

# Thematic Expert Committee

NBA supported programme

February 17<sup>th</sup> 2020

Venue: Govt. Guest house, Thycaud, Thiruvananthapuram



**Kerala State Biodiversity Board**



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## **Agenda for Thematic expert committee**

10.30 - 10.50 : Inauguration and Program overview

10.50 - 11.00 : Tea

11.00 - 1.00 : Group discussion

1.00 - 1.45 : Lunch

1.45 - 3.00 : Group discussion

3.00 - 3.15 : Tea

3.15 - 4.45 : Presentation

4.45 - 5.30 : Discussion and conclusion

### **1. BHS - Notification and Management of BHS**

- a. Asramom BHS Management Plan
- b. Guidelines for identification, survey and declaration of locally important biodiversity rich sites as local BHS.

### **2. Conservation of Agrobiodiversity through Custodian Farmers**

- a. Methodology –Agrobiodiversity index/ mapping
- b. Guidelines for identification of Custodian farmers and Nature of support to custodian farmers
- c. Capacity building needs
- d. Best practises of Agro biodiversity conservation
- e. Sustainability plan

### **3. Riverine Biodiversity rejuvenation**

- a. Riparian biodiversity rejuvenation
- b. Training requirements for Kudumbasree, MNREGS and others
- c. Best practises of Riverine biodiversity management

### **4. Access and Benefit Sharing (ABS)**

- a. Guidelines for Levy of collection fees by BMC
- b. Guidelines for Inclusion of Green Cess in Compensatory afforestation plan while granting Environmental clearance to Quarries

### **5. Peoples Biodiversity Register (PBR) updation incorporating data from forest areas and Traditional Knowledge of Indigenous community**

- Methodology
- Source of data - Primary and Secondary
- Role of Range Forest officers and support required from Forest department

## Attendance Sheet

Consultative Workshop- Expert Committee Meeting  
Govt. Guest House, Thycaud, Trivandrum on 17/02/2020

### Peoples Biodiversity Register (PBR) update incorporating data from forest areas and Traditional Knowledge of Indigenous community

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### BHS - Notification and Management of BHS

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**Riverine Biodiversity rejuvenation**

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**Access and Benefit Sharing (ABS)**

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**Attendance Sheet**  
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**Conservation of Agro biodiversity through Custodian Farmers**

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**Conservation of Agrobiodiversity through Custodian Farmers  
(RKI Project) - Major Components of Project**



**Agenda 1**  
**Conservation of Agrobiodiversity through Custodian Farmers**  
**(RKI Project) - Major Components of Project**  
**Point for Discussion**

Methodology Agrobiodiversity index/ mapping	A comprehensive index for prioritisation of custodian farmers will be developed based on the criteria and appropriate weightage
Guidelines for identification of Custodian farmers	<ul style="list-style-type: none"> <li>➤ Those who practising traditional farming peculiar to Kerala's heritage, conservation practices including all types of crops.</li> <li>➤ Selective guidelines for northern and southern states while selecting, mainly focus on agrobiodiversity significant area. eg:- Alappuzha with rice, fish, duck so on.</li> <li>➤ Farmer must practise cultivation at least 10 years and the same thing should be certified by Agriculture officer in consultation with BMC/ Ward member.</li> <li>➤ The farmer should maintain maximum crop and animal diversity may be species, genetic or ecosystem level.</li> <li>➤ Emphasis should be given to those who practising multicrop/ multienterprise /multispecies and multivariety/multibreed.</li> </ul> <p><b>Weightage criteria</b></p> <ul style="list-style-type: none"> <li>➤ Given to those practising agriculture based on Kerala's Agricultural Economy</li> <li>➤ Preference to those maintaining land races, wild relatives, threatened and endangered species.</li> <li>➤ A farmer cultivating under exploited crops, fish and animals.</li> <li>➤ Whether the material conserved are shared between farmers and R &amp;D institution.</li> </ul> <p><b>SPECIAL CHARECTERISTICS</b></p> <ul style="list-style-type: none"> <li>➤ Whether traditional variety used for breeding programmes</li> <li>➤ Whether traditional variety used for breeding programmes and developed new variety</li> <li>➤ Involvement in PBR</li> <li>➤ Involvement in BMC</li> <li>➤ Intergenerational carry forward.</li> <li>➤ Whether Female headed family</li> <li>➤ Whether the family belongs to marginalised community.</li> <li>➤ Trait specific germplasm for Climate smart agriculture.</li> <li>➤ Germplasm contributing to nutritional requirements.</li> <li>➤ Recognition in the form of award at Panchayath/block/district/state/ national/international.</li> </ul> <p><b>For the purpose of identification and prioritisation the above guidelines should be included and index with weightages for choosing the custodian farmers for incentovisation</b></p>

