

# An comparative study of state rules based on the Biological Diversity Act, 2002

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Takshashila Discussion Document 2023-08  
Version 1.0, May 2023

This study compares rules passed by various states in a bid to implement provisions of the Biological Diversity Act, 2002. This analysis shows the extent to which states have adopted the Act and recommends best practices to harmonise the implementation of its provisions across India.

*Recommended Citation:*

Adithi Gurkar et al., "An Assessment of state rules for implementation of the Biological Diversity Act, 2002," Takshashila Discussion Document No. 2023-08, May 2023, The Takshashila Institution.

# Executive Summary

The Biological Diversity Act, 2002 was enacted for the **conservation of biological diversity, sustainable use of its components and fair and equitable use and sharing of resources** in order to prevent overuse or eventual destruction of biodiversity. However, since the Act was enacted, it has been embroiled in controversy and requires strengthening to ensure its objectives are achieved, whilst allowing the optimal and sustainable use of biological resources. In this working paper series, we examine various aspects of the Act to provide a comprehensive analysis of its implementation and impact over the past 20 years. This paper performs a comparative study of state rules enacted to implement the national Act and recommends best practices that can be used to harmonise the regulations across the country.

This document has been formatted to be read conveniently on screens with landscape aspect ratios. Please print only if absolutely necessary.

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# I. Introduction

The Biological Diversity Act, 2002 (BDA) allowed all states to create their own State Biodiversity Boards (SBBs) and applicable rules to preserve their biodiversity. An analysis of these rules allows us to understand how states have interpreted the BDA and also identify best practices for implementing its provisions.

The BDA's main objective is to ensure the **conservation of biological diversity, sustainable use of its components and fair and equitable use and sharing of resources** in order to prevent overuse or eventual destruction of biodiversity.

To assess the implementation of the BDA in India, we have studied and compared the BDA rules for 14 Indian states, namely:

1. [Mizoram](#)
2. [Meghalaya](#)
3. [Nagaland](#)
4. [Odisha](#)
5. [Punjab](#)
6. [Rajasthan](#)
7. [Sikkim](#)
8. [Tamil Nadu](#)

9. [Tripura](#)
10. [Uttarakhand](#)
11. [Uttar Pradesh](#)
12. [Maharashtra](#)
13. [Manipur](#)
14. [West Bengal](#)

In **Section II**, we compare the state rules on basis of adoption of key provisions for implementation of the BDA, 2002. In **Section III**, we study specific procedural aspects across states to identify best practices for biodiversity conservation.

## II. A comparison of key provisions adopted across states

Most states analysed in this report have opted to implement key provisions from the BDA legislation. We show below an analysis of select functions:

### 1. Functions of State Biodiversity Board in interaction with state government (Refer to Figure 1)

- A majority of the states' BDA Rules (10 out of 14) have provisions for advising state governments on matters relating to biodiversity.
- All state governments, except Maharashtra, have a provision to propose creation of posts for effective discharge of the board's functions.
- Twelve of the 14 states provide for technical assistance to the state government, and
- All 14 states' BDA Rules provide for reporting to the state government about the functioning of the board.

