



**Report On
One Day Cross Sectoral Policy and Integration Workshop on
Biodiversity Conservation: Common Goals, Shared
Responsibilities, Multiple Policies**

*Strengthening the Implementation of the Biological Diversity Act and Rules
with Focus on its Access and Benefit Sharing Provisions
(UNEP-GEF-MoEF&CC-ABS Project)*

**16 June, 2016
Ranipool, East Sikkim**

Organized By



**SIKKIM BIODIVERSITY BOARD
Forests, Environment and Wildlife Management Department
Government of Sikkim**

ONE DAY CROSS SECTORAL POLICY AND INTEGRATION

WORKSHOP

Concept Note

It is apparent that increased demand for food and raw materials, unregulated tourism, globalization, trade liberalization, etc. has largely affected the biodiversity and the associated traditional knowledge through bio-piracy and/or introduction of exotic species taking into account the rural development and livelihood. The BD Act alone cannot achieve the objectives of biodiversity conservation, its sustainable use and fair and equitable sharing of benefit arising out of its use. A great need is felt to harmonize BD Act 2002 with other sector's policies and to identify and implement measures to enhance cooperation and coordination of policies and programmes among sectors especially with that of Agriculture, Horticulture, Animal Husbandry, Forest, Wildlife, Tourism, etc. to attain the objectives of the Act.

Further, several ongoing researches / projects in the state on biodiversity / bio-resources and associated traditional knowledge has also directly and indirectly influenced the biodiversity conservation policies and these needs to be streamlined under the provision of Sikkim State Biological Diversity Rules 2006.

Hence, **One Day Cross Sectoral Policy and Integration Workshop on “Biodiversity Conservation: Common Goal, Shared Responsibilities, Multiple Policies”** was organised with the aim to brainstorm and

1. Identify ways of coordination, cooperation or integration of other sector's policy with BD Act 2002,
2. Enhance understanding of how policies and strategies developed in other sector can aid in effective implementation of BD Act 2002 in the State,
3. Analyse the issue of research, bio-piracy, illegal trade, commercialization especially concerning the biodiversity / bio-resources and associated traditional knowledge,
4. Explore examples of cross-sectoral networks, processes and partnership.

One day **Cross Sectoral Policy and Integration Workshop on Biodiversity Conservation – Common Goals, Shared Responsibilities, Multiple policies** under UNEP-GEF-MoEFCC-ABS Project was organized at Mayfair Resort, Ranipool on 18.06.2016 by Sikkim Biodiversity Board. The programme was attended by Principal Secretaries / Secretaries, Principal Directors / Directors of the line Departments, Scientists from various institutes, NGOs, Board Members, BMC Members, local entrepreneurs, ITBP officials, ADC (East) and Senior Officers of the Forest, Environment and Wildlife Management Department.

The programme started with offering of Khadas by the Member Secretary to the respected dignitaries and the Board Members and lighting of ceremonial lamp.

Following the welcome address by Mrs. Usha Iachungpa (AD cum State Project Coordinator) to the dignitaries and the participants to the workshop, Executive Chair to the Board and the





researchers and companies are expected to comply with benefit sharing principles in the event of accessing community resource or knowledge for commercialization and must take their PIC and undergo MAT. He added that BD Act is to regulate the use of bio-resources and not to impose restrictions.

Talking about the Sikkim State Biological Diversity Rules 2006, which is notified using the power conferred under Section 63 of the Act, he said that any person intending to do research or commercialize the biodiversity/bio-resource in Sikkim should intimate Sikkim Biodiversity Board. He clarified that though intimating the Board by the Indian researcher is not in consonance with the BD Act 2002; however, it is done on the interest of the state and its people and to safeguard our rich biodiversity.

Member Secretary also enlightened the participants about the recently notified ABS Guidelines of 2014 and its benefit sharing mechanism. At the end, he stressed that Line departments must comply by MTA of the Nagoya Protocol while introducing exotic species (plant or animal) in the Country / State and ensure to go through Pre Entry Quarantine (PEQ) of the biological materials; they also need to intimate SBB while bringing in the bio-resource / biodiversity (plant or animal) from other states, for record as well as for the welfare of the state.

Presentation 2: Wildlife Policy / Act

Presenter: Mr. CS Rao IFS, CCF-T cum CWLW (FEWMD)



Mr. CS Rao, congratulating the SBB for organizing the very important workshop, shed light on the Wildlife (Protection) Act, 1972 and its different provisions, Conventions and Treaties supporting the wildlife protection and initiatives taken by the state government for biodiversity conservation through wildlife sector in detail. In his presentation, Mr. Rao said that, WPA 1972 accord protection to the wildlife of the country at different level through declaration of National Parks and Sanctuaries, declaring many of the wildlife

as protected and including them in list of Schedule species, provisioning stringent punishment and penalties to the offenders, prohibiting hunting, etc. At the same time, he said that there is a provision in the Act (Section 7) which gives power to the CWLW to take immediate action without taking consent of the Government and issue order to kill those animals, even listed in the Schedule I (most protected), which are threatening the human life or are diseased or are causing damages to the properties. According to Mr. Rao, the major drawback in the Act is that there is no provision to deal with wildlife crime associated with endangered wildlife of foreign country.

