biodiversity related to a specific area and he also mentioned how LBFs would help in motivating and channelizing the whole process of making of PBRs. Next Biodiversity Heritage Site provision under the Biological Diversity Act, 2002, was discussed and how this would be able to help locals conserve their heritage site which they already have been doing from generations (Sacred Groves) or they were not able to because of lack of initiative or incentive. Certain exemptions under Biological Diversity Act, 2002 and normally Traded Commodities (NTCs) were also discussed and explained.

Penalties related to breach to Biological Diversity Act, 2002, were discussed next and it was stated that: Firstly whoever contravenes or attempts to contravene or abets the contravention of the provisions of section 3 or section 4 or section 6 shall be punishable with imprisonment for a term which may extend to five years, or with fine which may extend to ten lakhs rupees and where the damage caused exceeds ten lakhs rupees such fine may commensurate with the damage caused, or with both. And secondly whoever contravenes or attempts to contravene or abets the contravention of the provisions of section 7 or any order made under sub-section (2) of section 24 shall be punishable with imprisonment for a term which may extend to three years, or with fine which may extend to five lakhs rupees, or with both. In addition it was told that the offences under this Act shall be cognizable and non-bailable. This clause stipulates that the Central Government may give directions to the State Governments for execution any of the provisions of this Act.

In the last part of presentation activities of HP State Biodiversity Board were discussed.



S. N.	Name of the District	Number of Development Block	Number of Gram Panchayats
1	Bilaspur	4	151
2	Chamba	7	283
3	Hamirpur	6	229
4	Kangra	15	760
5	Kinnaur	3	65
6	Kullu	5	204
7	Lahaul-Spiti	2	41
8	Mandi	10	473
9	Shimla	10	363
10	Sirmour	6	228
11	Solan	5	211
12	Una	5	235
Grand Total		78	3243

12 * 78 + 3243 = 3333 BMC, PBR's & ABS points + BHS
Financial year 2016-17 (prioritized 30% formula)

Biodiversity Management Committees (BMCs) Constituted at Gram Panchayat Level (FY 2016-17)			
District	Total GP	BMC constituted	% age
Sirmour	228	42	18.42
Kullu	204	74	36.27
Chamba	283	54	19.08
Shimla	363	59	16.25
Total	1078	229	21.24

Tripartite MoU signed for the preparation of 47 People's Biodiversity Register (PBRs)

S. No.	District	Block	PBRs	TSG
1	Chamba (6)	Bhatiyat	1	HPU, Shimla
		Chamba	3	
		Sakoni	2	
		Amni	3	
2	Kullu (29)	Banjar	8	CSK, Palampur
		Kullu	10	
		Nagar	8	
		Pachhad	2	
3	Sirmour (5)	Nahan	1	GBPIHED, Kullu
		Sangrah	2	
		Chhodhara	1	
		Chopal	3	
4	Shimla (7)	Jubbal-Kotkhai	1	HFRI, Shimla
		Nankhari	1	
		Theog	1	
		Total	47	

Tripartite MoU to be signed for the preparation of 50 PBRs

DISTRICT	BLOCK	PBRs
Chamba (7)	Bhatiyat	7
	Nagar	3
Kullu (7)	Banjar	4
	Paonta	5
Sirmour (14)	Nahan	1
	Rajgarh	1
	Sangrah	3
	Shillai	3
	Pachhad	1
	Biscanipur	4
	Chirgadin	1
Shimla (22)	Chopal	3
	Mashobra	5
	Nankhari	1
	Narkanda	2
	Rampur	3
	Robru	3
	Total	50

- PBRs prepared under UNEP-GEF-MoEF Project
- "Expert Group" evaluated and finalized 6 PBRs prepared under UNEP-GEF-MoEF Project:
1. Narwana Khas (Kangra)
 2. Tandi (Kullu)
 3. Batal (Sirmaur)
 4. Jana (Kullu)
 5. Sainj (Shimla)
 6. Shakrori (Shimla)

It was told that in Himachal Pradesh 229 BMC's have been constituted, 47 People's Biodiversity Register (PBRs) Tripartite MoU have been signed, 50 more PBRs Tripartite MoU's are to be signed and so far 6 PBRs have been prepared namely: Narwana Khas (Kangra), Tandi (Kullu), Batal (Sirmaur), Jana (Kullu), Sainj (Shimla) and Shakrori (Shimla).

Next Sh. Kamraja Kaisth, Principal Scientific Officer (PSO), State Council for Science, Technology and Environment (SCST&E) was requested to provide information on Biological Diversity Act, 2002 and its Implementation Scenario in Himachal Pradesh. Sh. Kamraja Kaisth gave brief background of HP State Biodiversity Board (HPSBB) and gave vital information related to Biological Diversity Act, 2002. He



state the functions of HP State Biodiversity Board mentioning that the function of the HPSBB is to advise the Govt. of H.P subject to any guidelines issued by the Ministry of Environment and Forests & Climate Change, GoI, New Delhi on matters relating to the conservation of biodiversity, sustainable use of its components and equitable sharing of the benefits arising out of the utilization of biological resources. He mentioned that the State board has regulatory

function to regulate by granting of approvals or otherwise requested for commercial utilization of bio survey and bio-utilization of any biological resources by the Indians. He also stated that HPSBB can perform other functions which may be necessary to carry out the provisions of the Biological Diversity Act, 2002 or as may be prescribed by the State Govt. next he gave information on Salient Features of Biological Diversity Act, 2002 which is to regulate access to biological resources of the country with the purpose of securing equitable share in benefits arising out of the use of biological resources and associated traditional knowledge relating to biological resources and also to conserve and ensure sustainable use biological diversity. He also stated that knowledge of local communities related to biodiversity is to be respected and protected under the Act.

State level interactive workshop for Media on Biological Diversity Act,2002

Biological Diversity Act, 2002- Implementation Scenario in Himachal Pradesh

By
K. Kaisth
Principal Scientific Officer

HIMACHAL PRADESH STATE BIODIVERSITY BOARD
STATE COUNCIL FOR SCIENCE, TECHNOLOGY & ENVIRONMENT, H.P.
Science Bhawan, Baramulla, SHIMLA-1

Initiatives taken for implementation of Biological Diversity Act,2002

- H.P. State Biodiversity Board is implementing the Biological Diversity Act,2002 to the stakeholders of biodiversity after its constitution by the Govt. of H.P in the year 2005 in the State.
- Awareness created at 28 Blocks and 100 Panchayats
- H.P. State Biodiversity Board has prioritized four Districts namely; Chamba, Kullu, Sirmour and Shimla so far for implementation of Biological Diversity Act, 2002 in the State presently.
- Awareness being generated by the Board about Biological Diversity Act, 2002 to the stakeholders from different walks of life at District, Block and Local Bodies level in the State.
- H.P. State Biodiversity Board has constituted approximately 425 Biodiversity Management Committees comprising in the State.
- Project for identification of Sacred Groves for declaration them as Heritage Sites in the State being executed in the State with the collaboration of WWF, Shimla.
- UNEP- GEF-MoEF Project for strengthening implementation of Access and Benefit Sharing provisions of BD Act, 2002 being implemented in the State alongwith other nine other States



Role of BMCs

Documentation of local biodiversity

Chronicing of Traditional Knowledge

Custodian and Trustee (PBRs)

Conservators of local biodiversity

Other features of the Biological Diversity Act, 2002 include securing sharing of benefits with local people as conservers to biological resources and holders of knowledge and information relating to the use of biological resources and conservation and development of areas of importance from the stand point of biological diversity by declaring them as Biological Diversity Heritage Sites. Besides protection and

rehabilitation of threatened species the main feature of the BD Act, 2002 includes to Involve of Govt. institutions and stakeholders of biodiversity in implementation of BD Act through constitution of Committees. In the last part of his presentation he briefly described the role and functions of Biodiversity Management Committees.

Last presentation was given by Dr. Murari Lal Thakur, State Project Coordinator (SPC) of UNEP-GEF MoEFCC ABS Project in HP State Biodiversity Board (HPSBB). During his presentation he laid stress and provided information to media on Access and Benefit Sharing (ABS) mechanism and its relevance in Himachal Pradesh. During his presentation he gave information on how Biological Diversity Act came to



existence. He gave information on role, functions and duties of SBB and BMCs. Further he provided information on economic importance of bioresources specific to State of Himachal Pradesh. He gave information on bioresource based industries in Himachal and bioresources associated with industrial usages. Later on he explained the Access and Benefit Sharing mechanism and its provisions stating that ABS is Accessing of biological resources, sharing of benefits between users and Providers. The fair and equitable sharing of the benefits arising out of the utilization of genetic resources is one of the three objectives of the CBD and the CBD in its Article 15 sets out principles and obligations of parties related to Access to genetic resources and the fair and equitable sharing of benefits arising out of the utilization of genetic resources, on the basis of Prior Informed Consent (PIC) and Mutually Agreed terms (MAT). He also explained what PIC and MAT is, he told that the permission given by the competent national authority of a provider country to a user prior to accessing biological resources, in line with an appropriate national legal and institutional framework is Prior Informed Consent (PIC) and an agreement reached between the providers of biological resources and users on the conditions of access and use and the benefits to be shared between both parties is termed as Mutually Agreed terms (MAT).



Citing some examples of ABS from India he mentioned the success story of the Kani tribe of Kerela for its Access and Benefit Sharing (ABS) model. He also briefed about transferring the Results of Research to Foreign Nationals, Companies, Non-resident Indians for commercial purposes or otherwise and related procedures. In the last part of his presentation he gave information on main industries using biological resources, few popular products driven from Bioresources and Bio-economics of some important medicinal herbs of the State.

Glimpses of the Event







Registration List of Participants:

Registration of Participants

State level interactive workshop for media on Biological Diversity Act, 2002

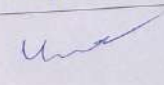


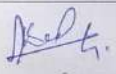

Date: 11.5.2017
Venue: Hotel Holiday Home, Shimla






Sr. No.	Name & Designation	Name of Newspaper/ News Agency	Office	Fax	Mobile No.	email id	Signature
1	Pooja Kumari	DONews Shimla	Shimla	2803234	916586722		
2	Manjit Singh	Camera man DPR Shimla	Chitthi Shimla	284311	9874841119		
3	Balkrishna	Camera man DPR	"	2624185	98571 61075		
4	Pawan Thakur	PRO (DPR)			94180 69064	himschal.dpr1@gmail.com	



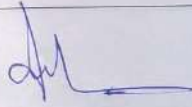

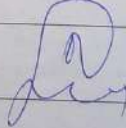
Sr. No.	Name & Designation	Name of Newspaper	Office	Fax	mob. No.	email ID	Sign.
5	Geeta Thakur	PRO DPR				9418483572 dprshimla@gmail.com	
6	Bhramar Chohan	Deputy Magistrate Sd (DWS)	94180 12121			Bhramarchohan@gmail.com 9418012121	
7	V. S Chauhan	Joint Inspector DPR	94180 77580	2624806		Yadchanha@gmail.com	
8	Mridha Tandon	Legal Incharge for Forest and Environment			9153215870	mridha@vifindia.net.in	
9	Vikrant	D. H	94184 33150			Vikki.bal@gmail.com	
10	Jalith Kumar	The Statesman	94185 88653			Jalith.thakur1992@gmail.com	



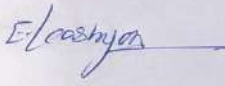
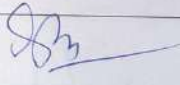

S.No.	Name & Designation	Name of newspaper News agency	Ph. No. office	Fax	Mob. No.	email ID	Sign.
11	Narinder SM	PR Shival	94180-5820				
12	Naresh Kumar	Punjab Kesari	9418005732			kumar.nareshk@gnail.com	
13	Dinesh Agarwal	Yogmarg	94180 68287				
14	Domena Sharma	Amphiprakash	94180 65046			domena.sharma.12@gmail.com	

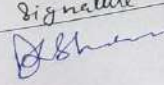
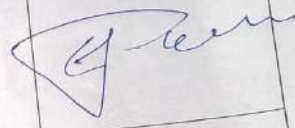


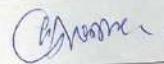
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15	Ravi Editor	Dussehra Dussehra			9418058726		
16	Shiksha Sharma	Prasanta Dussehra News DTR		280 4400	94180 13038		
17	Lokinder Beakta	Himachal Abh Ashi			94180 44477	lokinderbeakta @gmail.com	
18	UMESH Surplent	Kabru Abh. Pat.			94180 00999	UMESH51MCA@ gmail.com	

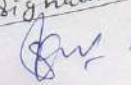


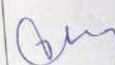
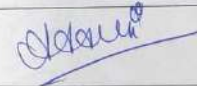
S.No.	Name & Designation	Name of Newspaper News Agency Office	Ph. No. office	Fax	Mobile No.	email ID	Sign.
19.	Kinval Pathole	Asit Samat	94185 27124			Vind. Pathole@gmail.com	
20.	Ashok Kumar	D.P.R.O. office.	98770 84081				
21.	J.P. Shanday	Shail Samachar	94180 20312			shailsamachar@gmail.com	
22.	Khushal Singh	Dnyu Himachal	94186 01020			Khushal.singh.sml@gmail.com	
23.	Anbarkhad Mekar	Reporter Eye	96259 31530			reporterseye@gmail.com	

S.No.	Name & Designation	Name of Newspaper News Agency Office	Fax	Mobile No.	email id	Signature	
24.	Anish	TV 100		98641011	chavva.srinivas		
25.	Gyan Thakur Correspondent	Jamika Teesuw	2655514	2652138	94180-55500	tkakur.gyan@gmail.com	
26.	Vikram	City Channel	9	9	94185-22144 92185-22144	news2cc@gmail.com	
27.	Preet	Punose Kesari			898810364	preetrossi@gmail.com	
28.	Roshni	News 18			98452-78400	Roshni2@gmail	

Sr No	Name & Designation	Name of Newspaper News Agency Office	Fax	Mobile No.	email id	Signature
29	Pradeep Kumar Daily Post	Daily Post		98174-28079	pradeepkumar68@gmail.com	
30	Archara Phull Bureau Chief	The Statesman		94180-28111	archaraphull252@gmail.com	
31	Anup Vard	Chairman BMC, Shimla		94180-28989	campvaid@gmail.com	
32	Kishan Singh	New 18 HIMACHAL		94186-44034	Kishantk@gmail.com	
33	Rameth Sharda	Daily Haryana New		94184-25999		