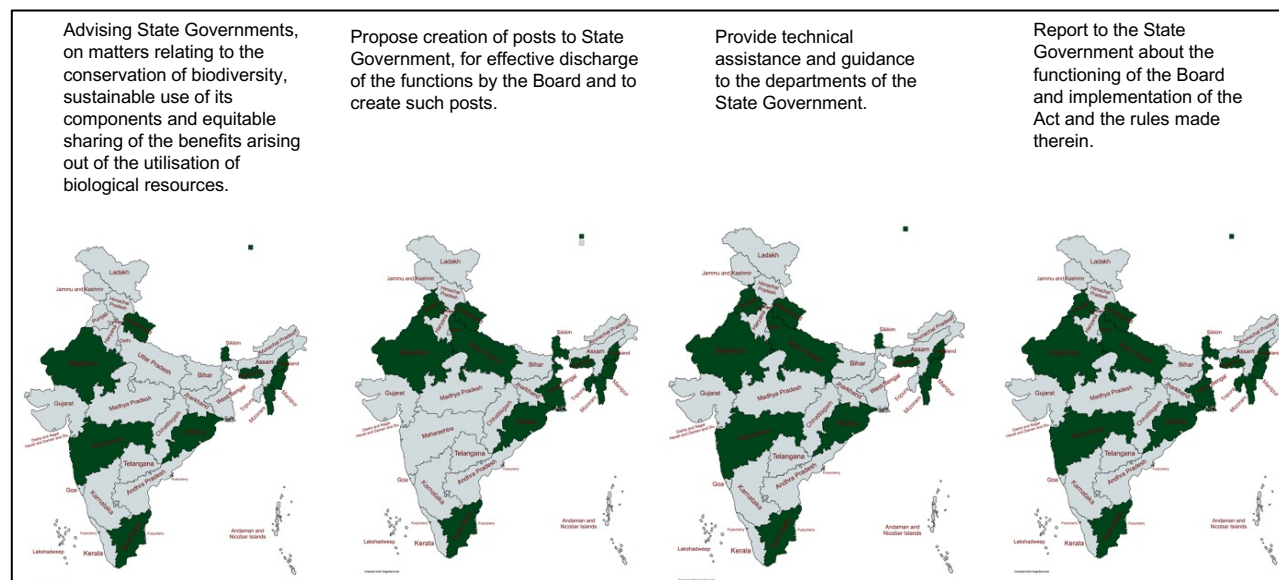


Figure 1 Functions of State Biodiversity Board in interaction with state government – the states marked in green have provided for these functions in their state rules

## 2. Provisions to support livelihoods (Refer to Figure 2)

The BDA Rules of Sikkim, Mizoram, Nagaland, and Tamil Nadu have provisions to promote and strengthen individuals and institutions that are already working towards conservation, sustainable use, and equitable benefit-sharing of biological resources. They also have enabling provisions to provide livelihood support to villagers that have been shifted, or are in the process of getting shifted from unsustainable livelihoods to sustainable livelihoods. This is a key provision that should be replicated in other states as well.

In 11 of the 14 states' BDA Rules examined in this study, inter-sectoral planning and management has been provisioned to ensure that biodiversity and biodiversity-dependent livelihoods are integrated into all sectors and at all levels (from local to state) of planning and management. These provisions may facilitate such sectors and administrative levels to contribute effectively to conservation and sustainable use and for giving advise and directions (both oral and written) to the local bodies (such as Biodiversity Management Committees), for effective implementation of the Act, and to facilitate their meaningful participation in all measures relating to conservation, sustainable use, and equitable benefit-sharing.

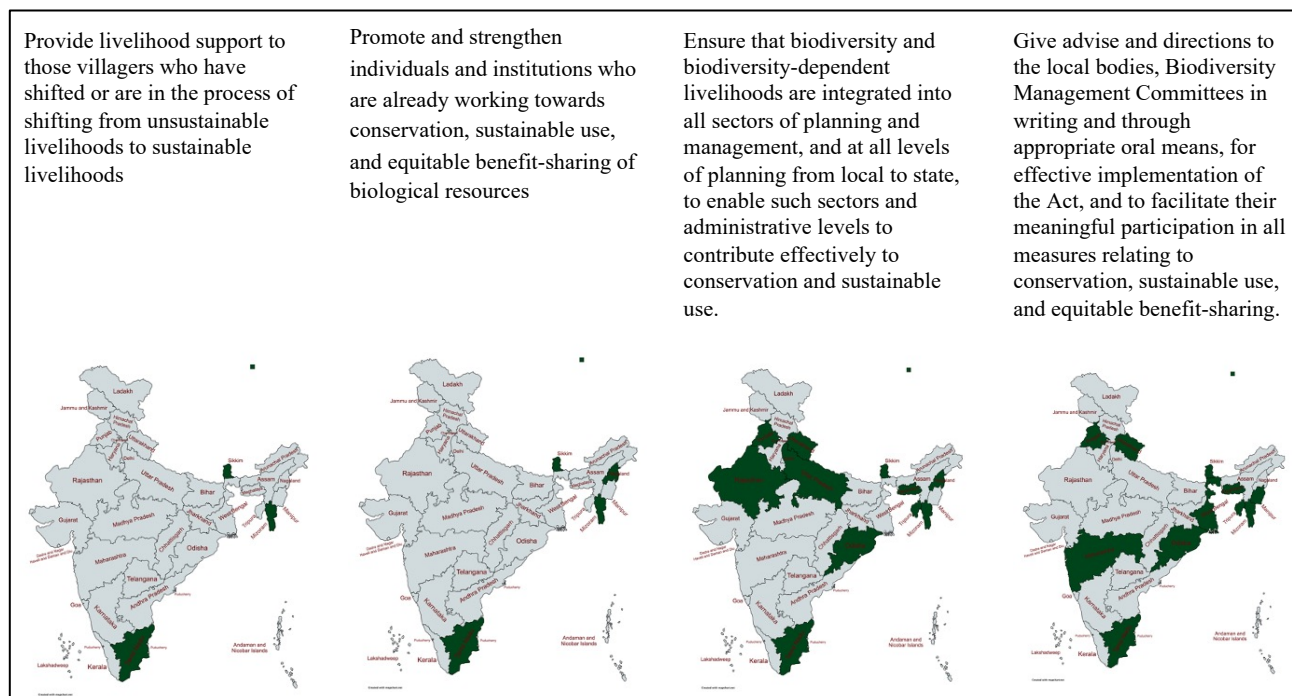


Figure 2 The states marked in green have made the designated provisions to support livelihoods

### 3. Finance related provisions (Refer Figure 3)

- Only in 8 out of 14 states, do the BDA Rules have provisions to recommend, prescribe, modify, levy and collect fee against collection of biological resources other than forest produce from time to time.
- All 14 BDA Rules examined here, except Maharashtra, have kept provisions for sanctioning grants-in-aid and grants to Biodiversity Management Committees for specific purposes.