In his presentation, he also highlighted about the various initiative of the state government to conserve the rich biodiversity of the state such as continuous effort to include some of the



In his presentation, Mr. Karma also shed light on some of the points of State Environment Policy 2000 (SEP) which are conflicting with the BD Act 2002. For example, SEP talks about providing sustainable livelihood to the tribal population and other forest dwellers belonging to non-tribal communities but there is no clear mention in the Policy about what kind of usufruct sharing should be there. Similarly, the SEP focuses on managing only the Goucharan and Khasmal forest through JFMC which is very meagre in terms of total geographical area (5.48%). Hence it is necessary to extend the excess right of JFMC to the reserve forest areas if the department really intend to involve local communities in forest management. Mr. Karma added that the SEP also talks about enhancing the carrying capacity of the forest by banning grazing in the forest area, etc., which will pose serious threat to the traditional livelihood option of large population of the state and this needs major re-thinking.

Mr. Karma also talked about the State Forest Policy and its different provisions in his presentation. At the end, he insisted that there is a need to have adequate resources, provide equal opportunities and capacity building of the forest field staffs for proper implementation of the forest and wildlife related policies in the state. At the same time, he added that forest field officers are part of the BMC constituted under the provision of BD Act 2002 by the Sikkim Biodiversity Board, hence, they need to be fully sensitized regarding the Act as well as their roles and responsibilities for its effective implementation in the State.

Open House Discussion

Dr. HK Badola, Scientist F (GB Pant Institute) pointed out the quarantine issue and said that, particularly giving the example of large cardamom, large amount of planting material were brought in to the state in the past and this might have possibly lead to the spread of disease in large cardamom today. Therefore PEQ is very important for ensuring that the biological material which is entering the state is disease free. He added that quarantine is a systematic process and time consuming; it requires periodic assessment and re-assessment before certifying any biological material to be disease free and is ready for introduction in the state or released in the wilderness. He further said that the quarantine is limited not only to large cardamom but it will be applicable for other biological materials too. Hence, the SBB and FEWMD together must take this issue ahead, he added.

Responding to Dr. HK Badola, Member Secretary (SBB) Mr. Gurung said that it is the responsibility of the individual to ensure that he brings in the biological materials after going through PEQ; it is not the responsibility of any of the state department to facilitate quarantine.

Dr. Shanti Kumar Singh, Scientist (RCIBSD): Do an entity has to intimate SBB for bringing in / taking out the soil sample to / from the state?

Answering to the query, **Board member Dr. Ghanashyan Sharma** made it clear that since soil contains micro-organisms, it comes under the purview of Sikkim State Biological Diversity Rules 2006; hence an entity must intimate the Sikkim Biodiversity Board.

Dr. Bhoj Kumar Acharya, Board Member and Associate Professor (Sikkim University): Whether National Forest Conservation Act 1927 and 1980 implemented in the State? If so, how they go in line with Sikkim Forest Act 1988?

Answering to the query, Mr. Karma Legshay informed that Forest Conservation Act 1980 is implemented in the State and is different from the Sikkim Forest Act 1988 in a way that former deals with divergence of forest land while latter deals with forest in the state; however, both the Acts runs in harmony with each other.

Sum-up of the presentations

Dr. Anil Mainra

While thanking all the presenters for enlightening the participants on legal issues on biodiversity conservation, the chair to the technical session I, Dr. Anil Mainra said that legal provisions make the foundation for protecting the biodiversity. The BD Act 2002 is enacted with three major objectives: biodiversity conservation, sustainable use of its components and benefit sharing with the local communities and Sikkim has adopted the Act in 2006 and notified Sikkim State Biological Diversity Rules in 2006. Since then we have made progress and have constituted quite a few number of BMCs in the state but there is a need to share the information amongst all including the intellectuals. Dr. Mainra further said that we all have to understand that how the benefit of preserving the biodiversity can accrue to the BMCs and whatever resource is being used in any form, when there is use of biodiversity, some portion of profit should go to the local communities. Citing the example of Kanni tribe of Kerala, the chair said that arrangement have been made for benefit sharing between the tribe and the pharmaceutical companies which are manufacturing drug using their traditional knowledge and bio-resources. That kind of mechanism needs to be developed in Sikkim because our state is rich in biodiversity and the associated traditional knowledge and so many healers are still practicing this traditional healing system in the state. Talking about the legal provisions, he said that BD Act is very stringent and non-bailable warrant can be issued if the entity is booked under the Act. Hence, it is mandatory for everyone to take the consent of the state biodiversity board if intend to commercialize any bio-resource of the state.

In regard to WPA 1972, he said that there are certain weaknesses in the Act like plant genetic resources are being ignored and benefit sharing mechanism is not there and that is why BD Act has been enacted in 2002 to take care of the those issues.

Appreciating the enlightening presentation made by Mr. Karma Legshay, the chair highlighted the issues of grazing and said that the subject was addressed by the state government long way back in 1998 and this has led to tremendous change in the biodiversity in the state. Sharing his personal experiences, he said that prior to ban on grazing, very few bird species used to be seen that too inside the forest but now we can see enormous number of bird species everywhere and this is due to the timely taken decision and imposing of ban on grazing policy of our visionary Chief Minister Shri Pawan Kumar Chamling.

The increase in number of bird species is also attributed to the organic farming policy of the state government, he added. According to him, due to consumption of crop disinfected with pesticide or insects infected with pesticides earlier, the vital organs of the bird used to get affected and this way birds were eliminated. As per the chair, the biological system is very complex and is much interdependent on each other so it becomes very difficult to predict the kind of impact our present activity will have in the future years to come.

Dr. Mainra also raised the issue of invasive species and said that we have to be very careful while introducing any genetic resources (whether plants or animals) from other regions into the state. He cited an example of *Hedygium* species which was introduced from this part of the world long back as garden plant, perhaps from Sikkim, has become invasive and causing immense problem in Hawaii and New Zealand. Currently, huge sum of money is being spent by the government of those countries for identifying its biological control in Sikkim. Therefore, we must ensure that any biological resource which we are introducing doesn't affect the local biodiversity in the longer run.