Sr No	Name & Designation	Name of Newspaper News Agency Office	Fax	Mobile No.	email id	Signature
34	Bhupinder Singh Deepestadai	Ajit Sankh		94180-11644	bhupinderseml@gmail.com	
35	P. R. Kashyap	Dewan Punjab		94180-55925	premsaj.kashyap@gmail.com	
36	EKTA KASHYAP	Diwan Himachal		94590-35125		
37	Sauri Datta S. Jambhal	Ajit Sankh		94596-27129	sauridatta@gmail.com	
38	Anil Kumar Deepestadai	Aajka Jaisla New		94189-61185	anilkumarsharma120@gmail.com	

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39	Prasanna Kumar	Asit Sanchari			98820 88558	dkshinda 44@gmail.com	
40	Sunder Lal	Hindustan			9418-07470		
41	Kuldeep Singh	Asit Sanchari			9418577115	Kuldeep16871@gmail.com	
42	Vivek Singh	PK Delhi			94181 00009	newsforu4365@gmail.com	
43	Gejender Sharma	Channel 9			94546 24180	gajisharma 85@gmail.com	

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44	Suresh Kishore Editor	Himalayan Dust	Shukla		987070901	suresh@himalayan.com	
45	Baldev Singh Charan Editor	Himalayan Dust	Shukla		94181 65656		
46	Kalyan Prasad	CHANNEL 9			9416583400		
47	Prakash Chand	N100			94185 72333	Sonivanta@gmail.com	
48	Shrawani Kapur	Daruk Sareva			9436 246603	Kapoorshivani1981@gmail.com	

Sr No	Name & Designation	Name of Newspaper News Agency	Office	Fax	Mobile No.	email id	Signature
49.	Sunil Parmar Reporter MHORE News	MHORE News			9479940102	parmar.shinik007@gmail	
50.	Yashvander Sharma	Dainik Jagran			94180 42743	yadevsmk@gmail .com	
51	Rishabh Kumar JD IPR	JD IPR					
52	R.S Noyal BT	DIPR					
53.	Mohit Sharma	Z TV	-		809/08 5055		

Sr No	Name & Designation	Name of Newspaper News Agency	Office	Fax	Mobile No.	email id	Signature
54.	Prakhar Dixit Sr. Correspondent	Amar Ujala			9736016201	praktard@sml.amarujala.com	
55.	Deepa Bhatnagar Correspondent	Bhante.ka Shikhan			94183- 19126	depasml@gmail.com	Deepa-
56	Deepika Himachi dastak	Sr. karnam Himachal			94182 75533	dastaksmf@gmail.in	
57.	Sayni	D.P.R.O office			98162 16699		
58	Anita Kumari Photojournalist	The Tribune			9418175009	anita.kumari80@gmail.com	



सत्यमेव जयते



जहाँ है हरियाली ।
वहाँ है खुशहाली ॥



H.P. State Biodiversity Board **UNEP-GEF MoEFCC ABS Project**

PROCEEDINGS ON:

**“One day Training workshop for Forest Officials on Biological Diversity Act,
2002, and its Access and Benefit Sharing Provisions”**

Hotel Pong View, Dharamshala.

7th September, 2017.

“One day Training workshop for Forest Officials on Biological Diversity Act, 2002, and its Access and Benefit Sharing Provisions”

The international community's concern about the unprecedented loss of biodiversity emerged at the United Nations Conference on the Human Environment held in Stockholm in 1972. In 1987, the World Commission on Environment and Development enunciated the principle of “sustainable development” in its landmark report titled “Our Common Future” in which it observed that “humanity has the ability to make development sustainable to ensure that it meets the needs of the present generation without compromising the ability of the future generations to meet their own needs”. “Sustainable development” became the theme of the United Nations Conference on Environment and Development (UNCED), held at Rio de Janeiro in June 1992. In the 20 years between the Stockholm and Rio summits, various international conventions were promulgated to deal with the conservation of the earth's species, but all have been fundamentally flawed in one respect or another. Consequently, it became apparent that a global agreement specifically addressing the problem of ecosystem destruction was needed. In November 1990, the United Nations Environment Programme (UNEP) began the first of seven negotiating sessions whose objective was to produce an international treaty on the conservation of biological diversity. The CBD was presented at the Earth Summit in Rio de Janeiro in June 1992, where it was signed by 153 nations including India. The CBD came into force from the 29th of December 1993. In 1994, India started its preliminary work to give effect to CBD with a central enactment. After circulation of several draft notes and cabinet notes, a draft Bill was introduced in the Lok Sabha and in December 2002, the Parliament passed the Bill. On 1st July 2004 the Biological Diversity Act, 2002 came into full force and effect. The Central Government also notified the Biological Diversity Rules, 2004.

The need to spread Biodiversity awareness is enormous in the context of successfully addressing Biodiversity Conservation problems, Biological Diversity Act 2002 and rules 2004 address the same. It is also linked to biodiversity education for conservation so as to sustainably use and protect valuable bioresources. On the one hand, awareness on Biological Diversity Act, 2002 creates greater awareness in individuals and communities with respect to putting environmental resources to use even while conserving them. On the other hand, greater the awareness increases especially within the line departments of the government, the scope of sustainable use and conservation practices for protecting our valuable biodiversity also increases. In order to conserve and sustain biodiversity of the State and to implement programmes and strategies related with biodiversity conservation at the state and national level it is realized that the line departments of the state should be made aware about the provisions, scopes and role of Biological Diversity Act, 2002 and also highlighting responsibilities and duties of the associated

Line departments in implementation of Biological Diversity Act, 2002. Protecting biodiversity on the sustainable principle has been a strategic approach in worldwide conservation plans and management as a result it was decided by HP State Biodiversity Board to make line departments aware about the role and scope of Biological Diversity Act, 2002. In this connection a training workshop for officials of HP Forest Department was organized at Hotel Pong View, Dharamshala., Kangra on 7th September, 2017, under supervision of Sh. Kunal Satyarthi, Joint Member Secretary, Himachal Pradesh State Biodiversity Board.

Sh. Vinay Tandon, IFS ret'd. PCCF, HoFF was the worthy Chief Guest, Dr. Sanjay Kumar, Director CSIR was the Guest of Honour, Ms. Mridhu Tandon, Researcher, Legal Initiative for Forest and Environment and Sh. Ishwar Poojar also addressed the participants. Participatory officials in the "One day Training workshop for Forest Officials on Biological Diversity Act, 2002, and its Access and Benefit Sharing Provisions" include Divisional Forest Officers (DFOs), Assistant Conservator Forests (ACFs) and Range Forest Officers from Dharamshala circle, Chamba circle, Hamirpur circle and Wildlife North. Scientists and Officials from Himachal Pradesh State Biodiversity Board (HPSBB) also attended the workshop.

During the inaugural session Sh. Vinay Tandon, IFS ret'd. PCCF, HoFF was requested to share his views. Sh. Vinay Tandon in his talk highlighted the need and silent features of Biological Diversity Act 2002 and hence provided an overview about the Biological Diversity Act, 2002. He stated that India is party to the Convention on Biological Diversity (CBD) 1992 which recognizes the sovereign rights of states to use their own Biological Resources. In order to help in realizing the objectives of CBD, India has enacted an umbrella legislation called the biological Diversity Act 2002 aimed at conservation of biological resources and associated knowledge as well as facilitating access to them in a sustainable manner and through a just process. He also mentioned that Biological diversity, commonly called as biodiversity, is a term used to refer to the variety of plant and animal life found on earth. With rapid urbanization and globalization, earth's biodiversity is facing the threat of being eroded. Global warming, Climate change, Pollution have all contributed to damaging the biodiversity around us. The Convention on Biological Diversity [CBD] is a United Nations initiative to help foster and protect biodiversity and encourage the sustainable use of our natural resources. The Convention was opened for ratification in 1992 at the Earth Summit in Brazil. India is a signatory of the CBD. Under its obligations as a CBD signatory, India had to enact a legislation that provided for the explicit protection of biodiversity. Sh. Vinay Tandon further stated that the main objective behind enacting the BD Act was to conserve Indian biological diversity, regulate access to Indian biological resources, ensure equitable benefit sharing arising from the utilization of those resources, and establish various governing bodies such as the National Biodiversity Authority (NBA) at the national level, the State Biodiversity Boards (SBBs) at the state level, and Biodiversity

Management Committees (BMCs) at the local level. He further told how Biological Diversity Act, 2002 helps in protecting biodiversity and what role Forest Department have in working towards the conservation of our states valuable bioresources. He concluded by saying that the biological Diversity Act, 2002 aims to exercise sovereignty over the country's natural resources. It also aims to bring forth a protection of traditional knowledge and access to biological resources for all Indians to enjoy.

Guest of Honour Dr. Sanjay Kumar, Director CSIR was requested next to share his views. Briefly he told about the roles, functions and activities of Council of Scientific and Industrial Research he stated that the Council of Scientific & Industrial Research (CSIR), is known for its cutting edge R&D knowledgebase in diverse S&T areas and is a contemporary R&D organization. Having pan-India presence, CSIR has a dynamic network of 38 national laboratories, 39 outreach centres, 3 Innovation Complexes and 5 units. CSIR's R&D expertise and experience is embodied in about 4600 active scientists supported by about 8000 scientific and technical personnel. CSIR covers a wide spectrum of science and technology – from radio and space physics, oceanography, geophysics, chemicals, drugs, genomics, biotechnology and nanotechnology to mining, aeronautics, instrumentation, environmental engineering and information technology. It provides significant technological intervention in many areas with regard to societal efforts which include environment, health, drinking water, food, housing, energy, farm and non-farm sectors. Further, CSIR's role in S&T human resource development is noteworthy. Pioneer of India's intellectual property movement, CSIR today is strengthening its patent portfolio to carve out global niches for the country in select technology domains. CSIR is granted 90% of US patents granted to any Indian publicly funded R&D organization. On an average CSIR files about 200 Indian patents and 250 foreign patents per year. About 13.86% of CSIR patents are licensed - a number which is above the global average. Amongst its peers in publicly funded research organizations in the world, CSIR is a leader in terms of filing and securing patents worldwide. As he went forward he touched on the importance and scope of BD Act, 2002 and how CSIR is working towards the conservation of Bioresources that are facing various types of threats including overexploitation, degradation and extinction.

Sh. Kunal Satyarthi, Joint Member Secretary, HP State Biodiversity Board imparted knowledge related to Biological Diversity Act, 2002, and its Access and Benefit Sharing Provisions to all participants. Sh. Kunal Satyarthi interactively presented many cases related to BD Act by showing news clipping from Times of India newspaper in which it was mentioned that in August 2012, two Czech nationals were arrested "for stealing insects" near the Singalila National Park in Darjeeling. In September, the two Prague-based entomologist Petr Svacha and his colleague Emil Kucera were convicted by a local court under provisions of Biological Diversity Act, 2002.

By giving these examples he explained that biodiversity is not just associated with medicinal plants and herbs found in wild but it covers everything except Normally Traded Commodities (NTC's) and other agriculture produce till the time some value addition is done e.g. cultivation of apple is not applicable under BD Act, 2002 but if someone or some industry or firm is engaged in value addition by making some commercial product like jam or wine from apple then they do come under BD Act, 2002. By giving these examples Sh. Kunal Satyarthi showed the scope, provision and power of Biological Diversity Act, 2002 and these examples also acted as the foundation of the whole presentation for better understanding of the topic for Bar Association and Senior Advocates of Himachal Pradesh High Court. Next he briefed about the status of global biodiversity and also told about the alarming rate (150 varieties of different species being lost every day) at which biodiversity is being wiped off from the face of earth. Next he brought everybody's focus on Biological Diversity Act, 2002 and its provision. He stated that Biodiversity found on Earth today is the result of 3.5 billion years of evolution. India is the seventh largest country in the world and Asia's second largest nation with an area of 3,287,263 square km. It has a land frontier of some 15,200 km and a coastline of 7,516 km. India is one of the top twelve megadiversity countries and has two of the total eighteen 'biodiversity hotspots' in the biodiversity rich areas of the Western Ghats and Eastern Himalayas.

It was mentioned that the Biological Diversity Act 2002 is a law meant to achieve three main objectives:

- Conservation of biodiversity;
- Sustainable use of biological resources;
- Equitable sharing benefits from such use of resources.

Its key provisions aimed at achieving the above were also told to the participants which were as under:

1. Prohibition on transfer of Indian genetic material outside the country, without specific approval of the Indian Government;
2. Prohibition on anyone claiming an Intellectual Property Right (IPR), such as a patent, over biodiversity or related knowledge, without permission of the Indian Government;
3. Regulation of collection and use of biodiversity by Indian nationals, while exempting local communities from such restrictions;
4. Measures for sharing of benefits from the use of biodiversity, including transfer of technology, monetary returns, joint Research & Development, joint IPR ownership, etc.;

5. Measures to conserve and sustainably use biological resources, including habitat and species protection, environmental impact assessments (EIAs) of projects, integration of biodiversity into the plans, programmes, and policies of various departments/sectors;
6. Provisions for local communities to have a say in the use of their resources and knowledge, and to charge fees for this;
7. Protection of indigenous or traditional knowledge, through appropriate laws or other measures such as registration of such knowledge;
8. Regulation of the use of genetically modified organisms;
9. Setting up of National, State, and Local Biodiversity Funds, to be used to support conservation and benefit-sharing;
10. Setting up of Biodiversity Management Committees (BMC) at local village level, State Biodiversity Boards (SBB) at state level, and a National Biodiversity Authority (NBA).

Next Sh. Kunal Satyarthi mentioned that the Biological Diversity Act's aim is to provide for the "conservation of biological diversity, sustainable use of its components and for the equitable sharing of the benefits arising out of the use of biological resources." This has to be done through approval of Indian Government for transfer of Indian genetic material outside the country, regulating all Indian nationals for collection and use of biodiversity except the local community, undertaking measures to conserve and sustainably use biological resources, local communities to have a say in the use of their resources and protection of indigenous or traditional knowledge. This act also envisages setting up of Biodiversity Management Committees (BMC) at local village level, State Biodiversity Boards (SBB) at state level, and a National Biodiversity Authority (NBA) which is the three tier system. Next he described the functions of State Biodiversity Boards (SBB), Biodiversity Management Committees (BMC) and National Biodiversity Authority (NBA) which were:

- BMCs: Prepare, maintain and validate People's Biodiversity Register (PBR) in consultation with the local people. Advice on any matter referred to it by the State Biodiversity Board or Authority for granting approval, to maintain data about the local vaid and practitioners using the biological resources
- SBBs: Advise the State Governments, subject to guidelines issued by the Central Government, on matters relating to conservation of biodiversity, sustainable use of its components and equitable sharing of benefits arising out of utilization of biological resources. Regulate by granting approvals or otherwise request for commercial utilization or bio-survey and bio utilization of any biological resource by Indians.