- |  |  |   |  |
|--|--|---|--|
| Recommend, prescribe, modify, collection of fee of biological resources other than forest produce from time to time. | Sanction grants-in-aid and grants to Biodiversity Management Committees for specific purposes. | Shall have power to acquire, hold and dispose of property, both movable and immovable and enter into contract for the same. | Prepare the annual Budget of the Board incorporating its own receipts as also the devaluation from the State and Central Government provided that the allocation by the Central Government shall be operated in accordance with the budget provisions approved by the Central Government |
|--|--|---|--|

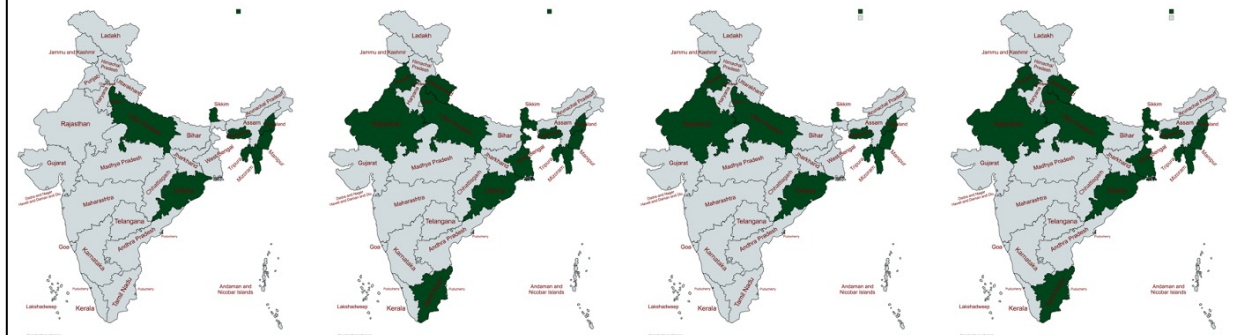


Figure 3 The states marked in green have made the designated provisions related to finances

#### 4. Provisions related to implementing the State Biodiversity Board plan (Refer to Figure 4)

- Of the total 14 State BDA Rules examined here, 11 have provisions for updating and implementation of a State Biodiversity Strategy and Action Plan.
- Except Nagaland, all states have a provision to engage consultants for a specific period to provide technical assistance to the board.
- Twelve states have provisions to plan and organise training of personnel engaged in biodiversity conservation.
- Eleven states provide for the commissioning of studies and funding investigations and research.