Mr. Nima Wangdi Tamang, Co-chair of the technical session I, said that BMCs, which have been constituted under the provision of BD Act 2002 needs to be sensitized regarding the Act, ABS, their roles and responsibilities, etc. Unless they know for what the BMCs have been constituted, it will be difficult to implement the BD Act 2002 at local level. The FEWMD has taken good initiative of legalising the collection of *Ohicordyceps sinensis* in the state; it is a good opportunity for BMC to practically test the ABS process.

Talking about wildlife sector, he informed that the FEWMD has recently distributed Rs. 36.0 Lakhs as *ex-gratia* payment to the victim of the human-wildlife conflict and in order to prevent this in the future, the FEWMD is laying solar fencing in the fringe villages of the protected areas and has already completed the same in Kitam Bird Sanctuary in South Sikkim which have been much appreciated by the local communities. Adding to the human-wildlife conflict issue, he said that though the WPA 1972 has given power to CWLW to issue an order to kill the animals which are causing menace in the villages; nevertheless, it becomes difficult for the CWLW to give such order as the animal right activists make unnecessary issues out of it. The Co-chair also informed that the state government has taken positive initiative of creating Local Trust Fund (LTF) from collected entry fee; 70% of which will go back to EDCs and 30% will be retained by the FEWMD for the management of the Protected Areas (PAs). The creation of LTF is very encouraging for EDCs because once they start getting fund; they will be motivated to dedicate more of their time in managing the PAs.

As far as Sikkim Forest Act is concerned, there are some confusion regarding private state forest and the custodian of the forest along state highway which needs to be clarified, he added.

TECHNICAL SESSION II

Chair: Mr. Zangpo Bhutia, Secretary (Tourism & Civil Aviation Department)

Co-Chair: Mr. CS Rao IFS, CCF-T cum CWLW (FEWMD)

Rapporteur: Miss Sonam Norden Bhutia SFS, ACF – KNP (FEWMD)

Presentation 1: Policies of Agriculture and Horticulture Department: Common goal shared responsibilities

Presenter: Mr. PT Bhutia, Director (Horticulture and Cash Crops Dev. Deptt.)

Mr. Bhutia represented two departments i.e., Food Security and Agriculture Development Department and Horticulture and Cash Crop Development Department and focussed his presentation on the different initiatives of the State Government to promote organic farming, round year crop production, judicious utilization of cultivable land, conservation of natural



Cabbage cultivation at Perbing, South Sikkim



Carrot cultivation at Tarey Bhir, South Sikkim



Buckwheat Field



3. Ensure the ecological and environmental sustainability of the livestock sector growth and modernisation

The speaker also highlighted on the strategic framework adopted in the state for achieving the above goals and encouraging the rural people to adopt livestock farming, such as

1. Equip and empower the small producers with information and skills to maximise returns through awareness programmes, vaccination campaigns, providing veterinary services which help the farmers to improve their day to day livestock management, sensitizing them regarding endo and ecto parasites, de-worming, by addressing mineral deficiency of the livestock, innovative feeding practices because importing of feeds from outside is banned in the state, capacity building, etc.;
2. Promote and nurture grass roots level organizations all over the state, as the link between the department and the small holders through motivation, skill trainings, extension coordination and value addition;
3. Promote adoptions of advanced technologies, encourage and support their application for productivity enhancement by adopting breeding policy for cattle, goats and pigs; conserving the endangered local indigenous “Siri or Pade” cow (for which 03 conservation zone has been notified in south, east and west districts), goat (Singhari), sheep (Gharpala and Banpala) and Yak (Haazi);
4. Serve as a protective armour around small producers and their subsistence farming systems;
5. Encourage growth and modernisation of the State Livestock Sector in a well-balanced format by encouraging the farming of neglected animals like sheep, goat and pig.
6. Direct action by the government in Disease Control & Healthcare Plan through disease surveillance, sample collection or PEQ of the livestock at the check posts, vaccination and de-worming, setting up disease investigation labs, etc.



7. Credit facility to livestock farmers for upgrading their social status from below poverty line to above poverty line
8. Ensuring ecological and environmental sustainability through the introduction of large number of high yielding cattle, goat, pigs and desi fowl which have potential to generate employment in addition to food production
9. Dealing with epidemiological situation of rabies through awareness generation regarding timely and appropriate post exposure treatment, birth control of canines, providing trainings to the professionals including the health experts, ensuring availability of vaccines and anti-sera, strengthening diagnostics capabilities of the staffs, ensuring the involvement of NGOs and local community during the time of epidemic, etc.

During the presentation, Dr. Bhutia also highlighted on the medicinal properties of the milk from the indigenous cattle. He also threw light on the conflicting issues between policies of Forest and Animal Husbandry by citing an example of “Happy Animal” concept. According to Dr. Bhutia, the animals are not to be kept tied up; rather they should be set free. So he requested the Forest Officials to re-visit the ban on grazing policy and allow restricted grazing in some areas because grazing always does not have negative impact but it also does have some positive results.

Open House Discussion

Dr. Thomas Chandy, appreciating both the presenter and the department for their effort on conserving germplasm of agriculture, horticulture and livestock diversity of the state, highlighted on few points which are conflicting with the policy of biodiversity conservation. Making remark on two crop one village policy under MOVCD scheme, Dr. Chandy said that by adopting such policy, in one hand we may make profit but on the other hand there is a maximum chance of losing many of our traditional crop variety such as maize, for which Sikkim is considered as one of the primary centre of origin, etc. Hence he suggested Agriculture and Horticulture Department to concentrate equally on promoting farming of other traditional varieties of agricultural and horticultural crops.

