



सत्यमेव जयते



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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 other 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 led 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 earn 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.