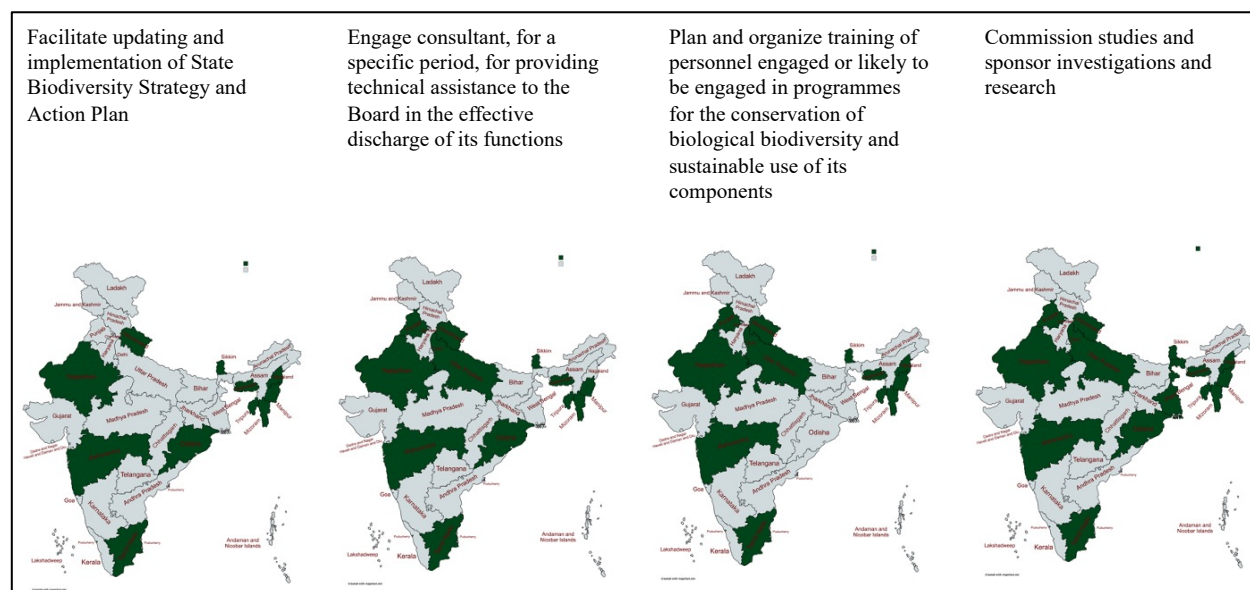


Figure 4 States marked in green have enacted provisions related to implementing the State Biodiversity Board plan

#### **5. Provisions related to documenting, and commercial use of bioresources (Refer Figure 5)**

Seven states have specific provisions that allow regulation by granting of approvals for commercial utilisation or bio-survey or bio-utilisation of any biological resource by Indian nationals. Only Sikkim and Tamil Nadu have provisions regulating the granting and approval of bioresources. All 14 states have provisions to collect, compile and publish technical and statistical data, manuals, codes or guides relating to conservation of biological diversity, sustainable use of its components and fair and equitable sharing of benefits arising out of the use of biological resources and knowledge, and to take steps to build databases and to create information and documentation systems for biological resources and associated traditional knowledge through biodiversity registers and electronics databases to ensure effective management, promotion and sustainable use.

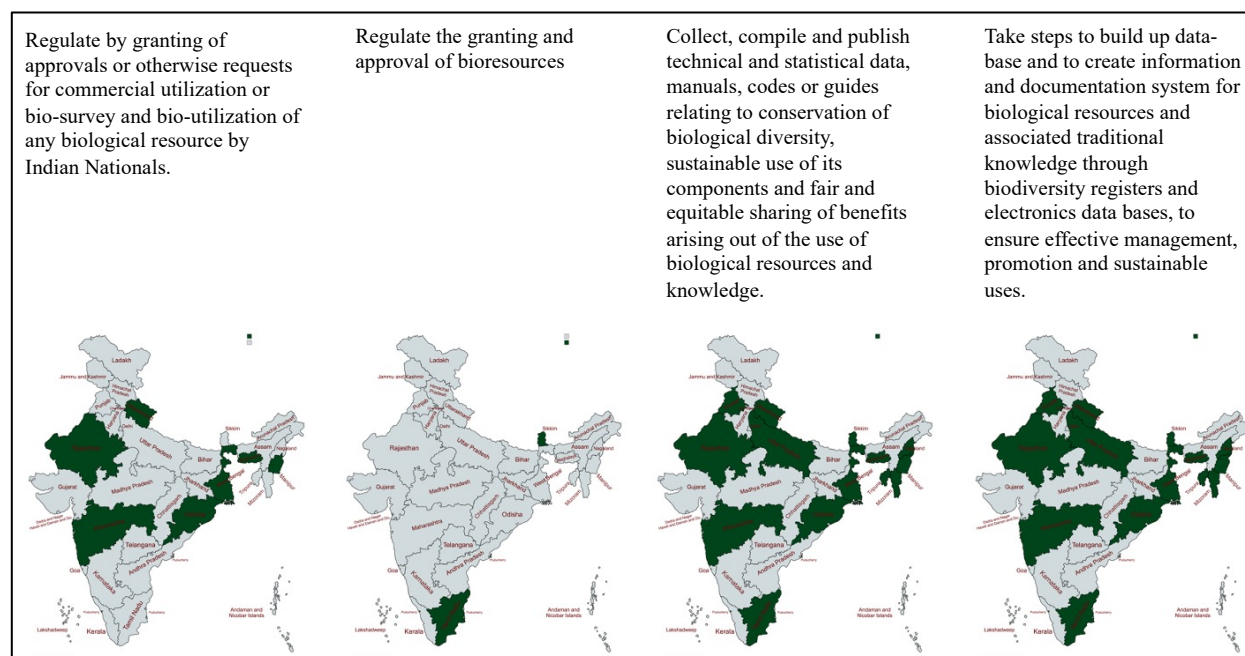


Figure 5 States marked in green have provisions related to documenting, and commercial use of bioresources

## 6. Provisions related to Biodiversity Management Committee's performance

Only Mizoram, Nagaland and Sikkim have a provision to formulate indicators to evaluate the performance of the Biodiversity Management Committees (BMC), and annually reward the best performing BMC at each level in the state and dissolve poorly performing BMCs.