Simultaneously, Dr. Chandy also appraised the Animal Husbandry Department and the participants as well about the vision of Hon’ble Chief Minister to have a zoo of traditional domesticated animals of Sikkim, which in future may also serve as germplasm bank and help conserving domesticated livestock diversity.

Dr. HK Badola, supplementing to the remark of Dr. Chandy said that mountains have unique topography, soil, climate, variation in altitude due to which it harbour variety of plant and animals making it a biodiversity hotspot. However, the policy of two crop one village will lead to huge loss of genetic diversity. He mentioned that practicing monoculture cropping will be easier but at the same time, it will be highly susceptible to diseases and there will be no alternative in case of disease outbreak. Citing an example from Himachal Pradesh wherein monoculture of garlic was practiced and the sudden decrease in market value of the crop affected the villager’s livelihood as there were no alternative. Hence, Dr. Badola suggested mapping areas having traditional crop diversity as per agro-climatic zones which will serve as crop diversity hotspot or germplasm bank and to avoid monoculture farming in those areas.

He also said that crops like buckwheat having market demand can be promoted scientifically using local varieties of the state instead of importing from nearby countries like Nepal. This will serve the purpose of commercial farming as well as aid in conserving traditional breed of buckwheat in the longer run.

Mr. PT Bhutia responding to the Dr. Chandy and Dr. Badola said that for implementing policy of Two Crop One Village under MOVCD, the scientists from different National Institutions, state departments, local stakeholders were consulted following which 14000 ha land were taken to cultivate 04 crops in 14 cluster villages in 28 GPUs in open consultation with local people in Gram Sabhas. Within the 14 cluster villages, if any of the farmers are not willing to take up this policy, they are under no compulsion. Further, he informed that the crops which are selected are traditional crops and the department is taking up this to support the rural people. Also, the state will export the same only after processing and value addition for which the facilities will be developed in the state by March 2018. MOVCD is a mission which includes research, cultivation, processing and marketing, he added.

Adding to it, Dr. Badola suggested that Sikkim Biodiversity Board should organize separate workshop or seminar to discuss these issues in depth.

Dr. Ghanashyam Sharma (Programme Manager – TMI)

Question to AHLF&VS Deptt.

Is Animal Husbandry Department not going to dilute the originality of indigenous Siri breed by crossing it with Jersey breed at the time when the entire Siri breed is on the verge of extinction in the state?

Dr. K.C. Bhutia (AHLF&VS Deptt.), responding to the query raised by Dr. Ghanashyam said that under livestock breeding policy, during any cross breeding the germplasm is maintained at 50-50 level, though the ignorant farmer demand for more exotic germplasm. In any case, the germplasm is always maintained at 50-50 level sometimes even by back crossing.

Question to FSAD Deptt.

The Agriculture Department, at one side talking about conserving traditional agrobiodiversity, and in other side have been distributing high yielding varieties of paddies to the farmers, introducing new crops like kiwifruit and promoting the cultivation of flowers and medicinal plants, trying to transform our traditional agriculture system into cash based system. Is the Agriculture Department not going to give adverse impact to the local and traditional crop varieties? How the Department compensate these things by introducing HYV of crops from outside?

Mr. PT Bhutia (H&CCD), answering to the queries of Dr. Ghanshyam said that the HYV seeds are distributed with the consent of the farmers. All the activities undertaken by the department is in compliance with the NPOP guidelines of organic farming.

Mr. N Jaswant IFS, (DFO-Ecotourism, SBFP – FEWMD)

Happy Animal Concept is very interesting but allowing the domestic animals to graze inside the sanctuary will lead to transmission of diseases from domestic animals to the wild animals

and vice versa and at the same time they may become easy prey to the wild animals inviting more problems of human-animal conflict. What the department has to say in this?

Dr. K.C. Bhutia replied that “Happy Animal Concept” only means let loose the animal and allow free movement in the demarcated area for grazing, not necessarily in the forest area. He further mentioned that the blanket ban on grazing in our state is conflicting to this concept and made a submission to the house for allowing restricted grazing for the animals which needs to be addressed in a near future.

Ms. Usha Lachungpa (Principal Chief Research Officer - FEWMD cum AD – SBB & State Project Coordinator – UNEP-GEF-MoEFFCC-ABS Project)

Ms. Usha highlighted some issues for discussion such as

1. Open conflict in policies of Forest Department and Animal Husbandry Department with each other in regard to conservation of indigenous Siri breed, ban on grazing policy and human – wildlife conflict.
2. Need of having PEQ facility in the state for both crops and animals in order to save our traditional agricultural heritage of Sikkim which is in danger due to introduction of new exotic species

TECHNICAL SESSION III

Chair: Dr. Thomas Chandy, Principal Secretary cum PCCF IFS (FEWMD)

Co-Chair: Dr. KC Bhutia, Addl. Dir. (AHLF&VSD)

Rapporteur: Mrs. Merab Basnet SFS, ACF – NTFP (FEWMD)

Presentation 1: Introduction to Intellectual Property Right (IPR) with special reference to Patent

Presenter: Dr. Bharat Bashistha, Addl Dir. (DST&CC)



Dr. Bashistha generally talked about IPR, Patent & Design, Trademark, Geographical Indication, Patent Right, Principles underlying the Indian Patent Act 1970, Criteria for Patenting, etc. Through presentation, Dr. Bashistha enlightened the participants about what Patent is and what it says. According to him

