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PEOPLE'S BIODIVERSITY REGISTERS (PBRs)

India's Biological Diversity Act, 2002 which was promulgated to meet the objectives of Convention on Biological Diversity (CBD) mandates creation of Biodiversity Management Committees (BMCs) at the level of all local bodies. The main responsibility of a BMC is to prepare a People's Biodiversity Register PBR which documents the availability of biological resources and associated knowledge. However, even after 14 years of promulgation of the Act, PBRs are left to be prepared at the level of more than 93% BMC. This brief looks at the status of preparation of PBRs in India.

Uttarakhand State Biodiversity Board

PBR PREPARATION IN SUKHI VILLAGE, BHATWARI BLOCK, UTTARKASHI DISTRICT, UTTARAKHAND

I. OVERVIEW OF THE BIOLOGICAL DIVERSITY ACT

The Biological Diversity Act, 2002 (BD Act) was promulgated by the Government of India to give effect to the Convention on Biological Diversity (CBD). Signed at the Rio Earth Summit 1992, CBD is the most important legislation for conservation of biological diversity. 198 countries are party to the international binding agreement and it is based on three-fold objectives: conservation of biological diversity, sustainable utilization of its components and fair and equitable sharing of benefits arising out of utilization of genetic resources.

The BD Act institutes a three-tier structure for its implementation which consists of National Biodiversity Authority (NBA) at apex level, State Biodiversity Boards (SBBs) at State level and Biodiversity Management Committees (BMCs) at local body levels. Given CBD, the objectives of BD Act are conservation of biological diversity, its sustainable use and to ensure fair and equitable sharing of benefits arising out of utilization of biological resources and associated knowledge.

II. LEGAL PROVISIONS WITH RESPECT TO PBRS

i. Overview of PBRs

The BD Act mandates every local self-governing institution in both rural and urban areas[1] to constitute a BMC within its area of jurisdiction. A BMC is constituted for the promotion of conservation, sustainable use and documentation biodiversity. This includes preservation of habitats, conservation of landraces, folk varieties and cultivars and maintaining records of traditional knowledge on local biological resources.[a] A BMC is a seven-member committee which is elected in the general body meeting of that local body. The tenure of a BMC is 5 years/co-terminus with tenure of local body. The jurisdiction of a BMC i.e. its legal authority will be restricted to the territorial boundary of its local body.[b]

The primary responsibility of a BMC is to prepare a People's Biodiversity Register (PBR) in consultation with local people. A PBR comprehensively documents information on the availability of local biological resources and traditional knowledge (such as knowledge regarding their medicinal properties) associated with them.[c] According to Madhav Gadgil (known for initiating the PBR programme in India before the promulgation of the Act), PBR is a *way to record people's knowledge and perceptions of the status, uses, history, ongoing changes and forces driving these changes in the biological diversity resources of their own localities (Gadgil 2000).*

ii. Preparation of PBRs

The process of PBR preparation is participatory in nature which requires extensive and intensive consultation with large number of people who need to share their common as well as specialized knowledge.[d] Given the technical nature of PBR exercise, a Technical Support Group (TSG) is formed in every district which consists of experts from various disciplines and line departments, universities, research institutes, and schools and non-governmental organizations. The major responsibility of a TSG is to assist the BMC in listing the local names of flora and fauna and current practices of communities regarding conservation and to validate/cross

a Section 41 (1) of Biological Diversity Act, 2002
b Section 1.2: Tenure of the BMC: Guidelines on Operationalization of Biodiversity Management Committees issued by National Biodiversity Authority 2013
c 4 Sub Rule 6 of Rule 22 of Biological Diversity Rules, 2004
d Section 4: People's Biodiversity Register: NBA Guidelines on Preparation on People's Biodiversity Registers: issued by National Biodiversity Authority, 2013

check the same before it is documented in the PBR.[a] The format in which PBR is prepared is prescribed by the NBA in its Guidelines on Preparation of People's Biodiversity Registers (PBRs).[b]

The various steps involved in PBR preparation are summarized in Chart 1.