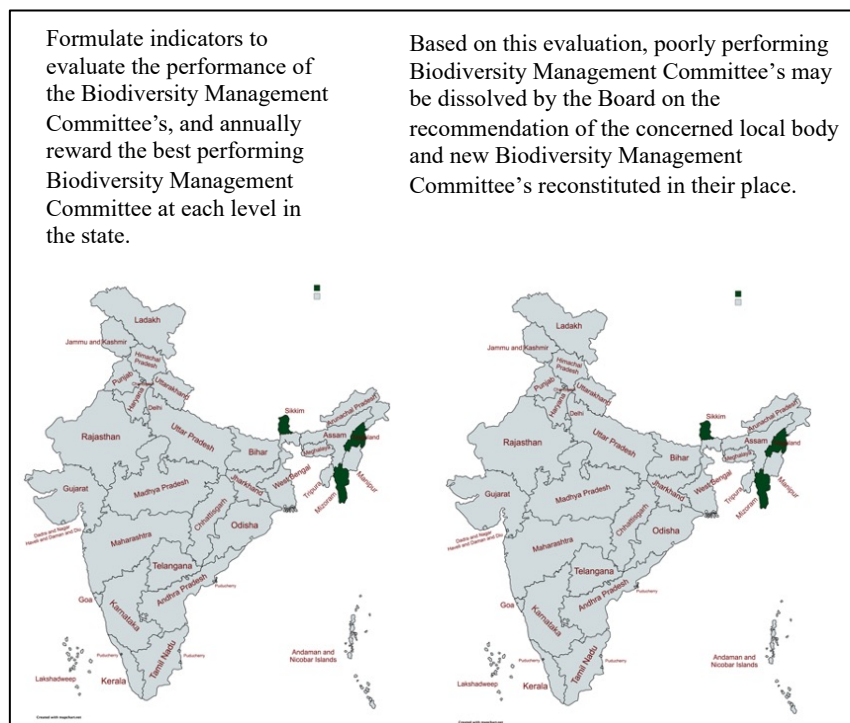


Figure 6: States marked in green provide for rules related to Biodiversity Management Committee's performance

## 7. Provisions related to activities of the Board (Refer Figure 7)

Except Nagaland, all states have provisions for the Board to organise mass media programmes to promote conservation of biodiversity, sustainable use of its components and fair and equitable sharing of benefits arising out of the use of bioresources.

Twelve states have a provision to devise methods to ensure protection of rights including intellectual property rights over bioresources and associated knowledge.

Eleven states have a provision for the Board to perform other functions prescribed by the state government.

Thirteen states have provided to undertake physical inspections of executed activities or works to ascertain whether it is in accordance with the Act.

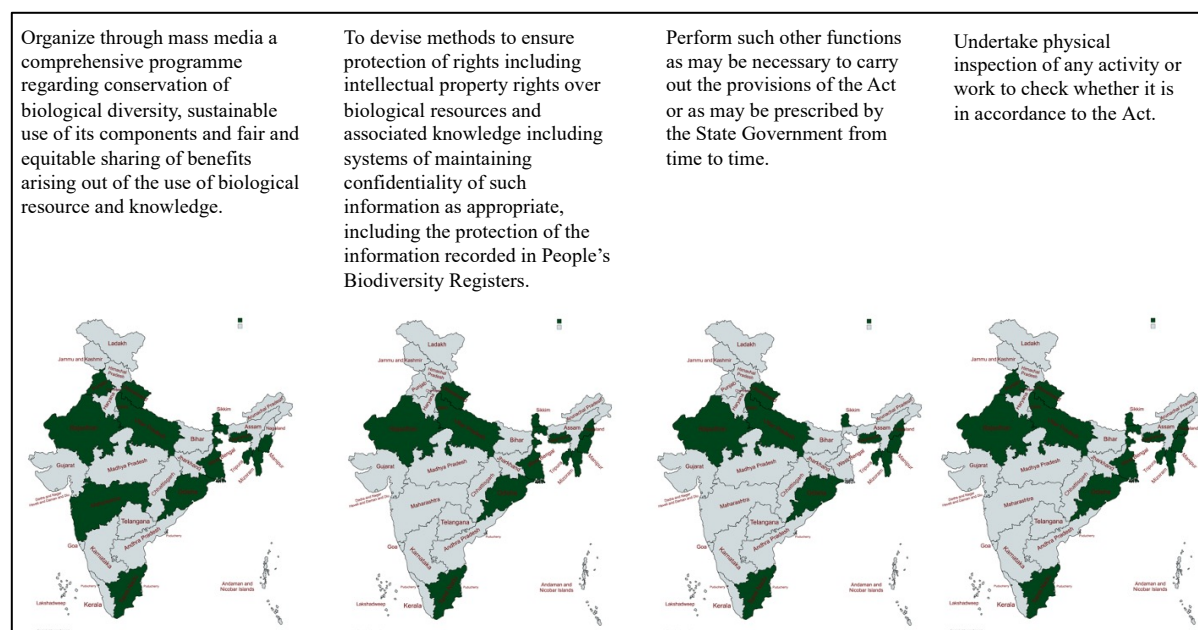


Figure 7: States marked in green include specified provisions related to activities of the Board