- Patent is an exclusive right granted by government to an inventor or applicant for a limited period of time (normally 20 yrs from the filing date)
 - Patent is a monopoly right to the exclusive use of an invention, granted to the inventor or his assignee
- No one can make, use, manufacture or market the invention without the consent of the patent holder
 - The rights are territorial. No international patents
 - Government reserves the right to suspend or cancel a patent at will

- Patent is an award to the inventor and a reward for the investor

He also gave overview on what can be patented and what cannot be patented under IPA 1970. According to him

1. Living organisms and anything that can be injurious to public health cannot be patented
2. Merely making in one piece, articles, previously made in two or more pieces is frivolous and cannot be patented
3. Any device, apparatus or machine made with intention of committing thefts or injuring human beings or food adulterations cannot be patented
4. Claim for discovery of scientific principle is not patentable, but such principle when used with process of manufacture resulting into a substance, or an article, is patentable
5. New use for a known substance is also not patentable; it means 2nd or 3rd use for a known substance, it is not a discovery and is allowed to claim patent
6. A mixture of different types of medicament or medicine to cure multiple diseases is a mere admixture of substances, and is not a patentable invention, but an admixture resulting into synergistic properties of a mixture is not considered as mere admixture e.g. soap, detergent, lubricants and polymer composition etc. Hence they are patentable
7. Mere arrangement or re-arrangement or duplication of known devices while each of them are functioning independently
8. Method of testing applicability during the process of manufacture of any machines or for the improvement or restoration of existing machines is not patentable
9. A method of producing a new form of a known plant even if it involved a modification of the conditions under which natural phenomena would pursue their inevitable course is not patentable
10. A method of treatment of malignant tumor cells and method of removal of dental plaque and carries or the art of curing illness are not patentable, since they are held to be treatment of human beings
11. Clones and new variety of plants are not patentable but process or method of preparing Genetically Modified Organisms are patentable
12. A mathematical or business method or a computer programme perse or algorithms are not patentable
13. No Patent shall be granted in respect of an invention relating to atomic energy falling within subsection (1) of section 20 of the Atomic Energy Act, 1962 (33 of 1962)
14. In the case of food, drugs and chemical substances, only the process is patentable

Talking about the right to apply for patent, Dr. Bashistha highlighted that any person claiming to be the true inventor of the invention or any person being the assignee of the inventor or legal representative of any deceased person who immediately before his death was entitled to make such application have the right to claim patent under Section 6 of IPA 1970. The Act provides incentive to invent and disclose the invention, invest in R & D, manufacture and commercial use in addition to encouraging industrial and economic growth and providing protection to private property.

Before concluding his presentation, Dr. Bashistha said that Sikkim State Council of Science & Technology is the government notified nodal agency for IPR in Sikkim and they have been

in raising awareness on IPR related issues in the state since long. In addition, till date they have filed for copy rights for two stories, farmers right under PPV&FRA for one crop (local rice), created 08 IPR Cells in the state, provided patent search facility (Prior Art Search) free of cost. Further, four GI registration is in the pipeline to be filed and it is with the TIFAC who has assigned Ms S Majumdar & Co., Kolkata for carrying out the registration and final touch up is being given for GI registration, he added.

Presentation 2: Sikkim Industry Policy

Presenter: Mr SK Pradhan, Director (Commerce and Industries Department)



Mr. Pradhan highlighted that Sikkim has seen a great boom in the industries in recent years and has emerged as one of the Industrial Hub today and this is all due to the continuous endeavor of the State government and the subsidy schemes from the Centre particularly NEIIPP which has been instrumental to bring about a rapid growth in industries in the state. Socio-cultural stability, distinct progressive policy regime, declaration as an organic state, promotion of cultivation of various organic agriculture and horticulture products, proximity to Bagdogra International Airport and Kolkata Seaport are the major advantages of investing in industry sector in Sikkim, he added.



Temi Tea Estate, South Sikkim

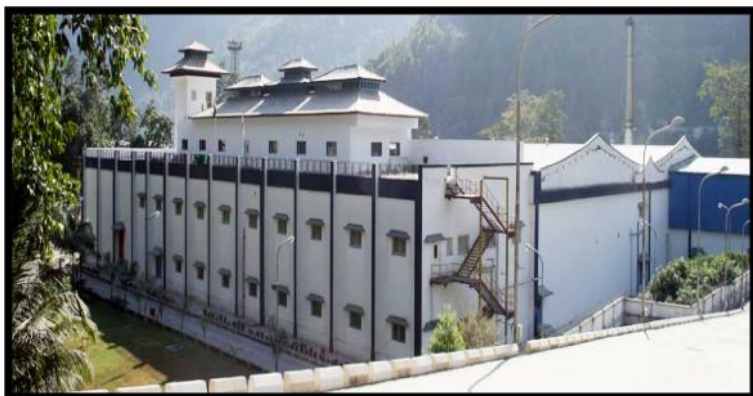
He revealed that 25 pharmaceutical units have already been set up in the state in addition to food processing, breweries, cosmetics, security ink, mattresses and corrugated boxes units. A joint venture company, MMTC Ltd. (a GOI undertaking) and

PAMPSA (Switzerland) will be setting up a precious metal (Gold and Silver) refining unit in Sikkim and the commercial production will start by March 2017. In addition, Sikkim has



Government Food Preservation Factory, Singtam (East Sikkim)

numerous public sector units under C&ID such as Directorate of Handloom and Handicrafts, Sikkim Handloom and Handicrafts Dev Corporation Ltd., Government Fruit Preservation Factory, Sikkim Industrial Development and Investment Corporation Ltd., Sikkim Khadi and Village Development Board, State Trading Corporation of Sikkim, Temi Tea State.