CHART 1: Process of PBR Preparation

STEP 1	Formation of a BMC
STEP 2	Sensitization of the public about PBR and its purpose
STEP 3	Training of members in identification and collection of data on bilological resources and traditional knowledge
STEP 4	Collection of data via Pariticpitaory Rural Appraisal (PRA) at village level; household interviews; interview with village leaders, key actors of panchayati raj, NGOs and direct field observations
STEP 5	Analysis and validation of data in consultation with TSG and BMC
STEP 6	Preparation of PBR
STEP 7	Computerization of information and resources

Source: NBA Guidelines on PBR Preparation, 2013

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Selaginella bryopteris **(LOCALLY KNOWN AS SANJEEVANI BOOTI), BADAGAI PANCHAYAT, BHANDARA BLOCK, LOHARDAGA DISTRICT, JHARKHAND. THE PLANT GIVES RELIEF FROM HEAT STROKE, DYSURIA (PAINFUL URINATION), IRREGULAR MENSURATION AND JAUNDICE.**

a Section 3: People's Biodiversity Registers and the role of National Biodiversity Authority (NBA) and Section 4: People's Biodiversity Register: and Section 4 NBA Guidelines on Preparation on People's Biodiversity Registers: issued by National Biodiversity Authority, 2013

b PBR Formats: PBR preparation Part 1 and Part 2: Peoples Biodiversity Register in Guidelines on Preparation on People's Biodiversity Registers: issued by National Biodiversity Authority, 2013

Traditional knowledge (TK) of local community with respect to local biodiversity forms an important part of the PBR. By living in close proximity to biodiversity rich areas, communities through their keen sense of observation, practice and experimentation have developed a body of invaluable TK. This TK represents the common wealth of communities, a heritage and continuation of intellectual property. This is commonly held by the villagers and access to it is governed by customary laws. Given the importance of TK, it is important to identify elderly persons who can provide information on biodiversity which was available in the past but no longer seen at present. Further, it is mandatory to update the PBR with the additional information as and when generated.[a]

III. WHAT PURPOSE DOES A PBR SOLVE?

i. Preservation of Traditional Knowledge

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Xanthium strumarium **(LOCALLY KNOWN AS CHOTA DHATURA) PLANT IS USED BY VILLAGERS FOR CONTROLLING FEVER; LESLIGANJ PANCHAYAT, LESLIGANJ BLOCK, PALAMAU DISTRICT**

The TK of the local people developed through their close interaction with nature and historical continuity of resource-use practices is of great value for conservation. Continuous interaction with local ecology enables them to make adjustments on the basis of continuous monitoring of on-going changes. This ecological understanding enables them to carry out "*adaptive management*" i.e. a system of management which is *flexible, knowledge based and appropriate to the new information age* (Gadgil 2006: 13).

While the strength of traditional sciences (knowledge of barefoot ecologists and grass-root innovators) lies in their enormous store of information of complex natural ecosystems; a grave concern is that its information base is fuzzy, incomplete and fragmented. The nature of TK is such that it is often transmitted from one generation to the other, where this transmission is often oral rather than written and its use is usually defined by customary law. Therefore, once the cultural tradition chain is interrupted, the knowledge at community level is lost as well (Rautaray, Pradhan, Behera, & Sahu 2014). This weakness can be overcome through the preparation of PBRs which would not only create a machinery for monitoring the trends of a variety of bio-resources throughout the country leading to the very basis of a strategy for conservation of these resources; but also, a well-defined stock of knowledge by barefoot ecologists and grass-root innovators.