### III. Comparison of procedures to identify best practices for implementation of BDA

Below is a summary of best practices for selection and appointment of chairperson, various experts, and frequency of meetings:

#### 1. Chairperson (Refer to Appendix I for detailed comparison)

##### 1.1 Chairperson eligibility criteria:

- The BDA Rules of all 14 states adhere to a shared criterion of appointing an eminent person having knowledge and experience in the subject of conservation and sustainable use of biological diversity, and in “matters relating to equitable sharing of benefits.”
- In addition, Meghalaya, Tripura, West Bengal and Tamil Nadu also allow a serving state officer to be the chairperson – of a rank not below that of an Additional Principal Chief Conservator of Forests in the case of Meghalaya, and not below the rank of Chief/Principal Secretary to the State Government in the case of Tripura, Tamil Nadu, and West Bengal.

- Nagaland requires the chairperson to be a well-known scientist, conservationist, naturalist or a scholar of a state or a central university, and generally a person with administrative experience.
- Rajasthan BDA Rules call for a demonstrative experience of minimum 30 years in conservation and sustainable use of biodiversity and in matters relating to the equitable sharing of benefits.
- Uttarakhand BDA Rules prescribe for the most detailed eligibility criteria for a 'chairperson', viz.,
  - a) Who is serving on the post not lower than that of joint secretary or its equivalent under Government of India or has retired from such post and having minimum experience of 25 years on the subject, or
  - (b) Having not more than 62 years of age and a minimum experience of 25 years in the subject of conservation and sustainable use of biodiversity and equitable sharing of its benefits, be made.
- In most states, the chairperson is chosen by a selection committee appointed by the state government. Uttarakhand has detailed eligibility criteria for this committee as well, namely:
  - a) State government may constitute the following selection committee to select a chairperson –
    - (i) Chief Secretary
    - (ii) Principal Secretary/Secretary, Forest
    - (iii) Principal Chief Conservator of Forests, Uttarakhand
    - (iv) Principal Secretary, Personnel

(v) Director General, Indian Council of Forestry, Research and Education or his representative

## 1.2 Analysis

The chairperson of the State Biodiversity Board is an eminent position, and their selection has to merit due importance. In this regard, the selection committee should also comprise experienced members. Uttarakhand's selection committee composition is most clear and should be treated as best practice.

While all states agree that the chairperson should be experienced in conservation, there are no clear terms in most state rules as to what the experience should entail. Only Uttarakhand and Rajasthan suggest an experiential range and other states could also propose a similar criterion to ensure that the chosen chairperson has adequate experience to deal with the demands of the position.

Nagaland has a special provision for the chairperson being a scientist, conservationist, naturalist or a scholar of a state or a central university, and generally a person with administrative experience. The chairperson's position requires a mix of understanding biodiversity and public policy. In this regard, perhaps training a scholar from an academic setting with public policy will equip them with the necessary tools to undertake their

responsibilities effectively. However, a solid experience in administration has to be considered an innate quality of the prospective chairperson. A serving senior officer (say, a chief secretary or an additional chief secretary) may prove useful as they can help in the integration of biodiversity with other line departments; inability to be able to devote sufficient time as chairperson could act as a flip side to this advantage, though.

### **1.3 Recommended best practices**

1. In addition to the shared requirements, states should specify the minimum years of experience required to become eligible for chairperson. A provision should be made for reducing the years of experience in exceptional cases. The criteria for assessing exceptional cases should also be laid out unambiguously.
2. Members of the selection committee should also have a background in biodiversity, conservation and a fair understanding on the concept of sustainable use of biological resources. The criteria for selecting these members should be specified in the BDA Rules.
3. Provisions could be made to train academicians in public policy and economics to make them better equipped to work in this committee as chairperson or individual members. Alternatively, where feasible, update seminars can be conducted to apprise members of the latest issues pertaining to the BD Act and Rules.

### **2. SELECTION OF EXPERTS (Refer to Appendix I for detailed comparison)**

## 2.1 Eligibility criteria

- Most states limit the number of experts to five. Mizoram, Nagaland, Odisha, Sikkim, Tripura and Maharashtra specify that at least two of these members should represent local communities. Nagaland further recommends that members may include:
  - a. An eminent scientist in the concerned field working with any national or state level institute
  - b. The Vice Chancellor of Nagaland University or any other subject matter expert from the university
  - c. Biodiversity/intellectual property related legal expert
  - d. Any other expert, preferably a woman, as may be nominated by the state government.
- Odisha BDA Rules recommend that the committee should have members with expertise in sociology/anthropology.