- NBA: The National Biodiversity Authority is mandated to regulate use of India's biological resources; facilitates/ enable conservation action and provides advice to Central and State Governments on issues of conservation, sustainable use and access and benefit sharing.

He told that the Biological Diversity Act of 2002, and the Biological Diversity Rules, 2004 are implemented by National Biodiversity Authority (NBA) at the national level, State Biological Board (SBB) at state level and Biodiversity Management Committees (BMC's) at local levels. To assist NBA at centre and to advise them on matters exclusive and of particular interest to the biodiversity of the State, similar Boards have been established in States under Section 22 of the said Act.

Sh. Kunal Satyarthi stated that the biodiversity legislation provides for a regulatory system by which access to knowledge relating to biodiversity can be granted. Providing for an approval procedure for a patent or any other intellectual property right based on any Indian biological material and knowledge. He also added that the Act does not prohibit IPRs and therefore the Act only forbids an application for any IPR in or outside India without prior approval of the NBA (Section 6). The NBA may either allow or disallow an application for a patent or any other IPR.

It was told that the National Biodiversity authority (NBA) deals with the requests for access to the biological resources as well as transfer of information of traditional knowledge to foreign nationals, institutions and companies. Through this way piracy of Intellectual Property Rights in and around India is prevented and it also saves the indigenous people from exploitation. Next Sh. Kunal Satyarthi explained everyone about the role and functions of Himachal Pradesh State Biodiversity Board (HPSBB). He said that HPSBB was constituted in the year 2006 and its administrative body consists of a Chairman, 5 ex-officio members, 5 expert members and secretarial staff. Next role and functions of Biodiversity Management Committee (BMC) was discussed. He described the role of BMC's which is also to conserve Biological diversity, ensure sustainable use of its components and lastly there should be fair and equitable sharing of the benefits arising out of utilization of biological resources. In the following presentation he went on describing about need and importance of Peoples Biodiversity Register (PBR); which are legal documents and database on biodiversity of any given area and he also described about Local Biodiversity Funds (LBFs). He described how PBRs as a legal document could play an important role in maintaining records on biodiversity related to a specific area and he also mentioned how LBFs would help in motivating and channelizing the whole process of making of PBRs. Next Biodiversity Heritage Site provision under the Biological Diversity Act, 2002, was discussed and how this would be able to help locals conserve their heritage site which they already have been doing from generations (Sacred Grooves) or they were not able to because of lack of initiative or incentive. Certain exemptions

under Biological Diversity Act, 2002 and normally Traded Commodities (NTCs) were also discussed and explained.

Access to Biological Resources and Associated Knowledge and Benefit Sharing Regulations, 2014 were described next. Benefit Sharing between the Applicant and the SBB says that the share of benefit as paid by the Applicant depends on the level of Annual Gross ex-factory Sales:

- ✓ Up to Rs. 1,00,00,000: 0.1%
- ✓ Between Rs. 1,00,00,000 and Rs. 3,00,00,000: 0.2%
- ✓ Above Rs. 3,00,00,000: 0.5%

Benefit Sharing procedure between the SBB and BMCs was also explained and was told that the Share of the SBB: Maximum 5% of the benefits accrued towards their administrative charges Share of the BMCs or benefit claimer where identified: Minimum 95% of the accrued to benefits In case BMC/benefit claimer not identified: Funds to be used to support conservation & sustainable use of biological resources & support local livelihoods of the local people where bio-resources are accessed.

During discussions on penalties related to breach to Biological Diversity Act, 2002, it was also mentioned that firstly whoever contravenes or attempts to contravene or abets the contravention of the provisions of section 3 or section 4 or section 6 shall be punishable with imprisonment for a term which may extend to five years, or with fine which may extend to ten lakhs rupees and where the damage caused exceeds ten lakhs rupees such fine may commensurate with the damage caused, or with both. And secondly whoever contravenes or attempts to contravene or abets the contravention of the provisions of section 7 or any order made under sub-section (2) of section 24 shall be punishable with imprisonment for a term which may extend to three years, or with fine which may extend to five lakhs rupees, or with both. In addition it was told that the offences under this Act shall be cognizable and non-bailable. This clause stipulates that the Central Government may give directions to the State Governments for execution any of the provisions of this Act. Penalties pertaining to the violation of BD Act, 2002 were described next and was stated that: Provisions of Section 55 (1) states that: Whoever contravenes or attempts to contravene or abets contravention the provisions of Section 3 or Section 4 or Section 6 shall be punishable with imprisonment for a term which may extend to 5 years or with fine which may extend to 10 lakhs rupees such fine may commensurate with damage caused, or with both. In addition whoever contravenes or attempts to contravene or abets contravention of the provisions of Section 7 or any order made under sub Section (2) of Section 24 shall be punishable with imprisonment for a term which may extend to 3 years, or with fine which may extend to five lakh rupees, or with both.

Next Sh. Ishwar Poojar, Project Manager (UNEP/GEF MoEF&CC ABS), NBA Chennai, presented his lecture on The Biological Diversity Act, 2002: The Access and Benefit Sharing Perspective. He started his presentation by giving examples of Billion Dollar Pharma Industries using Bio-resources like: *Vespa mandarinia japonica* - Giant Japanese Hornet: The hornets feed on crop pests, besides the workers feed on the flight muscles of others insects, they produce a liquid called Vespa Amino Acid Mixture (VAAM), can increase athletic performance. Fried hornets are delicacy at country side of Japan. *Illicium verum* – Chinese Star Anise: In 2009 Swine Flu outbreak lead to huge demand for anti influenza drug – tamiflu around the world. Which needed shikmic acid a primary precursor in pharma synthesis. Derived from Chinese Star Anise, extracted from its seed at tenth stage. By citing these examples he mentioned that how from these two bioresources only companies engaged in producing its formulations earns billions of dollars every year.

Next exemptions from ABS under BD Act were discussed. It was told that under Section 5 exemptions are provided for collaborative projects for research purposes and where no commercialization is being done. He also added that Section 7 exempts local practitioners, Vaidas, Hakims, Amchis etc. for accessing the bioresources and using them in fact the Act encourages the Traditional Knowledge associated with bioresources found in a community from generations to be documented and conserved under Peoples Biodiversity Registers (PBRs).

Sh. Ishwar Poojar also discussed and explained about the Prior Informed Consent (PIC) and Mutually Agreed Terms (MAT) procedures. Next he discussed offences and penalties under section 3, 4, 6, 7 and 24 (2) of the Act. Exemption of Certain Biological Resources under the BD Act were discussed and it was told that any items including Biological Resources which are being used as Normally Traded as Commodities are exempted from the Act. Act provides exemption of certain activities from its purview were to local people and community for free access to use bioresources within India, to growers and cultivators, vaidas and hakims (practitioners of traditional medicinal systems) to use bioresources, to biological resources, normally traded as commodities notified by the Central Government under section 40 of the Act, to collaborative research through government-sponsored institutes subject to conformity with guidelines and approval of the Central / State Governments and finally for research done by Indians within geographical boundaries of India are exempted. Guidelines on Access to Biological Resources and Associated Knowledge and Benefits Sharing Regulations, 2014 were discussed next and it was said that . Guidelines on Access to Biological Resources and Associated Knowledge and Benefits Sharing Regulations, 2014 have been notified on 21st November, 2014. The Regulation provides for legal certainty clarity and transparency simplified procedure to the Indian researchers / Govt. institutes to carry out basic research outside India, options of benefit sharing for different users, graded benefit sharing

establishing supply chain from source to manufacturer upfront payment on high economic valued bioresources (Red sanders, Sandal etc.) and apportioning accrued benefits to the community/BMC. Benefit Sharing Component comprising commercial utilization, Transfers of results of research and Intellectual property rights were discussed next and it was told that entities commercially utilizing bioresources and earning gross ex-factory sale of upto rupees 1,00,00,000 are liable to share 0.1% of their benefit with the concerned BMC/BMCs, from rupees 1,00,00,000 to 3,00,00,000 the percentage share of benefit increases to 0.3% of their total earning gross ex-factory sale and if the benefit earned is more than 3,00,00,000 then the percentage share of benefit further increases to 0.5% of their total earning from gross ex-factory sale. In case of Transfer of results of research, the benefit sharing obligation is 3.0 to 5.0% of the monetary consideration. In the final section of presentation Benefit Sharing component with alternative option for commercial utilization was discussed and it was noted that Alternative option for commercial utilization where the trader sells the biological resource purchased by him to another trader or manufacturer, if he is a trader – the buyer to pay 1.0 to 3.0% of the purchase price and if he is a manufacturer – the buyer to pay 3.0 to 5.0% of the purchase price. If the buyer submits proof of benefit sharing by the immediate seller in the supply chain, the benefit sharing obligation on the buyer shall be applicable only on that portion of the purchase price for which the benefit has not been shared in the supply chain. It was further added that in cases of biological resources having high economic value such as sandalwood, red sanders, etc. - the benefit sharing may include an upfront payment of not less than 5.0%, on the proceeds of the auction or sale amount, as decided by the NBA or SBB, as the case may be. Finally if the sale is through auction, the successful bidder or the purchaser shall pay the amount to the designated fund, before accessing the biological resource.

Next Ms. MridhuTandon, Researcher, Legal Initiative for Forest and Environment (LIFE), New Delhi presented her lecture. She started his talk by showing a video clip from NDTV news channel where in August 2012, two Czech nationals were arrested “for stealing insects” near the Singalila National Park in Darjeeling. In September, the two Prague-based entomologist Petr Svacha and his colleague Emil Kucera were convicted by a local court under provisions of Biological Diversity Act, 2002. By showing this clip she mentioned how powerful the BD Act, 2002 is how varied the scopes of this particular Act are.

After explaining Role of National Biodiversity Authority (NBA) at Apex Level, State Biodiversity Borads (SBB) at State Level and Biodiversity Management Commiittees (BMC) at Local Level and also she described procedure and need for formation of Peoples Biodivesity Register (PBR). Next in her talk she mentioned that the BD Act provides for four major categories of approvals. First, Section 3 of the Act mandates that people who are not citizens of India, entities registered outside India, and Indian companies having any portion of their shareholding or management held by non-Indians are required to obtain prior

approval of NBA by applying in the prescribed manner (Form I under Rule 14 of the Biological Diversity Rules, 2004) to access biological resources occurring in India or any traditional knowledge associated thereto to undertake activities such as “research” or “commercial utilization” or “bio-survey and bio-utilization.” Further, Section 7 of the Act mandates that people who are citizens of India and entities registered in India can obtain biological resources occurring in India for “commercial utilization” or “bio-survey and bio-utilization for commercial utilization” only after giving an intimation of the said access to the concerned SBB in the form and manner prescribed under the concerned State Biodiversity Rules. Second, Section 4 of the Act mandates that all people are required to obtain the prior approval of NBA by applying in the prescribed manner (Form II under Rule 17 of the Biological Diversity Rules, 2004) for transferring “results of research” relating to Indian biological resources. This approval applies only when a transferee is not a citizen of India or is an entity registered outside India or Indian companies having any portion of their shareholding or management held by non- Indians. Third, Section 6 of the Act mandates that all people are required to obtain prior approval of NBA by applying in the prescribed manner (Form III under Rule 18 of the Biological Diversity Rules, 2004) before applying for any intellectual property right within or outside India for any invention based on any research or information on Indian biological resources. Fourth, Section 20 of the Act mandates that all people are required to obtain prior approval of NBA by applying in the prescribed manner (Form IV under Rule 19 of the Biological Diversity Rules, 2004) before transferring any Indian biological resource to others.

Another pertinent provision under the BD Act is Section 40, which provides that the Central Government may, in consultation with NBA, declare by means of a notification that the provisions of the Act shall not apply to certain Indian biological resources that are normally traded as commodities. The Central Government has previously issued a notification (S.O. 2726, dated October 26, 2009) enlisting 190 species of plants as exempt from the provisions of the Act, provided they are normally traded as commodities. However, the said notification stands superseded by another notification (S.O.1352, dated April 7, 2016) that enlists 384 species of plants as exempt from the provisions of the Act, provided they are normally traded as commodities. The said notification also clarifies that products derived from the 384 species of plants and traded as a matter of common practice shall also be treated as normally traded as commodities, and in such cases, the onus of substantiation that the said products fall within common practice shall lie on the claimant.

Further, a very important notification issued under the BD Act is the Guidelines on Access to Biological Resources and Associated Knowledge and Benefit-Sharing Regulations, 2014 (“ABS Regulations”) that was notified on November 21, 2014 by NBA under the aegis of the Ministry of Environment, Forests, and

Climate Change. This notification was issued following the Nagoya Protocol on access to genetic resources and the fair and equitable sharing of benefits arising from their utilization to CBD, which came into force on October 12, 2014. The ABS Regulations provide that benefit-sharing may be done in monetary and/or non-monetary modes, as agreed upon by the applicant and NBA (Regulation 7). Annexure I to the ABS Regulations contains the various types of monetary and non-monetary benefits that could be shared and are essentially adapted from the Annexure to the Nagoya Protocol. The benefit-sharing obligations and approvals in general are implemented through a mutual agreement between a party seeking access and use of biological resources occurring in India on one hand and NBA on the other hand. NBA also consults SBBs and BMCs from areas concerned in granting approvals for activities under the BD Act. In the final part of his presentation few case studies and writ petitions filed under BD Act, 2002 were shared with the participants starting with classic example of The Czech Nationals Case

Facts of the Case:

- ✓ In July 2008, two Czech nationals Petr Svacha and Emil Kucera arrested for collection of beetles and butterflies from the Singalila National Park, West Bengal
- ✓ In possession of more than 1500 specimens of butterflies and beetles, including the endangered *Delisa sanaca* at the time arrest.
- ✓ Violation of the Law:
 - ✓ The Wildlife (Protection) Act, 1972: Sections 27, 28, & 29
 - ✓ The Biological Diversity Act, 2002: Sections 3 read with Section 19
- ✓ Verdict in the Case:
 - ✓ Petr Svacha was given a fine of Rs. 20,000
 - ✓ Emil Kucera, was sentenced to 3 years imprisonment by the Chief Judicial Magistrate of Darjeeling & fine of Rs. 50,000

Another case of BMC Keoti Matter O.A. No. 06/2014 (CZ) was discussed and the facts of the case are as under:

- ✓ The BMC of Keoti Gram Panchayat, Rewa district had filed a case in the NGT, Central Bench making the following prayers:
 - ✓ Declaration of Keoti Gram as a Biodiversity Heritage Site (BHS) u/s 37 of the BD Act, 2002 due to
 - ✓ Ecological Fragility of the area, presence of dense forest, water fall and diversity of medicinal plants.
 - ✓ Ecological value at stake: Illegal mining & construction in the name of 'tourism' – Environmental damage to Keoti Village Forests due to construction of Biodiversity Parks by State Govt.