TK is also a vital source of information for identifying uses of biological resources with actual or potential value. This knowledge is particularly valuable for bio- prospectors, or users of biological resources, who use

a Section 4.0: People's Biodiversity Registers: and 4.2: Documentation of Traditional Knowledge (TK) related to biodiversity: in Peoples Biodiversity Register in Guidelines on Preparation on People's Biodiversity Registers: issued by National Biodiversity Authority: 2013

it to guide them to plants, animals and microbes that are already known to have useful properties. Without this knowledge many species currently used in research and commercialized products may never have been identified. However, much of this information collected and subsequently published is often shown as an original discovery and patented via intellectual property rights (Secretariat of CBD 2011). Additionally, when use value emerging from such TK is commercially utilised, benefits are not shared with the communities or the traditional practitioners. In this context PBR is particularly helpful. Biodiversity registers prepared after comprehensive documentation of biological resources and associated TK prepared then serve as a legal document which confirms the sovereign rights of that BMC over the resources documented in the PBR. It serves as a legal basis which proves that the traditional knowledge associated with a biological resource is the '*prior art*'[2] of that village and therefore, cannot be patented.

ii. PBRs: A Counter to False EIA Reports

Sumit Mahar (Himdhara)

COLLECTING PINENUTS, LOCALLY KNOWN AS CHILGOZA, LIPPA VILLAGE, KINNAUR DISTRICT, HIMACHAL PRADESH

Another use of PBR emerges from India's development narrative which pushes for ecologically destructive projects such as mining and hydro power plants. India's environment laws mandate an environment impact assessment (EIA) of these projects before they are cleared. EIA is a tool to evaluate the ecological costs of a proposed project to be weighed against the economic benefits promised. However, fraudulent EIAs are a norm in India. Experts have long warned that EIAs are particularly weaker in sections of biodiversity and are silent on many pertinent issues. For example, the EIA for Nayamjang Chhu hydel project proposed in the Tawang valley of Arunachal Pradesh did not mention that the project site is also the nesting site of Black Neck Crane, an endangered species held sacred by the local Monpa tribe and protected under India's Wildlife Protection Act, 1972 (Dutta 2016). It was only with the bird's arrival after three years in December 2015 that the community could produce incontrovertible photographic evidence in front of National Green Tribunal that the site where the dam has been planned is a wintering habitat for the bird (Mitra 2016). In another example, the tribals from Kinnaur district of Himachal Pradesh are struggling to save the last remaining pine nuts Chilgoza, a species endemic to the area and under threat from the proposed Kashang Hydroelectric project (Dutta 2016). The livelihoods of the locals depend on these trees as every household manages at least 200 kg of Chilgoza every year. The market value of Chilgozais between Rs. 1,000–1,200 per kg, which can bring Rs. 2–2.5 lakh of annual earning per household. The villagers fear that hydel projects in the valley could severely hamper their Chilgoza crops, thereby endangering their livelihood (TERI & Global Green Growth Institute 2015). However, neither the EIA nor the Forest Department document the significant role these species play in providing livelihood security to the locals (Dutta 2016).

In this context, PBRs could be an effective tool to counter fraudulent EIAs. An EIA is prepared by the consultant hired and paid by the project proponent. On the other hand, the PBR is prepared by the local community of a local body after undertaking extensive and intensive consultation with locals who share their common as well as specialized knowledge. One major reason for the issues surrounding EIA studies have been the narrow parameters within which EIA is conducted. Under India's EIA process, the study area is restricted to a radius of 10 km around the project site. However, neither the EIA Notification nor any scientific criteria backs this methodology (Dutta 2017). A PBR on the other hand documents the entire biodiversity (be it wild, domesticated, agricultural or urban) within the territorial jurisdiction of a local body.

Construed in this way, PBRs are a powerful tool in the hands of the citizens which will enable them to comprehensively present the real ecological costs of a proposed development project before a decision maker. This will save areas from getting sacrificed based on rushed and biased assessments.

iii. Better understanding of local ecology

Ritwick Dutta

Detailed documentation through PBRs can play an instrumental role in bringing out useful understandings of ecological processes. A few examples (see box 1) suggest that findings from PBRs has led to better regulation of access to resources and ensured conservation.