## 2.2 Analysis

- Since the BDA is mainly for conservation of biodiversity for the local population, it is essential that the expert committee consists of local community members or experts nominated by them. A mixed committee of locals, academicians, industrial representative and lawyers would be ideal.
- Similarly, it is important to have proper gender representation particularly because local biodiversity may be used differently by different genders.

### **2.3 Recommended best practices**

1. Specify local community representation
2. Recommend specific positions that are central to biodiversity conservation as done by Nagaland.
3. Make it compulsory to have at least one woman as an expert.

### **3. Frequency of meetings (Refer to Appendix I for detailed comparison)**

The frequency of meetings conducted was assessed for 50% BDA Rules.

Seven of the 13 states analysed meet four times a year; five states meet twice a year; and Punjab does not have an allocation in the rules.

Recommendation: The committee could be more accessible if a standard frequency of meeting four times a year is followed.

### **4. Procedure for access to or collection of biological resources (Refer to Appendix II for detailed comparison)**

#### **4.1 Application fee:**

- There is a difference in the fees being levied for application of access to biological resources with three states (Mizoram, Nagaland and Sikkim) levying ₹100 for application for research purposes and ₹1000 for application for commercial purposes.

- Meghalaya and Maharashtra levy ₹500 for application for research purposes and ₹5000 for application for commercial purposes.
- Manipur and Tripura levy a flat rate of ₹1000 and ₹5,000 respectively for all applications. The BDA Rules of other states analysed did not have a prescribed fee structure. In addition, Meghalaya offers a 50% discount structure to applications submitted by the members of Schedule Castes and Schedule Tribes.
- Nagaland allows for traditional Naga healers to apply without any application fee. Maharashtra has a refund structure in case the application is not successful.

#### **4.2 Analysis:**

Fees in the ₹100–500 range for research applications and ₹1000–5000 for commercial applications appear to be reasonable. Further reduced fees for local population or those of proven economic disadvantage may promote access to biodiversity amongst these groups. Similarly, refunding a part of the fee in case the application is rejected will incentivise more players to applying for biodiversity access.

#### **4.3 Recommended best practices:**

1. Keep application fees in the range of ₹100–500 for research applications and ₹1000–5000 for commercial applications.
2. Specify discounts for local groups. However, the basis for discount should be specified to prevent misuse. For example, discounts could be offered to local hakims, but a company incorporated outside the

state, but wishing to utilise local bioresources should have to pay the full application fee.

3. Create a refund structure for rejected applications.

### **Conclusion:**

A comparative study of statewide BDA Rules shows the disparities between various states in implementing the BDA. It also creates opportunities to identify best practices that can be universally accepted to enable a smooth and consistent application of the Act.

## IV. Appendix

Appendix I Table with detailed comparison of provisions for recruiting chairperson, experts and frequency of meeting

State	Chairperson requirements	Experts' eligibility	Meeting Frequency
Mizoram	-	Not more than five members shall be nominated by the State Government, out of which 3 shall be from amongst experts in matters relating to conservation of wild biological diversity, sustainable use of biological resources and equitable sharing of benefits arising out of the use of biological resources and not less than two members shall be from local communities.	Twice a year
Meghalaya	Can also be serving officer of state government, not be of rank below that of an	Five nonofficial members from amongst the experts in matters relating to conservation of biological	Four times a year

	<p>Additional Principal Chief Conservator of Forests.</p> <p>Be recommended by a 3-member search committee, headed by the Chief Secretary, appointed for the purpose</p>	<p>diversity sustainable use to biological resource and equitable sharing of benefits arising out of the use of biological resources shall be nominated by the State Government.</p>	
Nagaland	<p>He/She should be a well-known scientist, conservationist, naturalist or a scholar of a state or a central university and generally a person with experience of administration.</p> <p>Shall be accorded a rank equivalent to a minister of state in the state government and recommended by the 3-member committee appointed by the government constituted for the purpose.</p>	<p>(1) Five nonofficial members from amongst the experts in matters relating to conservation of biological diversity sustainable use to biological resource and equitable sharing of benefits arising out of the use of biological resources shall be nominated by the State Government in consultation with the Chairman of the Board. At least two of these members shall be experts nominated from local communities.</p> <p>Such members may include:</p>	Twice a year