Zyklus Healthcare, Baghey Khola, East Sikkim

He talked about some of the eco-friendly industries of Sikkim such as floriculture and horticulture (agro based), animal husbandry, minor forest based products, handloom, handicraft and village industries, Toursim / Hospitality (rural tourism, village tourism), education, hydro power, tea, pharma

products and biotechnology. He also talked about the potential of Indo-China Border Trade through Nathula in east Sikkim and said that the volume of trade in terms of export (8.87 Lakh) and import (10.83 Lakh), since its opening in 2006, has significantly increased to 60.25 Crore (export) and 11.05 Crore (import) in 2015. According to Mr Pradhan, some crops of Sikkim like large cardamom, ginger, orchid (*Cymbidium* sp.), turmeric, buckwheat, and tea has high trade potential in the national as well as in international market due to its high demand and Sikkim has been exporting Temi tea to Germany, UK, Japan and Canada. At the end, Mr. Pradhan highlighted on key areas of recommendations to be taken up such as

- Need of globally accepted branding for Sikkim products especially to differentiate organic produce in Sikkim from inorganic crops/spices grown in other areas;
- Provide infrastructure support through creation of pack house, cold chains, etc., since most of the exporters prefer the sea route, hence appropriate cross border (interstate) arrangements will have to be made to ensure seamless movement of goods using cold chain facilities;

- Facilitate creation of Product Certification Lab in the State;
- Create greater awareness among growers regarding Good Agricultural Practices to ensure that the quality of produce is at par with the standards required in various countries viz. EU, USA, etc.;
- Value addition of agricultural produce such as Ginger and Turmeric by modernization and up gradation in machinery and equipments.



Denzong Albrew Pvt. Ltd. Mulukay, East Sikkim

Presentation 3: Draft State Tourism

Policy

Presenter: Mr HP Pradhan, Director (Tourism and Civil Aviation Department)



Mr. Pradhan appraised the participants and the dignitaries on the guiding principles of the State Tourism Policy which focuses on environmental sustainability, cultural integrity, equity and inclusiveness keeping in view the *Atithi Devo Bhava* slogan. He said that the tourism development will not be at the cost of degradation of the environment and natural resources of the state; it will ensure appreciation, respect and promotion of Sikkim's diverse culture and provide opportunities and benefits of tourism to all including those disadvantaged by

gender, remoteness and poverty equally focussing on providing quality experiences and services to all visitors and ensure their safety and satisfaction.

He also highlighted on the 05 goals of the policy

1. Develop tourism as a key sector in Sikkim's economy
2. Promote low impact tourism for the state
3. Make Sikkim a prime destination for nature and culture based tourism
4. Broad based tourism development to support local social and economic development in Sikkim
5. Ensure high quality standards and services for visitor satisfaction

He added that the policy is framed with the objectives to

1. Establish and strengthen Institutional Structures to promote, manage and implement responsible tourism in Sikkim by constituting Inter-Departmental Coordination Committee.



- Regulation of high influx of tourists in heavily visited areas thereby minimizing damages

The presenter also shed light on the key principles of ecotourism such as

- Conserve nature including culture and traditions.
- Respect local culture, tradition and customs;
- Adhere to international ecotourism principles, guidelines and standards for the development of ecotourism in the state of Sikkim
- Income generation through ecotourism activities
- Promote sustainable use of natural, cultural and local resources with emphasis on renewable energy
- Facilitate partnership for planning, implementation, coordination and monitoring ecotourism activities with key stakeholders such as NGOs, Government Organizations, local communities, tour agents and tour operators
- Enhance cooperation among the local entrepreneurs such as, home stay operators, tour operators, travel agents, government departments and other key players in development of ecotourism infrastructures and promotion of ecotourism products
- Encourage visitors learning

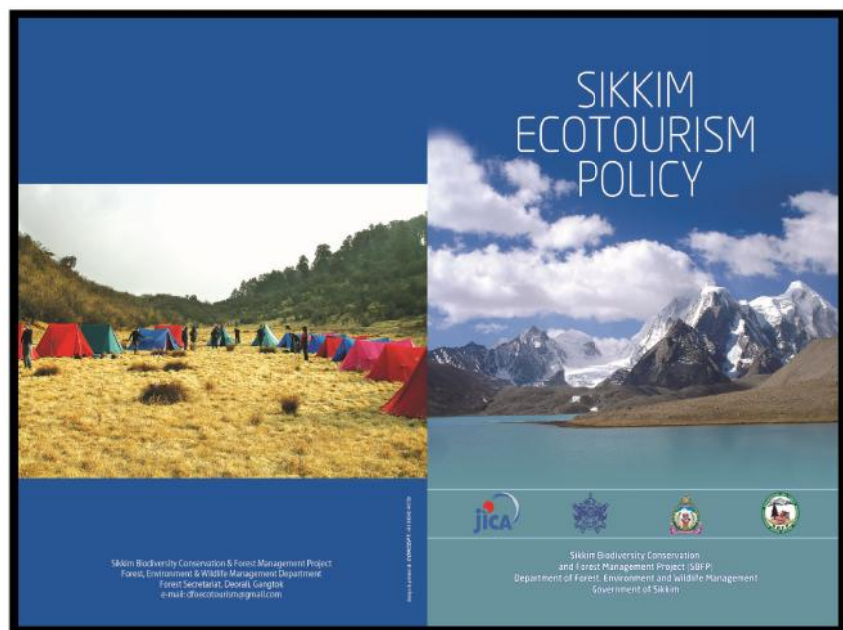
He said that Ecotourism Policy will be implemented through 3 tier structures: Ecotourism Council, Ecotourism Directorate and JFMCs/EDCs/PSSs. He also talked about the role of Ecotourism Council

and Directorate, strategies for ecotourism development in the state vis-à-vis environmental conservation, guidelines for service providers / visitors / researchers in PAs and Non-PAs.