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FOREST WITHIN MAHILONG GRAM PANCHAYAT, NAMKUM BLOCK, RANCHI

BOX NO. 1:
CASES WHERE PBR HAS LED TO BETTER ECOLOGICAL OUTCOMES ON THE GROUND

CASE 1: RAVINE MANAGEMENT AND EX-SITU CONSERVATION OF MEDICINAL PLANT IN CHAMBAL VALLEY

In Chambal Valley of Madhya Pradesh's Morena district, PBR prepared for the BMC Piprai Gram Panchayat (with technical support from local NGO Sujagriti Samaj Sevi Sanstha) revealed that 800 hectares of cultivable land was being transformed into ravines every year leading landlessness among local farmers. Ravines are a result of accelerated surface erosion in the valley. The alluvial soil in Chambal is loose, has sand content up to 95% and very low organic content. The PBR also revealed that *Commiphora wightii* (locally known as Guggal) a wild plant species was being pushed towards extinction. The resin extracted from Guggul has wide application in the treatment of numerous physical disorders like inflammation, obesity, cardiovascular disease, fracture of bones and lipid disorders and the same is used by pharmaceutical companies, vaids and other local villagers. However, due to unscientific tapping of Guggul gum, termite infestation and ravine formation, the plant population was under decline. Giving the findings from the PBR, the ravine issue was tackled through the following: (i) Improvement of soil strength by re-introducing the thorny shrub, Guggul and (ii) construction of water conservation and erosion control structures (like Dorbandi, Stopdams, Jalnikasnalis and check dams). Additionally, the BMC had systematically planted 10,000 Guggul plants and conserved 15,000 natural occurring plants in 70-hectare ravines. In order to ensure sustainable harvesting of Guggul, villagers were introduced to a new gum tapping device developed by Jawaharlal Nehru Agriculture University, Jabalpur. The BMC also levies fees on companies such as Dabur which use Guggul resin for commercial purposes (Krishnamurthi, Ojha, Ghosh, & Thomas 2017) (Hussain 2017).

CASE 2: COMMUNITY REGULATION OF ACCESS TO BIOLOGICAL RESOURCES IN SEONI FORESTS

The villagers in wooded tracts of Madhya Pradesh's Seoni district used to gather fruits of *Buchnania lazana* (locally known as chironji) from their local forests. Choronji is an economically valuable biological resource for the villagers. However, it was harvested without any mutual understanding among the villagers. Lack of trust led to every villager getting a size smaller than the mature size which fetches a better market price. This continued until when a cluster of 13 villages during their PBR preparation realized that the traditional convention was to wait till Akshayya Trtiya (around 10th May) when the fruit was ripe. Further, as a part of the Joint Forest Management initiative they were given exclusive rights to collect the fruit from the forest patch and they agreed among themselves to wait till Aksayya Tritya before plucking it. The result was that their total collection went up by 33% in terms of weight and value because the properly matured fruit commanded a higher price per kilogram (Gadgil 2006).

CASE 3: KNOWLEDGE-BASED SUSTAINABLE MANAGEMENT OF AGRICULTURE AND FISH IN HOOGHLY, WEST BENGAL

Through their PBR preparation, villagers of Teligram gram panchayat in West Bengal's Hooghly district realised that excessive use of chemicals and pesticides in paddy fields was having an adverse impact on fish (cultured in ponds) as well as on domesticated ducks. Given the learning from PBR, the local body decided to undertake a scientific exercise on the introduction of integrated pest management techniques and to lower their use of chemical pesticides. Therefore, along with academics, students and farmers, potential biological control agents for significant pests of major locally cultivated crops were identified. The selected agents were then released on the farmer fields and their efficacy was monitored as a part of the PBR exercise (Gadgil 2006).