- ✓ Immediate Stoppage of Construction activity and demolish construction already carried out .
- ✓ Notification of Species of Samavalli/Somlata, Morshikha and Patthar Chattha as Threatened Species (TS) u/s 38 of the BD Act, 2002: Payment of fees from those accessing/collecting biological resources from the Keoti Gram Panchayat u/s 41 (3) of the BD Act, 2002

Tribunal's Observations in this particular case was that there are no guidelines framed by the State Govt. for identification and declaration of areas as Biodiversity Heritage Site (BHS) and the manner in which the BMC can levy the charges by way of collection fees and how the funds are to be utilized for benefit sharing. Hence Tribunal's Directions were that given the absence of Guidelines, the Tribunal had reiterated its earlier directions that no mining of any sort, construction or alteration of habitat in any manner will be allowed in the area and the State to ensure the compliance of this direction strictly.

The State Government to devise comprehensive strategies to identify biodiversity rich sites and to protect and conserve such sites.

Next case discussed was of M/s Som Distilleries Pvt. Ltd. Vs. M.P. State Bio Diversity Board & Ors. (O.A. 62/2013, CZ). It was told that Madhya Pradesh State Biodiversity Board (MP SBB) in March-April 2013 had written to the NBA to issue uniform ABS guidelines to be used by the SBBs to regulate the collection of biological resources by Indian companies; thereby ensuring that companies pay benefit sharing to the SBB as well as BMC. However, with no clear response from the NBA, the Board issued notices to all companies using biological resource from their jurisdiction: Herbal Industries; Forest /Minor Forest Produce based industries; Sugar Mills, Distilleries, All Food Processing Industries, Soya Industries, Spinning/Gining/Textile Mills, Other Agro and Bio based Industries, Coal Mining Industries (Government. Semi Government and Private) and Industries using Coal Bio-resource (e.g. Cement and Steel Industries). The MP SBB had also written to the Forest Development Corporation, Minor Forest Produce Federation and Fisheries Department in the same regard. The notices highlighted that said company's extraction of raw material counts as "obtaining 'biological resources' for 'commercial utilization' as defined under the Act and thereby as per Section 7 read with Section 24 (1) requires the company to intimate the MP SBB through FORM 1 as prescribed in the MP Biological Diversity Rules, 2004 and pay Rs. 1000 as fees. Most importantly, in each of the notice it had asked to deposit 2% of their gross sales or gross revenue on financial year basis towards benefit-sharing in the Biodiversity Fund of the state. Given the absence of prescribed guidelines, the Board had used the similar formula as adopted by NBA in of the agreements signed by it in 2009.

Given the issuance of notices by the MP SBB, 13 companies filed a case challenging the said notices issued by MP SBB in the NGT, Central Zone. Given that the major ground of contention was that the

SBB had issued the notices without the ABS Guidelines being issued by the Central Government/NBA, the Tribunal had thereby directed the MOEF&CC and NBA to lay down standardised guidelines for ABS. Given the order of the Tribunal, the Guidelines on Access to Biological Resources and Associated Knowledge and Benefits Sharing Regulations, 2014 came into force on 21.11.2014

The decision held was that given the Guidelines dated 21.11.2014 framed by the MOEF&CC and NBA, the Tribunal vide its final order dated 17.12.2014 had set aside the earlier notices issued by the MP SBB and gave them the liberty to determine the case of each individual Applicant/Appellant afresh after taking into account the scheme of the Act, Rules as well as Regulations issued by the National Bio Diversity Authority under Section 64 of the Act of 2002.

The most interesting of all cases was the case by Eklahara BMC mentioning that coal is a 'bio-resource. Details of the case were: - Case by Eklahara BMC (O.A. No. 28/2013 (CZ) & O.A. No. 17/2014 (CZ) Coal is governed by MMDR Act, 1957 (Is coal a Bioresource). Given the arguments made by the BMC, the coal companies submitted that coal is governed by the provisions of Mines and Mineral (Development & Regulation) Act 1957 (MMDR Act 1957), which gives the Central government the sole statutory power to make rules regarding coal and levy charges. Given the above, the state government and its authorities have no competence and jurisdiction to levy any charges; such that, the state government can only levy royalty on the grant of mining lease and not in any other form. Given the provisions of MMDR Act 1957, categorisation of coal as a biological resource, would lead to a contradiction between the two statutes.

Coal is not a biological resource:

Given the primary contention of BMC that coal contains plant genetic material; the coal companies submitted that given the meaning of genetic material under Convention of Biological Diversity. i.e. "material of plant, animal, microbial or other origin containing functional unit of heredity"; the half-life of DNA (functional unit of heredity) is 521 years under ideal conditions (dried state, vacuum packed and frozen at about -80 C) and that coal traces its origin to 63-300 million years and its formation under conditions of under high temperature and pressure led to its conversion into a fossil and thereby has no plant genetic material present in them.

Arguments made by MOEF and NBA:

MOEF further presented opinions from Secretariat of Convention on Biological Diversity, Geological Survey of India and Zoological Survey of India to highlight that coal is not a biological resource.

The CBD has stated that biological resources as defined in the CBD deals with living organisms and that coal by no means is one. GSI stated that given the process of formation of coal, it is a geological resource rather than a bio-resource. The ZSI has reiterated the statement made by the CBD that in context of coal

being a bio-resource, though the definition of biological resources is not exhaustive, the CBD and BD Act define bio-resources in terms of living resources and not of biological materials of dead or fossilised in nature. Further, it is stated by the ZSI that though Nagoya Protocol emphasizes fair and equitable sharing of benefits arising out of utilisation of genetic resources and that coal has a biological origin, it is devoid of any heritable genetic material, metabolic reactions and genetic expressions. Therefore, Coal doesn't fall under access and benefit sharing.

The contention made by the Applicant BMC and MP SBB that Coverage of coal under MMDR Act 1957 does not take away the right of the BMC to claim their right under BD Act 2002.

The Tribunal had concluded that:

Coal although indisputably of plant origin, does not in a fossilised form, after millions of years being buried under the earth, retain any genetic characteristics which can be linked to the plants, or to the vegetation from which the coal was originally formed. There is no scientific study to date which suggests that coal has a genetic structure and that it is similar to that of plants. It is a fossilized form though some of the chemicals like carbon are similar to those present in plants and that alone is not enough to suggest that coal by any stretch of imagination is biological in its character and configuration on the ground. That coal does not have any genetic structure and, therefore, is neither a genetic material nor a genetic resource and accordingly does not qualify to be called a biological resource, therefore, given that Coal is not a biological resources, the Coal companies are not liable to pay any fees for accessing or collecting coal from the area falling within the territorial jurisdiction of the BMC.

Dr. Murari Lal Thakur from State Biodiversity Board gave presentation on Access and Benefit Sharing (ABS) mechanism and its relevance in Himachal Pradesh. Conception and enactment of the Biological Diversity Act, 2002 was initially discussed. CBD its objective and objectives of the BD Act, 2002 were informed to the participants. Nagoya Protocol on ABS was discussed which is based on the fundamental principles of prior informed consent (PIC), Mutually agreed terms (MAT), official checkpoint. Benefit-sharing obligations were discussed which were:

- Domestic-level benefit-sharing measures will provide for the fair and equitable sharing of benefits arising from the utilization of genetic resources, as well as subsequent applications and commercialization, with the contracting Party providing genetic resources.
- Utilization includes research and development on the genetic or biochemical composition of genetic resources.
- Sharing is subject to mutually agreed terms.
- Benefits may be monetary or non-monetary such as royalties and the sharing of research results

Traditional knowledge associated with genetic resources with provisions on access, benefit sharing and compliance were also discussed. Next in the presentation information on ABS provisions under BD Act, 2002 were discussed. Afterwards Benefit Sharing Options and Economic Importance of Bioresources present in the State of Himachal Pradesh were informed to the participants. A brief information regarding Bio-resource based industries and their global market share was discussed. Next determination of benefit sharing, PIC & MAT options, certain activities or persons exempted from approval of NBA or SBB, Fair and equitable benefit sharing options and non-monetary benefits of ABS provisions were discussed. in the final part of presentation some examples of ABS from India were discussed.



सत्यमेव जयते



जहाँ है हरियाली ।
वहाँ है खुशहाली ॥



H.P. State Biodiversity Board
UNEP-GEF MoEFCC ABS Project

PROCEEDINGS ON:

**“One day Training workshop for Forest Officials on Biological Diversity Act,
2002, and its Access and Benefit Sharing Provisions”**

Forest Training Institute Chail, Solan.

5th September, 2017.

“One day Training workshop for Forest Officials on Biological Diversity Act, 2002, and its Access and Benefit Sharing Provisions”

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Biological diversity Act, 2002 has been passed in accordance with India's compliance with Convention on Biological diversity, 1994. But the implementation of this act for last 13 years needs critical evaluation for better outcome.

The Nagoya protocol on Convention of Biological diversity encompasses of three dimensions and each of them can be evaluated on Indian context:

- a) Conservation of biodiversity
- b) Sustainable use of bio-resources
- c) Access and Benefit sharing

The main agenda of Nagoya protocol as well as the main focus of biodiversity act is to access the biological resources of area by commercial class and use of the the knowledge of the benefit of it and then expanding the benefits to the whole world in a sustainable way.

Himachal Pradesh State Biodiversity Board (HPSBB) in coordination with the National Biodiversity Authority (NBA), Chennai is implementing a project, sponsored by UNEP/GEF MoEFCC (GoI) on “Strengthening the implementation of Biological Diversity Act, 2002 with focus on its Access and Benefit Sharing (ABS) provisions” under the Act.

The Ministry of Environment & Forests is primarily concerned with planning, promotion, coordination and overseeing the implementation of the various environmental and forestry policies and programmes. The Ministry also serves as the nodal agency in the country for the United Nations Environment Programme (UNEP) and is also entrusted with the issues relating to multilateral bodies such as the Commission on Sustainable Development (CSD) and Global Environment Facility (GEF) on matters pertaining to Environment. Out of the many mandates and objectives of the Ministry, Conservation and Protection of environment, assistance to

organizations implementing environmental and forestry programmes, promotion of environmental and forestry research, extension, education and training and creation of environmental awareness among all sectors of the country's population, are in relation with Biological Diversity Act 2002, which is being implemented in various States of the Country.

The need to spread Biodiversity awareness is enormous in the context of successfully addressing Biodiversity Conservation problems, Biological Diversity Act 2002 and rules 2004 address the same. It is also linked to biodiversity education for conservation so as to sustainably use and protect valuable bioresources. On the one hand, awareness on Biological Diversity Act, 2002 creates greater awareness in individuals and communities with respect to putting environmental resources to use even while conserving them. On the other hand, greater the awareness increases especially within the line departments of the government, the scope of sustainable use and



conservation practices for protecting our valuable biodiversity also increases. In order to conserve and sustain biodiversity of the State and to implement programmes and strategies related with biodiversity conservation at the state and national level it is realized that the line departments of the state should be made aware about the provisions, scopes and role of Biological Diversity Act, 2002 and also highlighting responsibilities and duties of the associated Line departments in implementation of Biological Diversity Act, 2002. Protecting biodiversity on the sustainable principle has been a strategic approach in worldwide conservation plans and management as a result it was decided by HP State Biodiversity Board to make line departments aware about the role and scope of Biological Diversity Act, 2002. In this connection a training workshop for officials of HP Forest Department was organized at Forest Training Institute, Chail, Solan on 5th September, 2017, under supervision of Sh. Kunal Satyarthi, Joint Member Secretary, Himachal Pradesh State Biodiversity Board.



Sh. S.K. Sharma. IFS (PCCF, Management) was the Chief Guest, Sh. B.S. Rana IFS, Director Forest Training School, Chail, Solan, Sh. Saurabh Sharma, Advocate, Hon'ble Supreme Court of India and Sh. Ishwar Poojar would also address the participants. Participatory officials in the "One day Training workshop for Forest Officials on Biological Diversity Act, 2002, and its Access and Benefit

Sharing Provisions" included Divisional Forest Officers (DFOs), Assistant Conservator Forests (ACFs) and Range Forest Officers from Shimla circle, Rampur circle, Nahan circle and Wildlife South. Scientists and Officials from Himachal Pradesh State Biodiversity Board (HPSBB) also attended the workshop.

During the inaugural session Sh. S.K. Sharma. IFS (PCCF, Management) was requested to share his views. Sh. S.K. Sharma provided his insight on BD Act, 2002 and during his speech said that the Biological Diversity Act, 2002 is an Act of the Parliament of India for preservation of biological diversity in India, and provides mechanism for equitable sharing of benefits arising out of the use of traditional biological resources and knowledge. He said that Biodiversity is the variety and differences among living organisms from all sources, including terrestrial, marine, and other aquatic ecosystems and the ecological complexes of which they are a part. This includes genetic diversity within and between species and of ecosystems. Thus, in essence, biodiversity represents all life. India is one of the mega biodiversity centres in the world and has two of the world's 18 'biodiversity hotspots' located in the Western Ghats and in the Eastern Himalayas (Myers 1999). The forest cover in these areas is very dense and diverse and of pristine beauty, and incredible biodiversity. he also said that, the country is estimated to have over 45,000 plant species and 81,000 animal species representing 7% of the world's flora and 6.5% of its fauna. The 1999 figures are 49,219 plant species representing 12.5% and 81,251 animal species representing 6.6%. The sacred groves of India are some of the areas in the country where the richness of biodiversity has been well preserved. There are 89 national parks and 504 wildlife sanctuaries in the country. He also stated that over the last century, a great deal of damage has been done to the biodiversity existing on the earth. Increasing human population, increasing consumption levels, and decreasing efficiency of use of our resources are some of the causes that have led to overexploitation and manipulation of ecosystems. Trade in wildlife, such as rhino horn, has led to the extinction of species. Consequences of biodiversity loss can be great as any disturbance to one species gives rise to imbalance

in others. In this the exotic species have a role to play. He urged every participant to learn from the workshop about the BD Act and incorporate it in their official duties whenever and wherever required. In the last part of his speech Sh. S.K. Sharma praised Sh. Kunal Satyarthi and congratulated him for the efforts he has put in implementation of BD Act, for smooth functioning of HP SBB and streamlining the activities of HIMCOSTE.