Open House Discussion

Mr. Rahul, ADC – Gangtok raised the following points

- Due to disparities in Cadastral Survey of 1952 and Survey records of 1978-79, there are many land disputes in the State. Different departments follow different set of records. Further, he informed the house regarding the third level of surveying to be taken-up by the concerned department which may further complicate the situation.



To which Dr. Thomas Chandy stated that the reason behind the Cadastral survey of 1952 assigned in Sikkim Forest Act 1988, as it is considered more authentic. The need for the third level of surveying is to rectify the 1978-79 survey records. He mentioned that 1952 Cadastral survey was done during the monarchy when there was no confusion in the land status i.e private land, government land, khasmal and gorucharan, no encroachments, no manipulation hence it was considered the most authentic record and it was kept as benchmark for ascertaining the land status by Forest Department. However, the State Land revenue department follows Survey records of 1978-79 as per the notification issued by them. The State Forest Department implements the Forest Act 1988 and FCA 1980 which by default assigns the 1952 record. He further stressed that to follow the 1978-79 survey records it would require amendment of Sikkim Forest Act which is possible only if the State government is convinced that the 1978-79 record is authentic as 1952 survey record. He informed the house that the State Forest Department is trying to rectify and re-record the erroneous records i.e forest land as private land and vice-versa taking 1952 record as the baseline.

- He mentioned that at present the trade permit is being issued only by the Police Department and there is no any clearance from the FEWMD. Smuggling cases through the Nathula trade route is gradually becoming an issue; though some trade passes are also being issued from the District Office. He urged the need to streamline the mechanism of issuing the Trade Permit.

To which Dr. Thomas Chandy said that till date no any clearance is being issued by the FEWMD for the Trade License. In context to the smuggling of wildlife products he emphasized that the Wildlife Crime Control Unit is concerned with Wildlife within India; it does not consider the foreign wildlife and is the drawback of the Act. He further informed that nevertheless the FEWMD will be activating Wildlife Crime Control Unit, conducting raids, spot-checks, strengthening the strategically located check-posts. Further deliberations on this matter shall be taken up during the meeting with the WCCU which will be convened shortly.

Mr. Subash Yadav, Commandant - ITBP stated that the Military forces are also one of the stakeholders of Biodiversity Conservation and Management as above 10,000 ft is being manned by them. Efforts are being undertaken regularly to sensitize their troops regarding the conservation issues. He further informed the house that recently they had a meeting with Commerce and Industries Department to discuss various issues; lot of new security measures have been adopted which will definitely aid in addressing the trade related issues.

Dr. H.K.Badola said that for inter-linking the various Policies of the State Government further brainstorming sessions among the Heads of various line departments is required to fill up the gaps and address the contradictions collectively. He cited the example of the Draft State Tourism Policy which aims to promote the local cuisines while on the other hand the Sikkim Organic Mission Policy which is focusing on monoculture cropping, such contradiction needs to be addressed.

To which Dr. Thomas Chandy agreed upon and further stated that the recommendations placed in today's workshop shall be put-forward to the Government for appraisal and perusal.

Dr. Raj Kumar, NRCO - Pakyong emphasized on the conservation of plant genetic resources available in Sikkim, which can be used for future breeding programmes and quality improvement. He appraised that under Sikkim Organic Mission, indigenous varieties need to be focused more than the HYV as it will help in maintaining the gene pool. He also mentioned that the four Krishi Vigyan Kendras in Sikkim could be used for conservation of local genetic resources which would serve as Potential Germplasm banks.

Citing an example of about Dentam Pea (Bega Matar) in West Sikkim, he said that it is endemic to that area and is being consumed locally. The Pea though smaller in size has more grains and grows well only in that area and becomes susceptible to diseases if grown outside that area. Hence, he suggested if possible the Dentam Pea could be registered as Geographical Indicator and the local communities of the area can be motivated for conservation of such genetic resources and initiate to register the same under Plants Protection Varieties and Farmers Rights Act (PPV&FRA).

Ms. Jyotshna, Director (Directorate of Handicraft & Handloom) brought to the information of all raised a query that every year, students from NIT, Shillong and other institutions come to DHH for training on Lepcha traditional weaving. In such case, do the DHH need to seek the consent from the Sikkim Biodiversity Board as the traditional knowledge is being shared?

To which Shri YP Gurung replied that since traditional knowledge is being shared and they may go for its commercialization in future. Hence, DHH may refer them to SBB for consent and signing MoU from ABS point of view.

Adding to the point made by Member Secretary, **Mrs. Usha Lachungpa** said that all the line departments have their own policies and priorities but the underlining Act is the Biological Diversity Act 2002 and should consider it as the umbrella Act. BMC constitution is mandatory under the Act; so far, SBB have been able to constitute 25 BMCs; hence, all the line department especially RMDD should support SBB in forming BMCs in all the 176 GPUs which will benefit the local communities and state as a whole

Dr. Ghanashyam Sharma made the following suggestions:

- Quarantine mechanism needs to be initiated in the State as it is a serious matter
- GI registration is an issue considering the dilution of local genetic resources
- He mentioned for biodiversity conservation and effective implementation of BD Act 2002, there is a need to harmonize of all state policies

Dr. Bhoj Acharya suggested that under Sikkim State Biological Diversity Rules 2006, the researchers while intimating SBB need to fill up a form, but the form is related to commercial utilization of bio-resources; hence, for research purpose the form needs to be rectified or a separate form needs to be designed.