IV. STATUS OF PBR PREPARATION IN INDIA

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Buchanania lanzan **(CHIRONJI) TREE, SEONI DISTRICT MADHYA PRADESH**

PBR preparation is a mandatory requirement and the primary responsibility of every BMC. However, analysis reveals that as on October 2017 only close to 7% of BMCs have been able to prepare a PBR (see chart 2 a).

Chart 2 (b) indicates that while no PBRs have been prepared in Arunachal Pradesh, Chhattisgarh, Goa, Jharkhand, Meghalaya, Rajasthan, Sikkim and Tami Nadu; less than 5% of BMCs in Andhra Pradesh, Himachal Pradesh, Madhya Pradesh, Maharashtra, Mizoram, Odisha, Telangana and Uttarakhand have prepared the registers. Given their low level of compliance to PBR preparation, the SBBs of biodiversity rich states of Andhra Pradesh, Arunachal Pradesh, Himachal Pradesh, Manipur and Uttarakhand have termed PBR as a *time consuming, exhaustive, and lengthy and time taking exercise which cannot be rushed through and for which no short cut is available.*[a] However, given that BD Act was promulgated way back in 2003 these submissions are unwarranted.

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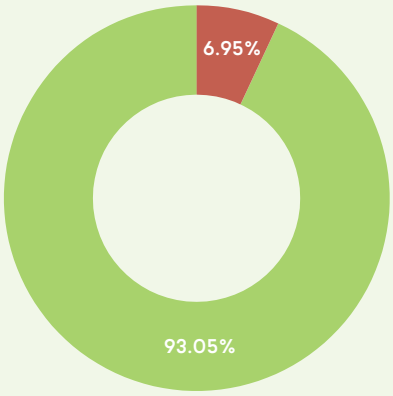
Senna Alata**, KARAUNDHI GRAM PANCHAYAT, GUMLA BLOCK, GUMLA DISTRICT USED BY VILLAGES FOR TREATING FUNGAL INFECTIONS ON THE SKIN**

a See Reply Affidavits filed by the State Biodiversity Board (SBBs) of Andhra Pradesh, Himachal Pradesh, Uttarakhand, Manipur Chandra Bhal Singh Vs. Union of India and Ors. Original Application (O.A.) No. 347 of 2016; National Green Tribunal, Principal Bench, New Delhi



Even after 14 years of the promulgation of the BD Act, 2002; more than 93% of the BMCs are yet to prepare PBRs. Current compliance rate is 6.95%

Chart 2(a): Compliance (in %) w.r.t PBR Preparation: All India level

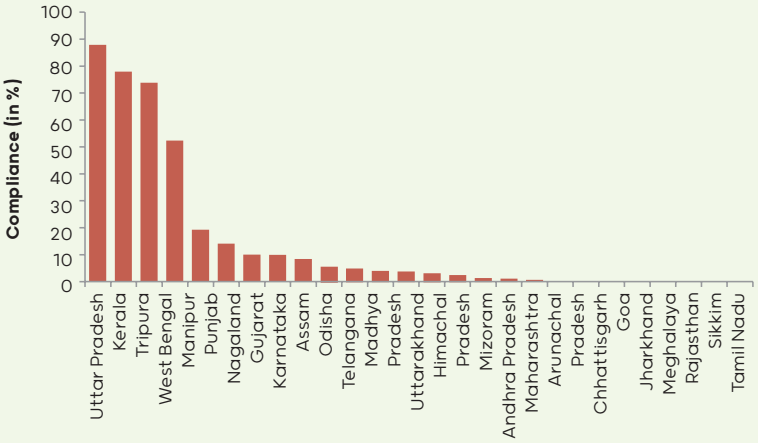


Chart 2(b): State wise compliance with w.r.t PBR Preparation

Compilation of Replies received in Chandra Bhal Singh Vs. Union of India & Ors. (OA No. 347/2016, NGT, New Delhi)[3]

Suresh Kumar Patel

PREPARATION OF BIODIVERSITY REGISTERS IN RANCHI, JHARKHAND

In Jharkhand, the State Forest Department has raised concerns over zero preparation of PBRs in their states. The department had expressed need for a comprehensive floristic study of the state. According to them while floral diversity of the state has long been explored and scholars from Universities and Botanical Survey of India (BSI) have carried out taxonomic and ethno-botanical studies; the task is still far from over (Forest and Environment Department Jharkhand n.d.).