Next Sh. B.S. Rana IFS, Director Forest Training School, Chail, Solan was requested to provide his view on the topic. Sh. B.S. Rana stated that the overall objectives of workshop/training programme were to establish a means for the conservation of biological diversity, the sustainable use of its components and the fair and equitable sharing of the benefits arising out of the utilisation of bioresources and that every participant should equally be benefitted and learned in the end

about BD Act, 2002. Enhancing knowledge and understanding of biological diversity and the impacts on it are important measures should be addressed in the training workshop. He requested participants to identify (for example etc.) and monitor important ecosystems, species and genetic components of biological diversity, as well as processes and activities that have or are likely to have significant adverse impacts on biological diversity and then able to determine their priorities with regard to conservation and sustainable use measures which need to be undertaken under BD Act, 2002.

Sh. Kunal Satyarthi, Joint Member Secretary, HP State Biodiversity Board imparted knowledge related to Biological Diversity Act, 2002, and its Access and Benefit Sharing Provisions to all participants. Sh. Kunal Satyarthi interactively presented many cases related to BD Act by showing news clipping from Times of India newspaper in which it was mentioned that in August 2012, two Czech nationals were arrested “for stealing insects” near the Singalila National Park in Darjeeling. In September, the two Prague-based entomologist Petr Svacha and his colleague Emil Kucera were convicted by a local court under provisions of Biological Diversity Act, 2002. Next in his presentation he showed some pictures of different varieties of brinjal, rajmah (pulse) and rice that was once found in the State and showed his concern that today out of many varieties found once now only very few are available, which shows the loss that biodiversity of the State has faced.

By giving these examples he explained that biodiversity is not just associated with medicinal plants and herbs found in wild but it covers everything except Normally Traded Commodities (NTC’s) and other

agriculture produce till the time some value addition is done e.g. cultivation of apple is not applicable under BD Act, 2002 but if someone or some industry or firm is engaged in value addition by making some commercial product like jam or wine from apple then they do come under BD Act, 2002. By giving these examples Sh. Kunal Satyarthi showed the scope, provision and power of Biological Diversity Act, 2002 and these examples also acted as the foundation of the whole presentation for better understanding of the topic for Bar Association and Senior Advocates of Himachal Pradesh High Court. Next he briefed about the status of global biodiversity and also told about the alarming rate (150 varieties of different species being lost every day) at which biodiversity is being wiped off from the face of earth. Next he brought everybody's focus on Biological Diversity Act, 2002 and its provision. He stated that Biodiversity found on Earth today is the result of 3.5 billion years of evolution. India is the seventh largest country in the world and Asia's second largest nation with an area of 3,287,263 square km. It has a land frontier of some 15,200 km and a coastline of 7,516 km. India is one of the top twelve megadiversity countries and has two of the total eighteen 'biodiversity hotspots' in the biodiversity rich areas of the Western Ghats and Eastern Himalayas.

Next he briefed about the inception of the BD Act how it came into force he mentioned that in 1987, the World Commission on Environment and Development enunciated the principle of "sustainable development" in its landmark report titled "Our Common Future" in which it observed that "humanity has the ability to make development sustainable to ensure that it meets the needs of the present generation without compromising the ability of the future generations to meet their own needs". "Sustainable development" became the theme of the United Nations Conference on Environment and Development (UNCED), held at Rio de Janeiro in June 1992. In November 1990, the United Nations Environment Programme (UNEP) began the first of seven negotiating sessions whose objective was to produce an international treaty on the conservation of biological diversity. The CBD was presented at the Earth Summit in Rio de Janeiro in June 1992, where it was signed by 153 nations including India. The CBD came into force from the 29th of December 1993.

Explaining the three tier system Sh. Kunal Satyarthi mentioned that the Biological Diversity Act's aim is to provide for the "conservation of biological diversity, sustainable use of its components and for the equitable sharing of the benefits arising out of the use of biological resources." This has to be done through approval of Indian Government for transfer of Indian genetic material outside the country, regulating all Indian nationals for collection and use of biodiversity except the local community, undertaking measures to conserve and sustainably use biological resources, local communities to have a say in the use of their resources and protection of indigenous or traditional knowledge. This act also envisages setting up of Biodiversity Management Committees (BMC) at local village level, State

Biodiversity Boards (SBB) at state level, and a National Biodiversity Authority (NBA) which is the three tier system. Next he described the functions of State Biodiversity Boards (SBB), Biodiversity Management Committees (BMC) and National Biodiversity Authority (NBA) which were:

- BMCs: Prepare, maintain and validate People's Biodiversity Register (PBR) in consultation with the local people. Advice on any matter referred to it by the State Biodiversity Board or Authority for granting approval, to maintain data about the local vaid and practitioners using the biological resources
- SBBs: Advise the State Governments, subject to guidelines issued by the Central Government, on matters relating to conservation of biodiversity, sustainable use of its components and equitable sharing of benefits arising out of utilization of biological resources. Regulate by granting approvals or otherwise request for commercial utilization or bio-survey and bio utilization of any biological resource by Indians.
- NBA: The National Biodiversity Authority is mandated to regulate use of India's biological resources; facilitates/ enable conservation action and provides advice to Central and State Governments on issues of conservation, sustainable use and access and benefit sharing.

The objectives of the Act were described next by Sh. Kunal Satyarthi which were:

1. Conservation of Biological diversity
2. Sustainable use of its components
3. Fair and equitable sharing of the benefits arising out of utilization of biological resources.

He told that the Biological Diversity Act of 2002, and the Biological Diversity Rules, 2004 are implemented by National Biodiversity Authority (NBA) at the national level, State Biological Board (SBB) at state level and Biodiversity Management Committees (BMC's) at local levels. To assist NBA at centre and to advise them on matters exclusive and of particular interest to the biodiversity of the State, similar Boards have been established in States under Section 22 of the said Act. The powers and functions of the State Biodiversity Boards have been listed down in Section 24 and Section 23 of the Act. Some of the major functions of these authorities were discussed which are as follows:

- To regulate activities of, approve and advice the Government of India on matters relating to the conservation of biodiversity, sustainable use of its components and equitable sharing of benefits.
- To grant approval under Sections 3,4 and 6 of Biodiversity Act,2002

- To notify areas of biodiversity importance as biodiversity heritage sites under this act and perform other functions as may be necessary to carry out the provisions of the Act.
- To take measures to protect biodiversity of the country as well as to oppose the grant of intellectual property rights to any country outside or any biological resources obtained from India.

It was told that the National Biodiversity authority (NBA) deals with the requests for access to the biological resources as well as transfer of information of traditional knowledge to foreign nationals, institutions and companies. Through this way piracy of Intellectual Property Rights in and around India is prevented and it also saves the indigenous people from exploitation. Next Sh. Kunal Satyarthi explained everyone about the role and functions of Himachal Pradesh State Biodiversity Board (HPSBB). He said that HPSBB was constituted in the year 2006 and its administrative body consists of a Chairman, 5 ex-officio members, 5 expert members and secretarial staff. Next role and functions of Biodiversity Management Committee (BMC) was discussed. He described the role of BMC's which is also to conserve Biological diversity, ensure sustainable use of its components and lastly there should be fair and equitable sharing of the benefits arising out of utilization of biological resources. In the following presentation he went on describing about need and importance of Peoples Biodiversity Register (PBR); which are legal documents and database on biodiversity of any given area and he also described about Local Biodiversity Funds (LBFs). He described how PBRs as a legal document could play an important role in maintaining records on biodiversity related to a specific area and he also mentioned how LBFs would help in motivating and channelizing the whole process of making of PBRs. Next Biodiversity Heritage Site provision under the Biological Diversity Act, 2002, was discussed and how this would be able to help locals conserve their heritage site which they already have been doing from generations (Sacred Grooves) or they were not able to because of lack of initiative or incentive. Certain exemptions under Biological Diversity Act, 2002 and normally Traded Commodities (NTCs) were also discussed and explained.

Access to Biological Resources and Associated Knowledge and Benefit Sharing Regulations, 2014 were described next. Benefit Sharing between the Applicant and the SBB says that the share of benefit as paid by the Applicant depends on the level of Annual Gross ex-factory Sales:

- ✓ Up to Rs. 1,00,00,000: 0.1%
- ✓ Between Rs. 1,00,00,000 and Rs. 3,00,00,000: 0.2%
- ✓ Above Rs. 3,00,00,000: 0.5%

Benefit Sharing procedure between the SBB and BMCs was also explained and was told that the Share of the SBB: Maximum 5% of the benefits accrued towards their administrative charges Share of the BMCs or benefit claimer where identified: Minimum 95% of the accrued to benefits In case BMC/benefit claimer not identified: Funds to be used to support conservation & sustainable use of biological resources & support local livelihoods of the local people where bio-resources are accessed.

During discussions on penalties related to breach to Biological Diversity Act, 2002, it was also mentioned that firstly whoever contravenes or attempts to contravene or abets the contravention of the provisions of section 3 or section 4 or section 6 shall be punishable with imprisonment for a term which may extend to five years, or with fine which may extend to ten lakhs rupees and where the damage caused exceeds ten lakhs rupees such fine may commensurate with the damage caused, or with both. And secondly whoever contravenes or attempts to contravene or abets the contravention of the provisions of section 7 or any order made under sub-section (2) of section 24 shall be punishable with imprisonment for a term which may extend to three years, or with fine which may extend to five lakhs rupees, or with both. In addition it was told that the offences under this Act shall be cognizable and non-bailable. This clause stipulates that the Central Government may give directions to the State Governments for execution any of the provisions of this Act. Penalties pertaining to the violation of BD Act, 2002 were described next and was stated that: Provisions of Section 55 (1) states that: Whoever contravenes or attempts to contravene or abets contravention the provisions of Section 3 or Section 4 or Section 6 shall be punishable with imprisonment for a term which may extend to 5 years or with fine which may extend to 10 lakhs rupees such fine may commensurate with damage caused, or with both. In addition whoever contravenes or attempts to contravene or abets contravention of the provisions of Section 7 or any order made under sub Section (2) of Section 24 shall be punishable with imprisonment for a term which may extend to 3 years, or with fine which may extend to five lakh rupees, or with both.

Next Sh. Ishwar Poojar, Project Manager (UNEP/GEF MoEF&CC ABS), NBA Chennai, presented his lecture on The Biological Diversity Act, 2002: The Access and Benefit Sharing Perspective. He started his presentation by giving examples of Billion Dollar Pharma Industries using Bio-resources like: *Vespa mandarinia japonica* - Giant Japanese Hornet: The hornets feed on crop pests, besides the workers feed on the flight muscles of others insects, they produce a liquid called Vespa Amino Acid Mixture (VAAM), can increase athletic performance. Fried hornets are delicacy at country side of Japan. *Illicium verum* – Chinese Star Anise: In 2009 Swine Flu outbreak lead to huge demand for anti influenza drug – tamiflu around the world. Which needed shikmic acid a primary precursor in pharma synthesis. Derived from Chinese Star Anise, extracted from its seed at tenth stage. By citing these examples he mentioned that

how from these two bioresources only companies engaged in producing its formulations earns billions of dollars every year.

Next he told everyone about the enactment of Biological Diversity Act, 2002 and the Convention on Biological Diversity (CBD). He mentioned that in 1992- The CBD became an international legally-binding treaty and 196 Parties (countries) till date have signed the agreement. He briefly touched on 2003 Cartagena Protocol and 2010 Nagoya Protocol when ABS was first conceived and later came into force on 12.10.2014. He also mentioned that Nagoya - Kuala Lumpur and Supplementary Protocol on Liability and Redress to the Cartagena Protocol on Biosafety. He stated that Biological Diversity Act was enacted in 2002 on the lines of CBD to implement the provisions of the BD Act, the National Biodiversity Authority was established in October 2003 at Chennai with following objectives:-

- Conservation of biodiversity,
- Sustainable use of its components,
- Fair and equitable sharing of benefits arising out of the use of bioresources

He said that the Act extends to the whole of India and that the Act covers foreign nationals and entities, Indian nationals and entities and NRIs. NBA, SBBs and BMCs together form the institutional framework for biodiversity legal regime in India vis-à-vis International compliance. Each of them work in co-ordination with the other under the Act to perform their roles and functions. Next Sh. Ishwar Poojar discussed Section 3 comprising Foreign Companies accession the bioresources of the country and what provisions BD Act, 2002 has for them, provision regarding transfers of results were discussed under Section 4 and Intellectual Property rights and issues related were discussed under Section 6. He mentioned that cases pertaining to Sections 3, 4, and 6 of the BD Act, 2002 are directly handled by National Biodiversity Authority (NBA) Chennai whereas Section 7 of the Act comprising of Access and Benefit Sharing Provisions is looked after by concerned State Biodiversity Boards and Section 21 again engages NBA regarding ABS issues. Section 53 gives power to SBBs to look after benefit sharing provisions.

Next exemptions from ABS under BD Act were discussed. It was told that under Section 5 exemptions are provided for collaborative projects for research purposes and where no commercialization is being done. He also added that Section 7 exempts local practitioners, Vaid, Hakims, Amchis etc. for accessing the bioresources and using them in fact the Act encourages the Traditional Knowledge associated with bioresources found in a community from generations to be documented and conserved under Peoples Biodiversity Registers (PBRs).

Sh. Ishwar Poojar also discussed and explained about the Prior Informed Consent (PIC) and Mutually Agreed Terms (MAT) procedures. Next he discussed offences and penalties under section 3, 4, 6, 7 and 24 (2) of the Act. Exemption of Certain Biological Resources under the BD Act were discussed and it was told that any items including Biological Resources which are being used as Normally Traded as Commodities are exempted from the Act. Act provides exemption of certain activities from its purview were to local people and community for free access to use bioresources within India, to growers and cultivators, vaid and hakims (practitioners of traditional medicinal systems) to use bioresources, to biological resources, normally traded as commodities notified by the Central Government under section 40 of the Act, to collaborative research through government-sponsored institutes subject to conformity with guidelines and approval of the Central / State Governments and finally for research done by Indians within geographical boundaries of India are exempted. Guidelines on Access to Biological Resources and Associated Knowledge and Benefits Sharing Regulations, 2014 were discussed next and it was said that . Guidelines on Access to Biological Resources and Associated Knowledge and Benefits Sharing Regulations, 2014 have been notified on 21st November, 2014. The Regulation provides for legal certainty clarity and transparency simplified procedure to the Indian researchers / Govt. institutes to carry out basic research outside India, options of benefit sharing for different users, graded benefit sharing establishing supply chain from source to manufacturer upfront payment on high economic valued bioresources (Red sanders, Sandal etc.) and apportioning accrued benefits to the community/BMC. Benefit Sharing Component comprising commercial utilization, Transfers of results of research and Intellectual property rights were discussed next and it was told that entities commercially utilizing bioresources and earning gross ex-factory sale of upto rupees 1,00,00,000 are liable to share 0.1% of their benefit with the concerned BMC/BMCs, from rupees 1,00,00,000 to 3,00,00,000 the percentage share of benefit increases to 0.3% of their total earning gross ex-factory sale and if the benefit earned is more than 3,00,00,000 then the percentage share of benefit further increases to 0.5% of their total earning from gross ex-factory sale. In case of Transfer of results of research, the benefit sharing obligation is 3.0 to 5.0% of the monetary consideration. In the final section of presentation Benefit Sharing component with alternative option for commercial utilization was discussed and it was noted that Alternative option for commercial utilization where the trader sells the biological resource purchased by him to another trader or manufacturer, if he is a trader – the buyer to pay 1.0 to 3.0% of the purchase price and if he is a manufacturer – the buyer to pay 3.0 to 5.0% of the purchase price. If the buyer submits proof of benefit sharing by the immediate seller in the supply chain, the benefit sharing obligation on the buyer shall be applicable only on that portion of the purchase price for which the benefit has not been shared in the supply chain. It was further added that in cases of biological resources having high economic value such as sandalwood, red sanders, etc. - the benefit sharing may include an upfront payment of not less than

5.0%, on the proceeds of the auction or sale amount, as decided by the NBA or SBB, as the case may be. Finally if the sale is through auction, the successful bidder or the purchaser shall pay the amount to the designated fund, before accessing the biological resource.