		<p>a. An eminent scientist in the concerned field working with any national or state level institute</p> <p>b. The Vice Chancellor of the Nagaland University or any other subject matter expert from the university</p> <p>c. biodiversity/intellectual property related legal expert</p> <p>d. any other expert preferably a woman as may be nominated by the state government.</p>	
Odisha	Can also be a Secretary to the Government in Forest & Environment Department	They will be nominated/selected based on their experience in the field of biodiversity conservation, sustainable use of natural resources, sharing of benefits arising out of biological resources to the local population, sociological/anthropological knowledge and knowledge/experience in other fields.	4 times a year

Punjab	No process	Punjab has no mention for the appointment of such members.	No process
Rajasthan	Minimum 30 years of experience in the conservation and sustainable use of Biodiversity and in matters relating to the equitable sharing of benefits. Recommended by 3-member search committee, consisting of chief secretary, Government of Rajasthan, Principal Secretary, Forest Department, Government of Rajasthan and Principal Chief Conservator of Forests, Rajasthan		4 times a year
Sikkim		Not more than five non-official members from amongst the experts in matters relating to conservation of wild biological diversity, sustainable use of biological	2 times a year

		resources and equitable sharing of benefits arising out of the use of biological resources shall be nominated by the State Government. Not less than two of these shall be from local communities.	
Tamil Nadu	Deputation of a person not below the rank of Principal Secretary to the Government or by selection from outside the Government. recommendation of a 3-member Search Committee constituted for the purpose headed by the Chief Secretary	Not studied	2 times a year
Tripura	Serving officer of the State Government, not below the rank of Chief Secretary to the State Government	At least two of these members shall be from local communities.	2 times a year
Uttarakhand	(a) who is serving on the post not lower than that of Joint Secretary or its equivalent under	No direct procedure for such appointment	4 times a year

	<p>Government of India or has retired from such post and having minimum experience of 25 years on the subject as mentioned in sub-rule (1), or</p> <p>(b) Having not more than 62 years of age and a minimum experience of 25 years in the subject of conservation &amp; sustainable use of Biodiversity and equitable sharing of its benefits, be made.</p> <p>State Government may constitute the following Selection Committee for selection of Chairman -</p> <p>(i) Chief Secretary</p> <p>(ii) Principal Secretary/Secretary, Forest</p> <p>(iii) Principal Chief Conservator of Forests, Uttarakhand</p> <p>(iv) Principal Secretary, Personnel</p>		
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	<p>(v) Director General, Indian Council of Forestry, Research and Education or his representative</p> <p>Three months prior to the occurrence of vacancy of Chairman, a list of 05 suitable and interest candidates shall be prepared and sent to the selection committee by the following search committee -</p> <p>(i) Principal Secretary/Secretary, Forest (ii) Sitting Chairperson, Uttarakhand Biodiversity Board (iii) Principal Chief Conservator of Forests (wildlife), Uttarakhand</p>		
Maharashtra		At least two of these members shall be from local communities.	4 times
Manipur			4 times

West Bengal	<p>deputation from amongst officers not below the rank of a Secretary to the Government of West Bengal or by selection (direct recruitment) selection committee, to be constituted by the state Government for this purpose</p> <p>(ii) The committee referred in (i) above all shall comprise of the following members:-</p> <p>Chief Secretary - Chairman</p> <p>Secretary, Department of Environment - Member</p> <p>Secretary, Department of Finance - Member</p> <p>One expert on conservation of Biodiversity/Natural resources - Member</p> <p>One person to be nominated by the State Government - Member</p>	Not studied	4 times
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**Appendix 2: Table with detailed provisions for application fee, period for decision, consultation with local bodies and conditions for approval**

State	Application fee	Period for decision	Consultation with local bodies	Conditions for approval may specifically provide measures for conservation and protection of biological resources to which the approval being granted.
Mizoram	INR 100 – research purpose INR 1000 – commercial purpose	3 months	Yes	Yes

Meghalaya	INR 500 – research purpose INR 5000 – commercial purpose Application submitted by the members of Schedule Caste and Schedule Tribe shall however be accompanied with a fee amounting to fifty percent (50%) of the amount specified here-in-above.	3 months	Yes	Yes
Nagaland	INR 100 – research purpose	3 months	Yes	Yes

	INR 1000 – commercial purpose No fee for traditional Naga healers			
Odisha	Fee to be fixed by State government	3 months	Not explicitly written	Yes
Rajasthan	Fee to be fixed by State government	3 months	Yes	Yes
Sikkim	INR 100 – research purpose INR 1000 – commercial purpose	3 months	Yes	Yes
Tamil Nadu	INR 10,000	3 months	If necessary	Yes
Uttarakhand		6 months	Yes	Yes

Maharashtra	INR 500 – research purpose INR 5000 – commercial purpose four fifth of which shall be refunded to the applicant in case of rejection of the application.	3 months	Yes	Yes
Manipur	INR 1000	2 months	Yes	Yes
West Bengal		1 month	Yes	Yes



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