Further, in both Kerala and Madhya Pradesh while all local bodies have constituted BMCs, PBR preparation has not kept pace in MP where though BMC constitution was over by 2006, PBR preparation had begun only in 2014.[a] Therefore, while BMC constitution is 100%, only 4% of the 23,743 BMCs[b] have prepared registers.

Another irregularity emerges from Uttar Pradesh. Out of 5,3518 local bodies in the state, 98 have constituted BMCs within their jurisdiction. Further, 86 PBRs have been prepared till date in the 9 different agroclimatic zones of the state. These 86 PBRs imply that all village level biodiversity registers are complete. This is because floral-faunal diversity between two climatic zones is largely similar. Therefore, once BMC constitution is complete in rest of the local bodies, these PBRs only have to be formally accepted by these BMCs.[c] However, this is not in sync with the BD Rules, 2004 which clearly mandate that once a BMC is constituted, PBR preparation is its mandatory responsibility. However, in this case every BMC is not preparing a PBR. In fact, PBR preparation has preceded BMC constitution. A seemingly similar approach is being followed in Mizoram where it has been decided to prepare and maintain the PBRs at the Block Level to cover one or more villages.

V. PRACTICAL EXPERIENCES WHILE PREPARING PBRS

Suresh Kumar Patel

PREPARATION OF BIODIVERSITY REGISTERS IN RANCHI, JHARKHAND

The process of PBR preparation has been termed as a **participatory process which requires intensive and extensive consultation with people**. To ensure the same, the first step calls for explaining the purpose of the study to all sections of the people in the gram panchayat. This is followed by undertaking a **Participatory Rural Appraisal (PRA)** at the village level among other ways of data collection such as literature reviews and household interviews, individual interviews with village leaders and knowledgeable individuals.[d] *PRA is a family of approaches and methods to enable rural people to share, enhance, and analyse their knowledge of life and conditions to plan and act" (Chambers 1992: 1).* PRA requires researchers / field workers (in this

a The fact that PBR preparation had begun only in 2014 has been taken from Reply affidavit submitted by Madhya Pradesh State Biodiversity Board in Chandra Bhal Singh Vs. Union of India and Ors. Original Application (O.A.) No. 347 of 2016; National Green Tribunal, Principal Bench, New Delhi

b Number of BMCs in Madhya Pradesh: Reply affidavit submitted by Madhya Pradesh State Biodiversity Board in Chandra Bhal Singh Vs. Union of India and Ors. Original Application (O.A.) No. 347 of 2016; National Green Tribunal, Principal Bench, New Delhi

c Reply Affidavit filed by the Uttar Pradesh State Biodiversity Board in Chandra Bhal Singh Vs. Union of India and Ors. Original Application (O.A.) No. 347 of 2016; National Green Tribunal, Principal Bench, New Delhi

d Section 4: Peoples Biodiversity Register in Guidelines on Preparation on People's Biodiversity Registers: Published by National Biodiversity Authority: 2013

context, TSGs) to act as facilitators to enable local people conduct to their own analysis, come out with their own conclusions and accordingly design their own developmental programmes (Cavestro 2003). Given its heavy reliance on participation by the communities, PRA allows locals to present their own perceptions and priorities and then incorporate them into plans.

In this context, how closely a PBR documents the local perceptions and knowledge about their biological diversity would then depend on to what extent the above methods (particularly PRA) are implemented in the field. The process of PBR preparation adopted in few areas in Himachal Pradesh and Uttarakhand may be relevant to note. These findings are presented in the box below.