Next Sh. Saurabh Sharma, Advocate Hon'ble Supreme Court of India and Legal Initiative for Forest and Environment (LIFE), New Delhi was requested to present his lecture. Sh. Saurabh Sharma started his talk by showing a video clip from NDTV news channel showing the case where in August 2012, two Czech nationals were arrested "for stealing insects" near the Singalila National Park in Darjeeling. In September, the two Prague-based entomologist Petr Svacha and his colleague Emil Kucera were convicted by a local court under provisions of Biological Diversity Act, 2002. By showing this clip he mentioned how powerful the BD Act, 2002 is how varied the scopes of this particular Act are.

During his talk he mentioned that India promulgated the Biological Diversity Act, 2002 (BD Act, 2002) on 05th February 2003 to operationalize the CBD, 1992. The objectives of the statute are as follows:

- Conservation of Biological Diversity
- Sustainable Use of its components
- Fair and Equitable Sharing of Benefits arising out of the use of biological resources and knowledge associated
- Matters connected and incidental thereto

Sh. Saurabh Sharma next described some important definitions under various sections and provided legal perspective, he stated that in Section 2(b): Biological Resources Means plants, animals, and micro organisms or parts thereof, their genetic material by products (excluding value added products) with actual or potential use or value, but does not include human genetic material, under Section 2 (f): Commercial Utilization means the end uses of a biological resource for commercial use such as Drugs; Industrial Enzymes; Food Flavours; Fragrance; Cosmetics; Emulsifiers; Oleoresins; Colours; Extracts; and Genes used for improving crops and livestock through genetic intervention. Conventional breeding and traditional practices in use in any agriculture, horticulture, poultry, dairy farming, animal husbandry and bee keeping are not commercial utilization as per Section 2(f) of the Act.

Another important definition he mentioned was Section 2(d): Bio-Survey & Bio-Utilisation which means that the survey or collection for any purpose of species, sub-species, genes, components and extracts of biological resources for any purpose is bio-survey and bio-utilization. This also includes characterisation, inventorization and bio-assay of biological resources and their components.

3-tier Institutional structure was described stating that at apex level is the National Biodiversity Authority (NBA) at State Level is the State Biodiversity Boards (SBB) and at local body level is the Biodiversity Management Committees (BMC). Functions of NBA under section 18 were described which were :

- ✓ Regulate grant of approval to foreign nationals and companies for access to bio-resources and associated knowledge
- ✓ Take measure to oppose the grant of IPR in any country outside India on any bio-resource obtained from India or knowledge associated with such bio-resource which is derived from India.
- ✓ Advise Cent Govt. on conservation, sustainable use and fair and equitable benefit sharing
- ✓ Advise State Govt. in selection of Biodiversity Heritage Sites
- ✓ Any activity necessary to carry out provisions of the Act

Functions of SBBs under Section 23 were described as under:

- ✓ Advise State Govt. on matters relating to conservation, sustainable use and fair and equitable sharing of benefits
- ✓ Regulate by granting approvals or requests for commercial utilization/bio-survey/bio-utilization for commercial utilization
- ✓ Any activity necessary to carry out provisions of the Act

Constitution of the BMC was described next and was said that BMC is to be constituted at the level of every local body within the area of its territorial jurisdiction Section 41 (1) of the BD Act, 2002 which is to be read with Rule 22 (1) of the BD Rules, 2004

Structure of the BMC was elaborated next mentioning that a BMC should comprise of Chairperson and not more than 6 persons nominated by the local body Chairperson to be elected by the BMC members in a meeting chaired by the Chairperson of the local body under Rule 22 (2) and Rule 22 (3) of the BD Rules, 2004

Main Responsibility of BMC was told next which was preparation of a People's Biodiversity Register (PBR) in consultation with local people which contains comprehensive information on availability and knowledge of local biological resources, their medicinal or any other use or any other traditional knowledge associated with them under Rule 22 (6) of the BD Rules, 2004

It was also mentioned that Collection of fees from any person accessing/collecting any biological resources within their territorial jurisdiction of BMC can be done. Mandatory Consultation with the BMC

by NBA & SBB while any decision relating to the use of biological resource within their jurisdiction pertains to Section 41 (3) of the BD Rules, 2004 and Section 41 (2) of the BD Act, 2002

The PBR Process was described next mentioning NBA Guidelines on PBR Preparation 2013 which incorporates 7 steps as under:

1. Formation of Biodiversity Management Committee (BMC)
2. Sensitization of the public about the study, survey and possible management
3. Training of members in identification and collection of data on biological resources and traditional knowledge
4. Collection of data.
5. Analysis and validation of data in consultation with technical support group and BMC
6. Preparation of People's Biodiversity Register (PBR)
7. Computerization of information and resources

Next in his talk Sh. Saurabh Sharma mentioned Regulating Access to Biological Resources & Persons covered. It was stated that Indian citizens, body corporates, associations or organisations which are registered or incorporated in India and not covered under Section 3 obtaining any biological resource Commercial utilization, bio-survey and bio-utilization for commercial utilization are covered under the Act.

For procedural provisions it was mentioned that persons covered under Section 7 shall have to give prior intimation to the concerned SBB, the form for such prior intimation may be prescribed by the State Government to the SBB further this form for prior intimation will be found in the State Rules and finally the SBB has powers to prohibit or restrict any such activity if its is detrimental to the provisions of the Act.

Appeals under Section 52 A were explained mentioning that:

- ❖ Any person aggrieved by a determination of benefit sharing or an order of the National Biodiversity Authority or a State Biodiversity Board under the Biological Diversity Act, 2002 may appeal before the National Green Tribunal, established under the National green Tribunal, 2010.
- ❖ All appeals to NGT shall be made as per provisions of the National Green Tribunal Act, 2010.

It was also stated that the notifications can be carried out by NBA regarding officers authorized to file Complaints under Section 61 (a). It was also mentioned that no court shall take cognizance of any offense under this Act except on a complaint made by the Central Government or any authority or officer authorized in this behalf by that Government; or any benefit claimer who has given notice of not less than 30 days in the prescribed manner, of such offense and of his intention to make a complaint, to the Central Government or the authority or officer authorized as aforesaid.

Threaten Species (TS) Section 38 was also covered and it was said that Section 38: The Central Government in consultation with the State Government, may from time to time notify any species which is on the verge of extinction or likely to become extinct in the near future as a threatened species and prohibit or regulate collection thereof for any purpose and take appropriate steps to rehabilitate and preserve these species

In the final part of his presentation Sh. Saurabh Sharma gave examples of cases and writ petitions files under BD Act, 2002. He started with the classic example of The Czech Nationals Case

Facts of the Case:

- ✓ In July 2008, two Czech nationals Petr Svacha and Emil Kucera arrested for collection of beetles and butterflies from the Singalila National Park, West Bengal
- ✓ In possession of more than 1500 specimens of butterflies and beetles, including the endangered *Delisa sanaca* at the time arrest.
- ✓ Violation of the Law:
- ✓ The Wildlife (Protection) Act, 1972: Sections 27, 28, & 29
- ✓ The Biological Diversity Act, 2002: Sections 3 read with Section 19
- ✓ Verdict in the Case:
- ✓ Petr Svacha was given a fine of Rs. 20,000
- ✓ Emil Kucera, was sentenced to 3 years imprisonment by the Chief Judicial Magistrate of Darjeeling & fine of Rs. 50,000

Another case of BMC Keoti Matter O.A. No. 06/2014 (CZ) was discussed and the facts of the case are as under:

- ✓ The BMC of Keoti Gram Panchayat, Rewa district had filed a case in the NGT, Central Bench making the following prayers:
- ✓ Declaration of Keoti Gram as a Biodiversity Heritage Site (BHS) u/s 37 of the BD Act, 2002 due to

- ✓ Ecological Fragility of the area, presence of dense forest, water fall and diversity of medicinal plants.
- ✓ Ecological value at stake: Illegal mining & construction in the name of 'tourism' – Environmental damage to Keoti Village Forests due to construction of Biodiversity Parks by State Govt.
- ✓ Immediate Stoppage of Construction activity and demolish construction already carried out .
- ✓ Notification of Species of Samavalli/Somlata, Morshikha and Patthar Chattha as Threatened Species (TS) u/s 38 of the BD Act, 2002: Payment of fees from those accessing/collecting biological resources from the Keoti Gram Panchayat u/s 41 (3) of the BD Act, 2002

Tribunal's Observations in this particular case was that there are no guidelines framed by the State Govt. for identification and declaration of areas as Biodiversity Heritage Site (BHS) and the manner in which the BMC can levy the charges by way of collection fees and how the funds are to be utilized for benefit sharing. Hence Tribunal's Directions were that given the absence of Guidelines, the Tribunal had reiterated its earlier directions that no mining of any sort, construction or alteration of habitat in any manner will be allowed in the area and the State to ensure the compliance of this direction strictly.

The State Government to devise comprehensive strategies to identify biodiversity rich sites and to protect and conserve such sites.

Next case discussed was of M/s Som Distilleries Pvt. Ltd. Vs. M.P. State Bio Diversity Board & Ors. (O.A. 62/2013, CZ). It was told that Madhya Pradesh State Biodiversity Board (MP SBB) in March-April 2013 had written to the NBA to issue uniform ABS guidelines to be used by the SBBs to regulate the collection of biological resources by Indian companies; thereby ensuring that companies pay benefit sharing to the SBB as well as BMC. However, with no clear response from the NBA, the Board issued notices to all companies using biological resource from their jurisdiction: Herbal Industries; Forest /Minor Forest Produce based industries; Sugar Mills, Distilleries, All Food Processing Industries, Soya Industries, Spinning/Gining/Textile Mills, Other Agro and Bio based Industries, Coal Mining Industries (Government. Semi Government and Private) and Industries using Coal Bio-resource (e.g. Cement and Steel Industries). The MP SBB had also written to the Forest Development Corporation, Minor Forest Produce Federation and Fisheries Department in the same regard. The notices highlighted that said company's extraction of raw material counts as "obtaining 'biological resources' for 'commercial utilization' as defined under the Act and thereby as per Section 7 read with Section 24 (1) requires the company to intimate the MP SBB through FORM 1 as prescribed in the MP Biological Diversity Rules, 2004 and pay Rs. 1000 as fees. Most importantly, in each of the notice it had asked to deposit 2% of their gross sales or gross revenue on financial year basis towards benefit-sharing in the Biodiversity Fund of

the state. Given the absence of prescribed guidelines, the Board had used the similar formula as adopted by NBA in of the agreements signed by it in 2009.

Given the issuance of notices by the MP SBB, 13 companies filed a case challenging the said notices issued by MP SBB in the NGT, Central Zone. Given that the major ground of contention was that the SBB had issued the notices without the ABS Guidelines being issues by the Central Government/NBA, the Tribunal had thereby directed the MOEF&CC and NBA to lay down standardised guidelines for ABS. Given the order of the Tribunal, the Guidelines on Access to Biological Resources and Associated Knowledge and Benefits Sharing Regulations, 2014 came into force on 21.11.2014

The decision held was that given the Guidelines dated 21.11.2014 framed by the MOEF&CC and NBA, the Tribunal vide its final order dated 17.12.2014 had set aside the earlier notices issued by the MP SBB and gave them the liberty to determine the case of each individual Applicant/Appellant afresh after taking into account the scheme of the Act, Rules as well as Regulations issued by the National Bio Diversity Authority under Section 64 of the Act of 2002.

The most interesting of all cases was the case by Eklahara BMC mentioning that coal is a 'bio-resource. Details of the case were: - Case by Eklahara BMC (O.A. No. 28/2013 (CZ) & O.A. No. 17/2014 (CZ) Coal is governed by MMDR Act, 1957 (Is coal a Bioresource). Given the arguments made by the BMC, the coal companies submitted that coal is governed by the provisions of Mines and Mineral (Development & Regulation) Act 1957 (MMDR Act 1957), which gives the Central government the sole statutory power to make rules regarding coal and levy charges. Given the above, the state government and its authorities have no competence and jurisdiction to levy any charges; such that, the state government can only levy royalty on the grant of mining lease and not in any other form. Given the provisions of MMDR Act 1957, categorisation of coal as a biological resource, would lead to a contradiction between the two statutes.

Coal is not a biological resource:

Given the primary contention of BMC that coal contains plant genetic material; the coal companies submitted that given the meaning of genetic material under Convention of Biological Diversity. i.e. "material of plan, animal, microbial or other origin containing functional unity of heredity"; the half-life of DNA (functional unit of heredity) is 521 years under ideal conditions (dried state, vacuum packed and frozen at about -80 C) and that coal traces its origin to 63-300 million years and its formation under conditions of under high temperature and pressure led to its conversion into a fossil and thereby has no plant genetic material present in them.

Arguments made by MOEF and NBA:

MOEF further presented opinions from Secretariat of Convention on Biological Diversity, Geological Survey of India and Zoological Survey of India to highlight that coal is not a biological resource.

The CBD has stated that biological resources as defined in the CBD deals with living organisms and that coal by no means is one. GSI stated that given the process of formation of coal, it is a geological resource rather than a bio-resource. The ZSI has reiterated the statement made by the CBD that in context of coal being a bio-resource, though the definition of biological resources is not exhaustive, the CBD and BD Act define bio-resources in terms of living resources and not of biological materials of dead or fossilised in nature. Further, it is stated by the ZSI that though Nagoya Protocol emphasizes fair and equitable sharing of benefits arising out of utilisation of genetic resources and that coal has a biological origin, it is devoid of any heritable genetic material, metabolic reactions and genetic expressions. Therefore, Coal doesn't fall under access and benefit sharing.