Mr. Zangpo Sherpa, Advocate (High Court of Sikkim) cum Member (Legal Advisory Group – SBB) raised the following points and suggestions:

- 1) What steps are being taken up by the FEWMD to monitor the effect on environment and biodiversity conservation the Hydro Electric Projects (HEPs) and Pharmaceuticals companies?
- 2) Similar to ABS mechanism as per Biodiversity Act, if a Corpus Fund could be created for people residing in the fringe areas of PAs, it could be used for the welfare and benefit of the people.

To which Dr. Thomas Chandy said that recently there was a meeting with all the Pharmaceutical companies and the HEPs of the State where various issues were apprised and discussed. Some new steps have been taken such as appointment of Honorary Pollution Warden from local areas, which is first time in India. They shall be collecting water samples from time to time and checking its quality as well as monitoring the water flow level. Spot checks will be conducted and if found that the water quality and its level is not maintained then fine shall be imposed as per the Environment Protection Act.

At present 5 HEPs have been commissioned in the state and they have been asked to install water discharge meter in the downstream of the dam by November 2016. The field staffs of Territorial and wildlife division have been directed to take the photograph and note down the reading of discharge meter with date and time and report immediately if there is decrease in the level of water in the downstream of the dam; action will be taken instantaneously.

Dr. Chandy further informed the house that for management of different types of waste such as e-waste, solid waste, bio-medical waste, rules have been revised by the Ministry in 2016. The specific responsibilities have been assigned to concerned Departments for which, a meeting have been called. He requested all the Heads of Departments to personally attend the meeting for necessary deliberation and for effective implementation of the rules.

Shri Karma Legshay informed the house about Supreme Court Judgment, 2002 with regard to a Reserve Forest in Karnataka wherein it has been mentioned that the baseline for record of Reserve Forests and the Protected Areas is the SOI topo-sheet. In context to Sikkim, the 1952 Survey record followed by the State Forest Department is in consonance with the SOI topo-sheet.

In regard to illegal trade of wildlife products which is gradually becoming an issue in the State he said that there is a need for convergence of the concerned departments with the FEWMD. In such cases information and data should be shared with the Forest Department as all such matters fall within the purview of Sikkim Forest Act 1988 and Wildlife Protection Act 1972.

Adding to Mr. Legshay, Dr. Thomas Chandy informed the house about a Supreme Court ruling wherein it has been mentioned that any wildlife related cases should be referred to the FEWMD because they only hold the right to apprehend the guilty.

Mr. Zangpo Bhutia, Secretary (T&CAD) made the following points:

The discrepancies in regard to 1952 survey record and 1978-79 survey records is due to the numerous land transactions done during the kingdom time (prior to 1975). There are many such land disputes which are still pending till today and needs to be resolved. He also stressed

upon the role of State Pollution Control Board and its strengthening to address all the issues related to environmental damage.

To which Dr. Thomas Chandy stated that the FEWMD is bound by many Acts and Rules, so any decision taken will have to be in compliance to those Acts and Rules. In regard to addressing issues relating to environmental damage, Dr. Chandy said that there has been dearth of staff in SPCB for sometime but now it has been provided with requisite technical staff and manpower; hence the issue will be addressed.

Ms. Priya Shreshtha, WWF duly thanking SBB for making them a part of the workshop raised a query: the issues which have been flagged at the workshop today mostly seem to be at the Policy level. Hence how will the issues be addressed?

To which Dr. Thomas Chandy replied saying that a set of recommendations from the Workshop will be circulated before putting forth to the Government and there shall be a brainstorming sessions as suggested by Dr. HK Badola over the recommendations. He further said that a Policy can be made solely by the Government and is at its discretion whereas the Department can put up the recommendations in the interest of conservation of biodiversity and for its sustainable and equitable use.

Dr. KC Bhutia duly thanking SBB for organizing such workshop said that all the line departments should come up with policies where the forward linkages and backward linkages are well developed so that any issue can be addressed. He also suggested that there should be stringent monitoring parameters to check any damage to our pristine environment and biodiversity due to heavy inflow of the tourists in the State. He also informed that initially it was proposed to set-up a quarantine system at Rangpo but due to fund constraint it could not materialize. Now the matter can be taken forward as this is the need of the hour.

Summing up the workshop

Dr. Thomas Chandy made the following points:

Quarantine mechanism need to be initiated in the State for both plants and animals and for which there is a need to identify and determine the role of line departments

Any plant or animal species introduced or in the process of introduction by any individuals or line departments, SBB needs to be duly intimated

There are two types of Industries in the State - Large Industries (HEPs and Pharmaceutical) and small industries (Cottage Industries). The former deteriorates the environment while the latter is favorable to Biodiversity Conservation and FEWMD would encourage such industries with minimal or no impact and SHGs needs to be facilitated with capacity building through Cottage Industries.

He appreciated the Draft State Tourism Policy where they had focused mainly on High - Value Tourism or High end Tourism and discouraged mass Tourism. He informed that in some states like Shimla where they have imposed some taxation like Hill city CESS which could also be replicated in our state. He further requested the Tourism Department if it could be possible for ISO Certification of hotels which would value to the State Tourism.

In regard to smuggling of Wildlife Products, Dr. Chandy informed the house that a meeting/brainstorming session shall be convened shortly and everyone will be invited for the same.

He further informed Forest Plus Project through USAID funding which is also a cross-sectoral policy programme and efforts are being made to involve all the line departments. With this, Dr. Chandy declared the closing of the workshop.

The workshop concluded with the Vote of Thanks by Miss Peggyla Venchungpa, Joint Project Coordinator.