BOX NO. 2:
QUESTIONABLE STATUS OF PUBLIC PARTICIPATION WHILE PREPARING A PBR

In Himachal pradesh the 'contract' for making PBRs has been given to state research university. While HP University, Shimla has been given the task of preparing registers for Shimla, GP Pant University and Himalayan Forest Research Institute have been given the task for palampur, Kullu and Chamba. A tripartite MoU is signed among the SBB, BMC and the university, post which each university is given the contract of 30-40 villages (Member Secretary HP SBB 2017).

Interactions with a few BMCs reveal that after the contract is given to the University, public participation in PBR preparation remains low. For example, in case of BMC Jana (Gram panchayat Jana, Kullu) while the BMC president (a local vaid) had received training in PBR from Bangalore, however, given the lack of technical knowledge among villagers in general, the task of PBR preparation was given to HP University Shimla. In order to document the information, PhD students from the university had divided the biodiversity into three parts: food and fodder crops, herbs, shrubs and trees. Further, given the president's knowledge of local medicinal plants, a part of documentation was carried out based on discussions and interviews with him. For species unknown to him, the university students were put in touch (by the BMC president) with other villagers especially, hakims/vaids. In this case the villagers were simply required to answer survey questions. In another example from BMC Sartyola (Gram Panchayat Sartyola, Mandi), the only knowledge that the BMC President had with respect to PBR was *"yes some researchers are collecting data in our village, but we are not involved in the same"* (President BMC Sartyola Panchayat 2017). In this context, the experience of BMC Shimla Municipal Corporation is equally relevant. In this case the Himalayan Forest research Institute (HFRI) after completing the PBR will submit a management plan to the BMC enlisting species of plants and sites that demand urgent conservation and the steps to be carried out for the same. The BMC will then implement the same using their resources, contacts and legal backing. According to the BMC Member Secretary, *"BMC is simply an implementing agency– it has the legal resources to implement what is necessary, however it doesn't have the technical expertise required to take the decision what is to be done with respect to conservation"* (President BMC Shimla Municipal Corporation 2017). The BMC Secretary (a veterinarian by training) attributes BMC's dependency on the SBB and TSG due to absence of technical support (such as Botanist/ Zoologist/Agriculturalist) within the BMC[4].

In Uttarakhand, the task of PBR preparation has been given to the local NGOs. Interaction with a few gram panchayat level BMCs in the state (BMC Champa, Hawalbagh Block, district Almora; BMC Kothera, BMC Simalkot, BMC Jajut, BMC Kuntola in Gangolihat Block, district Pithoragarh) reveals that PBR preparation was carried out based on household interviews, reviews of results by Botanical Survey of India (BSI)/Zoological Survey of India (ZSI) taxonomist and analysis of forest working plans. In this case the only role of BMC was to share their TK associated with local medicinal plants and guide the researcher (sent for data collection) through the village so as to connect them to others who might have knowledge on medicinal properties on local herbs.[5] Similar experience was shared from Dehradun as well, where according to their TSG (Society for Action in Mountainous Village Ecological Development and Initiatives (SAMVEDI), *"during PBR preparation carried by our team, the villagers have no idea of what is going on"* (President SAMVEDI 2017).

Given the above examples, it seems that the task of preparing PBRs is being outsourced to organisations having the desired expertise in preparing one; while the role of local people is simply restricted to help the researcher in data collection. This is not in sync with the need for conducting a PRA (which ensures public consultation) as provided for in NBA guidelines on PBRs. Moreover, it appears that the only focus of the Board is to complete their target number of PBRs even if it comes at the cost of public participation.