The contention made by the Applicant BMC and MP SBB that Coverage of coal under MMDR Act 1957 does not take away the right of the BMC to claim their right under BD Act 2002.

The Tribunal had concluded that:

Coal although indisputably of plant origin, does not in a fossilised form, after millions of years being buried under the earth, retain any genetic characteristics which can be linked to the plants, or to the vegetation from which the coal was originally formed. There is no scientific study to date which suggests that coal has a genetic structure and that it is similar to that of plants. It is a fossilized form though some of the chemicals like carbon are similar to those present in plants and that alone is not enough to suggest that coal by any stretch of imagination is biological in its character and configuration on the ground. That coal does not have any genetic structure and, therefore, is neither a genetic material nor a genetic resource and accordingly does not qualify to be called a biological resource, therefore, given that Coal is not a biological resources, the Coal companies are not liable to pay any fees for accessing or collecting coal from the area falling within the territorial jurisdiction of the BMC.

Dr. Murari Lal Thakur from State Biodiversity Board gave presentation on Access and Benefit Sharing (ABS) mechanism and its relevance in Himachal Pradesh. Conception and enactment of the Biological Diversity Act, 2002 was initially discussed. CBD its objective and objectives of the BD Act, 2002 were informed to the participants. Nagoya Protocol on ABS was discussed which is based on the fundamental principles of prior informed consent (PIC), Mutually agreed terms (MAT), official checkpoint. Benefit-sharing obligations were discussd which were:

- Domestic-level benefit-sharing measures will provide for the fair and equitable sharing of benefits arising from the utilization of genetic resources, as well as subsequent applications and commercialization, with the contracting Party providing genetic resources.

- Utilization includes research and development on the genetic or biochemical composition of genetic resources.
- Sharing is subject to mutually agreed terms.
- Benefits may be monetary or non-monetary such as royalties and the sharing of research results

Traditional knowledge associated with genetic resources with provisions on access, benefit sharing and compliance were also discussed. Next in the presentation information on ABS provisions under BD Act, 2002 were discussed. Afterwards Benefit Sharing Options and Economic Importance of Bioresources present in the State of Himachal Pradesh were informed to the participants. A brief information regarding Bio-resource based industries and their global market share was discussed. Next determination of benefit sharing, PIC & MAT options, certain activities or persons exempted from approval of NBA or SBB, Fair and equitable benefit sharing options and non-monetary benefits of ABS provisions were discussed. in the final part of presentation some examples of ABS from India were discussed.



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H.P. State Biodiversity Board
UNEP-GEF MoEFCC ABS Project

PROCEEDINGS ON:

**Awareness Advocacy Workshop on: Biological Diversity Act 2002, and its Access and
Benefit Sharing Provisions**

Conference Hall, Department of Law, Himachal Pradesh University, Shimla-5

25th August, 2017

Awareness Advocacy Workshop on: Biological Diversity Act 2002, and its Access and Benefit Sharing Provisions

Himachal Pradesh State Biodiversity Board (HPSBB) in coordination with the National Biodiversity Authority (NBA), Chennai is implementing a project, sponsored by UNEP/GEF MoEFCC (GoI) on strengthening the implementation of Biological Diversity Act, 2002 with focus on Access and Benefit Sharing (ABS) provisions under the Act.

The need to spread Biodiversity awareness is enormous in the context of successfully addressing Biodiversity Conservation problems, Biological diversity Act 2002 and rules 2004 address the same. It is also linked to biodiversity education for conservation as to sustainably use and protect valuable bioresources. On the one hand, awareness on Biological Diversity Act, 2002 creates greater awareness in individuals and communities with respect to putting environmental resources to use even while conserving them. On the other hand, greater the awareness increases especially within the line departments of the government, the scope of sustainable use and conservation practices for protecting our valuable biodiversity also increases. In order to conserve and sustain biodiversity of the State and to implement programmes and strategies related with biodiversity conservation at the state and national level it was realized that the Law departments of the state should be made aware about the provisions, scopes and role of Biological Diversity Act, 2002, so it was decided by HP State Biodiversity Board to make Law Department of Himachal Pradesh University aware about the role and scope of Biological Diversity Act, 2002. In this connection a one day training workshop for HP University, Law Department, comprising of Professors and law students was organized at HP University, Shimla under supervision of Sh. Kunal Satyarthi, Joint Member Secretary, Himachal Pradesh State Biodiversity Board. Prof. Girija Sharma, Dean of Studies, HP University was the guest of honor, Smt. Archana Sharma, Director, Environment Science & Technology, Govt. of HP was the Chief Guest, Prof Kamal Jeet Singh, Chairman, Deptt. of Law and Prof Sanjay Sandhu, Deptt. Of Law, HP University were present during the inaugural session of the workshop. Dr. Mustafa, IHCAP, Government of Switzerland, Dr. Sanjay Verma , JICA Project, Japan, Madam Michico, JICA Project, Japan and Prof. Raghivinder Singh, Director UILS were present during the training workshop. Scientists and officials from HP State Biodiversity Board attended the workshop and delivered the lectures.



Workshop was started with the welcome address by Prof. Kamaljeet Singh, Chairman Deptt. Of Law, HPU, Shimla. In his welcome address he laid stress on the importance of Biological Diversity Act, 2002 and its scope for the upcoming Law students.



Sh. Kunal Satyarthi, Joint Member Secretary, Himachal Pradesh State Biodiversity Board, enlightened the audience about the inception, importance and scope of Biological Diversity Act, 2002. Indian forest act, 1927, Wildlife Protection Act 1972 and Environment Protection Act, 1986, he briefly told that all offence under Biological Diversity Act 2002, are cognizable and non bailable and every biodiversity found in the local body has sovereign right over the Local biodiversity. he also told about ABS, Nagoya Protocol, Japan and Formation of Biodiversity management committees and Peoples biodiversity register formation.

Proff. Girija Sharma, Dean of studies, HPU, Shimla welcomed all the guests and audience. Importance of Biodiversity and need for its conservation was discussed during her talk. Onslaught of the machine age has caused worries causing lack of sensitivity towards nature. Gave examples as how the primitive societies and our ancestors have respected and conserved



nature during that time. The sensitivity towards nature is the need of hour and this feeling and sensitivity has to be inculcated in the young generation so as to make them better equipped and informed about the importance of nature and biodiversity. Needs of environment should be taught and awareness regarding conserving biodiversity

Ms. Archana Sharma, Director Env. Sc. & Technology, after welcoming all the guests and audience mentioned the importance of making law students aware about the Biological Diversity Act, 2002. She in her talk explained what Biodiversity is and made everyone



familiarized about the topic, she also mentioned how important it is to conserve our rich biodiversity. She explained how rural folks are dependent on resources arising from Biodiversity. She informed about the forest cover of the state and also mentioned about the endemic species of Himachal Pradesh. She also discussed about the NTFPs and the revenue that is generated from it. Medicinal

and aromatic plants and their importance were also told. She ended her speech by letting everyone know about the inception of Biological Diversity act and how sustainable use of bioresources was brought up. Earth summit and CBD were discussed and three tier system of Biological Diversity Act, 2002 i.e. Conserving Biodiversity, Sustainable use of its component and Fair and equitable Sharing of Benefits was also briefly discussed. She mentioned that it is of utmost importance to correctly interpret and apply Law and Act to ensure justice is done to its maximum limit. In the end she gave example of insect traders from national park where two Czech nationals were arrested “for stealing insects” near the Singalila National Park in Darjeeling. The two Prague-based entomologist Petr Svacha and his colleague Emil Kucera were convicted by a local court under provisions of Biological Diversity Act, 2002. By giving these examples she showed the scope, provision and power of Biological Diversity Act, 2002 and these examples also acted as the foundation for the presentations to follow later.

Dr. Sanjay Sindhu, Professor Department of Law presented the vote of thanks.

Sh. Kunal Satyarthi, Joint Member Secretary, HP State Biodiversity Board started his interactive presentation by showing an article published in a newspaper: Times of India on 7th September 2016 in which Baba Ramdev's firm Patanjali pledges to give 12 crore rupees to Uttarakhand Biodiversity Board for the bioresources they acquire from Uttarakhand for production of their products. He gave example of neighboring State of Uttarakhand stating that they have given notice to around 600 companies to comply with Biological Diversity Act, 2002 and share their benefits with the State Biodiversity Board and in return State Biodiversity Board will share 95% benefit with the local Biodiversity Committee from where the bioresource has initially been procured.

By giving many examples he explained that biodiversity is not just associated with medicinal plants and herbs found in wild but it covers everything except Normally Traded Commodities (NTC's) and other agriculture produce till the time some value addition is done e.g. cultivation of apple is not



applicable under BD Act, 2002 but if someone or some industry or firm is engaged in value addition by making some commercial product like jam or wine from apple then they do come under BD Act, 2002. Next he briefed about the status of global biodiversity and also told about the alarming rate (150 varieties of different species being lost every day) at which biodiversity is being wiped off from the face of earth.

Next he brought everybody's focus on Biological Diversity Act, 2002 and its provision. He briefed about how and why Biological Diversity Act was conceived he told that the international community's concern about the unprecedented loss of biodiversity emerged at the United Nations Conference on the Human Environment held in Stockholm in 1972. In 1987, the World Commission on Environment and Development enunciated the principle of "sustainable development" in its landmark report titled "Our Common Future" in which it observed that "humanity has the ability to make development sustainable to ensure that it meets the needs of the present generation without compromising the ability of the future generations to meet their own needs". "Sustainable development" became the theme of the United Nations Conference on Environment and Development (UNCED), held at Rio de Janeiro in June 1992. In November 1990, the United Nations Environment Programme (UNEP) began the first of seven negotiating sessions whose objective was to produce an international treaty on the conservation of biological diversity. The CBD was presented at the Earth Summit in Rio de Janeiro in

June 1992, where it was signed by 153 nations including India. The CBD came into force from the 29th of December 1993.

Biological diversity Act, 2002 came into existence much later than the other existing laws on environment such as the Indian Forest Act, 1927 , Wildlife Protection Act, 1972 , Environment Protection Act, 1986 etc. Government of India in 2002 decided to release its own draft on National Biodiversity Plan. The Act of 2002, based on this plan was passed by the Lok Sabha on 2nd December, 2002 and Rajya Sabha on 11th December, 2002.

He told that the Biological Diversity Act of 2002, and the Biological Diversity Rules, 2004 are implemented by National Biodiversity Authority (NBA) at the national level, State Biological Board (SBB) at state level and Biodiversity Management Committees (BMC's) at local levels. To assist NBA at centre and to advise them on matters exclusive and of particular interest to the biodiversity of the State, similar Boards have been established in States under Section 22 of the said Act. The powers and functions of the State Biodiversity Boards have been listed down in Section 24 and Section 23 of the Act. Some of the major functions of these authorities were discussed which are as follows:

- To regulate activities of, approve and advise the Government of India on matters relating to the conservation of biodiversity, sustainable use of its components and equitable sharing of benefits.
- To grant approval under Sections 3,4 and 6 of Biodiversity Act,2002
- To notify areas of biodiversity importance as biodiversity heritage sites under this act and perform other functions as may be necessary to carry out the provisions of the Act.
- To take measures to protect biodiversity of the country as well as to oppose the grant of intellectual property rights to any country outside or any biological resources obtained from India.

It was told that the National Biodiversity authority (NBA) deals with the requests for access to the biological resources as well as transfer of information of traditional knowledge to foreign nationals, institutions and companies. Through this way piracy of Intellectual Property Rights in and around India is prevented and it also saves the indigenous people from exploitation. Next Sh. Kunal Satyarthi explained everyone about the role and functions of Himachal Pradesh State Biodiversity Board (HPSBB). He said that HPSBB was constituted in the year 2006 and its administrative body consists of a Chairman, 5 ex-officio members, 5 expert members and secretarial staff. Next role and functions of Biodiversity Management Committee (BMC) was discussed. According to section 41 of the Biological Diversity Act states that every local body shall constitute a Biodiversity Management Committee (BMC) at this point it was elaborated that the three tier system of the Act comprising of NBA at center, SBB at State level and BMC at local/panchayat level works independently, have their own roles and responsibilities. Next he described the role of BMC's which is also to conserve Biological diversity, ensure sustainable use of its components and lastly there should be fair and equitable sharing of the benefits arising out of utilization

of biological resources. In the following presentation he went on describing about need and importance of Peoples Biodiversity Register (PBR); which are legal documents and database on biodiversity of any given area and he also described about Local Biodiversity Funds (LBFs). He described how PBRs as a legal document could play an important role in maintaining records on biodiversity related to a specific area and he also mentioned how LBFs would help in motivating and channelizing the whole process of making of PBRs. Next Biodiversity Heritage Site provision under the Biological Diversity Act, 2002, was discussed and how this would be able to help locals conserve their heritage site which they already have been doing from generations (Sacred Grooves) or they were not able to because of lack of initiative or incentive. Certain exemptions under Biological Diversity Act, 2002 and normally Traded Commodities (NTCs) were also discussed and explained.

Penalties related to breach to Biological Diversity Act, 2002, were discussed next and it was stated that: Firstly whoever contravenes or attempts to contravene or abets the contravention of the provisions of section 3 or section 4 or section 6 shall be punishable with imprisonment for a term which may extend to five years, or with fine which may extend to ten lakhs rupees and where the damage caused exceeds ten lakhs rupees such fine may commensurate with the damage caused, or with both. And secondly whoever contravenes or attempts to contravene or abets the contravention of the provisions of section 7 or any order made under sub-section (2) of section 24 shall be punishable with imprisonment for a term which may extend to three years, or with fine which may extend to five lakhs rupees, or with both. In addition it was told that the offences under this Act shall be cognizable and non-bailable. This clause stipulates that the Central Government may give directions to the State Governments for execution any of the provisions of this Act.

Next presentation was given by Dr. Murari Lal Thakur, State Project Coordinator (SPC) of UNEP-GEF MoEFCC ABS Project in HP State Biodiversity Board (HPSBB). During his presentation he laid stress and provided information to media on Access and Benefit Sharing (ABS) mechanism and its relevance in Himachal Pradesh. During his presentation he gave information on how Biological Diversity



Act came to existence. He gave information on role, functions and duties of SBB and BMCs. Further he provided information on economic importance of bioresources specific to State of Himachal Pradesh. He gave information on bioresource based industries in Himachal and bioresources associated with industrial usages. Later on he explained the Access and Benefit Sharing mechanism and its provisions stating that ABS is Accessing of biological resources, sharing of benefits

between users and Providers. The fair and equitable sharing of the benefits arising out of the utilization of genetic resources is one of the three objectives of the CBD and the CBD in its Article 15 sets out principles and obligations of parties related to Access to genetic resources and the fair and equitable sharing of benefits arising out of the utilization of genetic resources, on the basis of Prior Informed Consent (PIC) and Mutually Agreed terms (MAT). He also explained what PIC and MAT is, he told that the permission given by the competent national authority of a provider country to a user prior to accessing biological resources, in line with an appropriate national legal and institutional framework is Prior Informed Consent (PIC) and an agreement reached between the providers of biological resources and users on the conditions of access and use and the benefits to be shared between both parties is termed as Mutually Agreed terms (MAT).