The NBA guidelines for BMCs mandate that *each BMC shall prepare an Action Plan, drawing information validated in the People's Biodiversity Register(PBR)."*[a] This action plan prepared with the support of the TSG will outline the steps for conservation of local biological diversity. Given the extensive documentation that a PBR calls for, it can only serve as a basis of knowledge-based system of resource management, when main findings in the PBR are analyzed and an Action Plan post the analysis is prepared and implemented. As of date, while there are more than 3,000 PBRs prepared[b]; the critical question is whether the corresponding number of Action Plans has been prepared or not.

VI. CONCLUSION

The creation of PBRs in India is far from satisfactory. As discussed in this brief, the question is not just of having numbers in PBR creation but also following sound methodologies which involve local participation. We are witnessing short-cuts with respect to preparing PBRs. Finally, one of the most important steps in taking PBRs to their logical conclusion is creating action plans post their preparation. This is woefully lacking. In conclusion, work is needed on all fronts to make PBRs the robust and effective monitoring and documentation tool they were envisaged to be. The BD Act needs to be followed in both letter and spirit to ensure both democratization, as well as conservation, of biological resources.

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MEDICINAL PLANTS BEING SOLD AT PATALKOT, TAMIA TEHSIL, CHHINDWARA DISTRICT IN MADHYA PRADESH

a Section 1.10 BMC Action Plan: Guidelines on Operationalization of Biodiversity Management Committees issued by National Biodiversity Authority 2013

b LIFE's Analysis of the Replies received by State Biodiversity Boards (SBBs) in the matter of Chandra Bhal Singh Vs. Union of India and Ors. (Original Application O.A. No. 347 of 2016); National Green Tribunal, Principal Bench, New Delhi

NOTES

1. As per Clause 1 of Article 243 B of Indian Constitution, the term local body in rural areas means Panchayats constituted at village level, intermediate level and district level. Further, as per clause 1 of Article 243 Q of Indian Constitution, the term local body in urban area means Nagar Panchayats (constituted for a transitional area, i.e. an area in transition from a rural area to an urban area), Municipal Council (for a smaller urban area) and municipal corporation (for a larger urban area).
2. The term "prior art" in the context of patents is any evidence that proves the invention proposed for a patent is already known and therefore the proposed invention is not valid for a patent.
3. The petition was filed to highlight the gross non-implementation of the provisions of the Biological Diversity Act, 2002 and Biological Diversity Rules, 2004". The Petition made the Ministry of Environment and Forests and Climate Change, Government of India (MOEF&CC), National Biodiversity Authority (NBA) and respective State Biodiversity Boards (SBBs) parties to the case. In order to highlight the status of implementation of the Act in the petition information was obtained from the respective SBBs under Right to Information Act (RTI) with respect to compliance of certain important provisions which are of mandatory nature under the Act and Rules specifically, number of Biodiversity Management Committees (BMCs) constituted, number of People's Biodiversity Registers (PBRs) prepared by BMCs, amount of fees collected by BMCs and grants and loans made to the Local Biodiversity Fund (LBF) of the BMC. Given the shocking and surprising facts about the non-compliance of the provisions of the Biological Diversity Act, 2002 and Rules, from the replies received from the 15 SBBs, the applicant had prayed the Tribunal to direct the authorities to take steps to ensure that the provisions of the Act are implemented. The data used in this policy brief pertains to as on October 2017.
4. A field visit was taken by LIFE to Himachal Pradesh (May 2017) consisting of discussions with HP SBB Member Secretary and few BMCs: BMC Sartyola (Sartyola Gram Panchayat), Mandi district, BMC Jana (Jana Gram Panchayat, Kullu district) and BMC of Shimla Municipal Corporation, Shimla district.
5. A field visit was taken by LIFE to Uttarakhand (in July 2017) involving discussions with Joginder Bhisht, President, Lok Chetan Manch, Ranikhet Almora, Uttarakhand and Yogesh Pathak, President, Education for Theatre in Mass Society, Pithoragarh (TSGs for Uttarakhand) and discussion with the BMC members of the mentioned villages.

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