Citing some examples of ABS from India he mentioned the success story of the Kani tribe of Kerala for its Access and Benefit Sharing (ABS) model. He also briefed about transferring the Results of Research to Foreign Nationals, Companies, Non-resident Indians for commercial purposes or otherwise and related procedures. In the last part of his presentation he gave information on main industries using biological resources, few popular products driven from Bioresources and Bio-economics of some important medicinal herbs of the State.

Glimpses of the Event









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H.P. State Biodiversity Board
UNEP-GEF MoEFCC ABS Project

PROCEEDINGS ON:

“Interactive dialogue/workshop on traditional knowledge associated with
the biological resources and Biological Diversity Act, 2002”

24th June, 2017
At: ADC, Conference Hall, Kaza H.P.

Himachal Pradesh State Biodiversity Board (HPSBB) in coordination with the National biodiversity Authority (NBA), Chennai is implementing a project, sponsored by UNEP/GEF MoEFCC (GoI) on strengthening the implementation of Biological Diversity Act, 2002 with focus on Access and Benefit Sharing (ABS) provisions under the Act. In connection to the activities of the HP State Biodiversity Board and UNEP/GEF MoEFCC ABS project documentation of traditional Knowledge (TK) associated with the biological resources is one of the main targets under component-2 of the project.

Considering all the unique features of the State biodiversity its conservation needs utmost and immediate concern of all the stakeholders who are deriving benefits either directly or indirectly from it. Tribal region of Himachal Pradesh like Lahaul & Spiti are most enchanting and beautiful of all. The unique, rich and extraordinary terrain, culture and heritage and numerous valuable bioresources found in the region makes it an exceptional district of the State. Traditional knowledge associated with these bioresources has been gathered or accumulated by the tribal communities of Lahaul and Spiti through years of experience, it is often tried and tested over long period of time, it is also well adapted to local culture and environment, the main emphasis of it is on minimizing risks for the community rather than maximizing profits. Traditional knowledge is deep rooted in the tribal community across Lahaul & Spiti. Such kind of knowledge system is vital for well being of the society and for sustainable development. The traditional knowledge system has been developed by the communities to conserve and utilize the biological diversity of their surroundings and they also intelligently conserve the local biodiversity simultaneously. There are numerous sources of TK hidden in the villages and community in tribal regions especially in Lahaul and Spiti. The main sources here are: farmers, community leaders, elder person's, folklore, ancient records and Vaid and Hakims

But today the main concern is regarding depletion of our Traditional Knowledge and practices related to bioresources; hence there is a strong urge to protect the Indigenous Traditional Knowledge for which HP State Biodiversity Board planned an interactive dialogue/workshop on traditional knowledge associated with the biological resources at ADC Conference Hall, Kaza, Spiti on 24.6.2017 with the aim to improve the livelihoods of TK holders and communities, as TK is a valuable asset to indigenous and local communities who depend on TK for their livelihood, as well as to manage and exploit their local ecosystem in sustainable manner. The workshop also highlighted how protecting TK would help in improving the economic state of the rural community and eventually the whole State of Himachal Pradesh. The dialogue/workshop also covered the need to conserve the environment by spreading awareness on the conservation issues and by letting the rural/tribal community know about the incentives that can be driven by different sustainable agricultural practices, conserving biodiversity and protecting Traditional knowledge associated with them.

The dialogue/workshop was carried under supervision of Sh. Kunal Satyarthi, Joint Member Secretary, HP State Biodiversity Board along with officials from the HP State Biodiversity Board, Panchayati raj Department, Kaza, line departments and H.P. Forest Department. Around 150 persons in Kaza comprising of Panchayat Pradhans of 13 panchayats of development block Spiti, BDC members, Zila Parishad members of Spiti, 5 N.G.O's of Spiti, officers and officials of District administration and line departments at Kaza and at least 5 TK holders from each panchayat participated in the programme.





The inaugural session was coordinated by Sh. B.S. Rana Director, FTI, Chail (CCF) and Dr. Murari Lal Thakur, State Project Coordinator, HPSBB. Dr. M.L. Thakur gave presentation on Preservation of Traditional Knowledge Associated with Biological Resources under the Biological Diversity Act, 2002. By laying down stress on need for conservation and

Documentation of Traditional Knowledge associated with state specific bio-resources he mentioned that Knowledge, innovations and practices of indigenous and local communities which are Developed from experience gained over the centuries and adapted to the local culture and environment and is transmitted orally from generation to generation bears a lot of importance and should be conserved as such knowledge available today is quite less and hence there is a need for its documentation which would also help to conserve such vital information. Dr. ML. Thakur in his presentation also mentioned that TK tends to be collectively owned in the form of: stories, songs, folklore, proverbs, cultural values, beliefs, rituals, community laws, local languages, and agricultural practices, including the development of plant species and animal breeds. Traditional knowledge is mainly of a practical nature, particularly in such fields as agriculture, fishing, health, horticulture, and forestry. TK is being tapped as a resource by modern industry, thus indigenous and local communities have great opportunities in equitable share of the benefits of the use of their traditional knowledge. It was mentioned that 2753 communities, their geographical distribution, farming strategies, food habits, subsistence strategies and cultural traditions are available in the country out of which there are different types of TK like: Religious traditions including



temple forests, monastery forests, sanctified and deified trees, Traditional tribal traditions including sacred forests, sacred groves and sacred trees, Royal traditions like royal hunting preserves, elephant forests, royal gardens etc. Livelihood traditions like forests and groves serving as cultural and social space and source of livelihood products and services. Mentioning

importance of TK it was stated that TK also acts as a life supporting system as it acts as the basis for wellbeing and livelihoods of the indigenous communities. Herbal medicine dates back as far as the Indus

Valley civilisation in 2600 BC and Ayurvedic medicine developed by local people are still used today. He gave example of tea used in High altitude areas which is rich in ephedrine useful in kidney hormone disorders. Economic gains from TK were discussed next and it was mentioned that Industries using TK (biological resources) in modern times like food industry, the pharmaceutical industry and the cosmetic industry are earning a huge chunk of money from the knowledge derived from TK which is being translated into commercial benefits by providing leads for development of useful products and processes. The valuable leads provided by TK save time, money and investment of modern biotech industry into any research and product development. Hence, a share of benefits must accrue to creators and holders of TK. Only new knowledge can be patented (Patents only apply to inventions, not to existing knowledge). But if knowledge is held only in oral form, then many IPR regimes, do not consider oral knowledge as proof of previous documentation and therefore such knowledge is in danger of being patented. TK associated with agricultural practices and their importance was discussed next. It was mentioned that Traditional knowledge of Agro-biodiversity of at least 166 species of crops and 320 species of wild relatives of crops are known to have originated in India. In case of rice, 50,000-60,000 are reported to have been grown in India in the recent past. The much popular high yielding "pattambi varieties" of rice had received many valuable genes from the local paddy varieties that were conserved by the tribals. Next Biopiracy associated with Traditional Knowledge was discussed. It was told that according to Traditional Knowledge Task Force, Department of AYUSH (MoHFW) 374 (49%) of the 762 US patents (medicinal plants) were found to be based on traditional knowledge. Examples of Neem, Turmeric and basmati rice were also discussed. For conservation of such vast and scattered knowledge wealth it was told that for its conservation Traditional Knowledge Digital Library (TKDL) was formed with an effort towards defensive protection of Indian traditional knowledge. The documentation of traditional knowledge available in our ancient texts is being undertaken by NISCAIR (a CSIR lab), in the form of a computerized database, Traditional Knowledge Digital Library (TKDL). TK under Biological Diversity Act, 2002 was also discussed highlighting how this act helps in conservation of TK. In the last part of presentation Traditionally important medicinal and aromatic plants in temperate & alpine region of Himachal Pradesh were discussed and information available for these bioresources were discussed.

Next Sh. Kunal Satyarthi, Joint Member Secretary, HP State Biodiversity Board delegated and started his presentation informing and by imparting knowledge related to Biological Diversity Act, 2002, and its Access and Benefit Sharing Provisions to all participants. During the informative presentation cum



lecture, Sh. Kunal Satyarthi interactively presented many cases related to BD Act by showing news clipping from Times of India newspaper in which it was mentioned that in August 2012, two Czech nationals were arrested “for stealing insects” near the Singalila National Park in Darjeeling. In September, the two Prague-based entomologist Petr Svacha and

his colleague Emil Kucera were convicted by a local court under provisions of Biological Diversity Act, 2002. Next in his presentation he showed some pictures of different varieties of brinjal, rajmah (pulse) and rice that was once found in the State and showed his concern that today out of many varieties found once now only very few are available, which shows the loss that biodiversity of the State has faced.

By giving these examples he explained that biodiversity is not just associated with medicinal plants and herbs found in wild but it covers everything except Normally Traded Commodities (NTC's) and other agriculture produce till the time some value addition is done e.g. cultivation of apple is not applicable under BD Act, 2002 but if someone or some industry or firm is engaged in value addition by making some commercial product like jam or wine from apple then they do come under BD Act, 2002. By giving these examples Sh. Kunal Satyarthi showed the scope, provision and power of Biological Diversity Act, 2002.

Next he briefed about the status of global biodiversity and also told about the alarming rate (150 varieties of different species being lost every day) at which biodiversity is being wiped off from the face of earth. Next he brought everybody's focus on Biological Diversity Act, 2002 and its provision. Next he briefed about the inception of the BD Act how it came into force he mentioned that in 1987, the World Commission on Environment and Development enunciated the principle of "sustainable development" in its landmark report titled "Our Common Future" in which it observed that "humanity has the ability to make development sustainable to ensure that it meets the needs of the present generation without compromising the ability of the future generations to meet their own needs". "Sustainable development" became the theme of the United Nations Conference on Environment and Development (UNCED), held at Rio de Janeiro in June 1992. In November 1990, the United Nations Environment Programme (UNEP) began the first of seven negotiating sessions whose objective was to produce an international treaty on the conservation of biological diversity. The CBD was presented at the Earth Summit in Rio de Janeiro in June 1992, where it was signed by 153 nations including India. The CBD came into force from the 29th of December 1993.

The objectives of the Act were described next by Sh. Kunal Satyarthi which were:

1. Conservation of Biological diversity
2. Sustainable use of its components
3. Fair and equitable sharing of the benefits arising out of utilization of biological resources.

He told that the Biological Diversity Act of 2002, and the Biological Diversity Rules, 2004 are implemented by National Biodiversity Authority (NBA) at the national level, State Biological Board (SBB) at state level and Biodiversity Management Committees (BMC's) at local levels. To assist NBA at centre and to advise them on matters exclusive and of particular interest to the biodiversity of the State, similar Boards have been established in States under Section 22 of the said Act. The powers and functions of the State Biodiversity Boards have been listed down in Section 24 and Section 23 of the Act. Some of the major functions of these authorities were discussed which are as follows:

- To regulate activities of, approve and advice the Government of India on matters relating to the conservation of biodiversity, sustainable use of its components and equitable sharing of benefits.

- To grant approval under Sections 3,4 and 6 of Biodiversity Act,2002
- To notify areas of biodiversity importance as biodiversity heritage sites under this act and perform other functions as may be necessary to carry out the provisions of the Act.
- To take measures to protect biodiversity of the country as well as to oppose the grant of intellectual property rights to any country outside or any biological resources obtained from India.

It was told that the National Biodiversity authority (NBA) deals with the requests for access to the biological resources as well as transfer of information of traditional knowledge to foreign nationals, institutions and companies. Through this way piracy of Intellectual Property Rights in and around India is prevented and it also saves the indigenous people from exploitation. Next Sh. Kunal Satyarthi explained everyone about the role and functions of Himachal Pradesh State Biodiversity Board (HPSBB). He said that HPSBB was constituted in the year 2006 and its administrative body consists of a Chairman, 5 ex-officio members, 5 expert members and secretarial staff. Next role and functions of Biodiversity Management Committee (BMC) was discussed. He described the role of BMC's which is also to conserve Biological diversity, ensure sustainable use of its components and lastly there should be fair and equitable sharing of the benefits arising out of utilization of biological resources. In the following presentation he went on describing about need and importance of Peoples Biodiversity Register (PBR); which are legal documents and database on biodiversity of any given area and he also described about Local Biodiversity Funds (LBFs). He described how PBRs as a legal document could play an important role in maintaining records on biodiversity related to a specific area and he also mentioned how LBFs would help in motivating and channelizing the whole process of making of PBRs. Next Biodiversity Heritage Site provision under the Biological Diversity Act, 2002, was discussed and how this would be able to help locals conserve their heritage site which they already have been doing from generations (Sacred Grooves) or they were not able to because of lack of initiative or incentive. Certain exemptions under Biological Diversity Act, 2002 and normally Traded Commodities (NTCs) were also discussed and explained. Penalties related to breach to Biological Diversity Act, 2002, were discussed and in the final part of his presentation the importance of documentation of Traditional Knowledge associated with the state specific bioresources were elaborately discussed.



The Final presentation depicting Himachal Pradesh Biodiversity and its related issues and concerns was presented by Dr. Pamkaj Sharma, Consultant for State Centre for Climate Change. Biodiversity of Himalayan region in particularly related to Lahul and Spiti was elaborately discussed.

It was brought forward that The Himalaya is among

the Mega Biodiversity Hot Spots and best habitats for medicinal plants, supports a large number of medicinal plants. IHR extends from J & K (North) to Arunachal Pradesh (East) covering an area of 4,19,873 km² with large altitudinal range (200-8,000m). It was mentioned that Himalayan region is well known for unique and socio-economically important biodiversity. 21 forest types; Represents tropical, sub-tropical, temperate, sub-alpine & alpine vegetation are present in this region and it supports 18,440 plant species & > 30,000 species of fauna, 1748 medicinal plants, 675 wild edibles, 118 essential oil yielding MPs, 155 sacred plants and 279 fodder species. Next conservation and management practices related to conservation of Biodiversity was discussed. Different types of habitats and community types were also discussed. Native and endemic species of medicinal and aromatic plants were also discussed along with their valuable uses and need for their conservation. In the final part of the presentation need for conserving these native varieties of medicinal and aromatic plants were discussed.