Nature of support to custodian farmers	<ul style="list-style-type: none"> <li>• Training</li> <li>• Recognition/awards/honouring</li> <li>• Education/ job concession</li> <li>• Recognition to custodian farmers by recognising them as brand ambassador in agriculture department- strategic recognition –board, banner etc.</li> <li>• Facility for farm school</li> <li>• They should be included in the decision making bodies at different levels.</li> <li>• Provision for monetary benefits for participating exhibition/mela/workshop.</li> <li>• For Economic valuation of ecosystem services rendered by custodian farmers, a suitable remuneration at a maximum of one lakh per year.</li> <li>• In all governmental publicity programmes, he will be an integrated part.</li> <li>• Should be included in the panel of experts for handling sessions related with agriculture departments/university.</li> </ul>
Major deliverables and Milestones	<ul style="list-style-type: none"> <li>• Annually hundred custodian farmers from each district should be identified and baseline data collected and documented.</li> <li>• Success story at the rate of 100 per district should be documented and published, Video documentary of 10 per district</li> </ul>
	<ul style="list-style-type: none"> <li>• At least 10,000 farmers per district should be trained under 100 custodian farmers.</li> <li>• Dedicated, dynamic and interactive website under KSBB.</li> <li>• Establishment of nursery of planting material of indigenous varieties.</li> </ul>
Capacity building needs	<ul style="list-style-type: none"> <li>• Training to LSG representatives &amp; other concerned bodies.</li> </ul>
Best practices of Agro biodiversity conservation	<ul style="list-style-type: none"> <li>• Establishment of farmer field school.</li> <li>• Genome savour award winners case (PPVFRA), Biodiversity award winners</li> </ul>
Project Monitoring and Sustainability plan	<ul style="list-style-type: none"> <li>• Committee at district and state level with selected representatives from custodian farmers and experts selected from KSBB</li> </ul>
Linkages with schemes of line departments	<ul style="list-style-type: none"> <li>• It should be linked with selected line departments</li> </ul>



**PBR Updation incorporating data from forest areas and  
Traditional knowledge of Indigenous community**





**Agenda 2 :**  
**PBR Updation incorporating data from forest areas and**  
**Traditional knowledge of Indigenous community**  
**Point for Discussion**

General suggestions	<ul style="list-style-type: none"> <li>• Budget has to be enhanced per panchayat</li> <li>• Local TK and forest biological resources must be documented.</li> <li>• Secretary of the Local body/BMC must be custodian of the PBR data.</li> <li>• There should be a collection centre for biological resources at every local body in all the three tiers of Panchayats. Traders must execute an agreement with such centres at district level.</li> <li>• PBR which is already prepared must be utilised at local level for conservation practices.</li> <li>• Any new piece of information generated should be submitted to BMCs concerned.</li> <li>• KSBB must inform all universities and R&amp;D institutions for providing the copy of their reports/thesis/ dissertations (at least executive summary) related to biodiversity to BMCs concerned.</li> <li>• DCs of KSBB must identify district wise studies related to biodiversity going on in each district and collect all such details for further addition of such data in to concerned PBRs.</li> <li>• Duties of DCs must be redefined. DCs should be authorised to interact with R&amp;D institutions/ academic institutions regularly and appraise them to transfer their biodiversity related data to KSBB</li> </ul>
Methodology for updating PBR in forest areas	<ul style="list-style-type: none"> <li>• Human diversity, medicinal plants, NTFPs, tribal knowledge and practices must be collected.</li> </ul>
Source of data- Primary and Secondary	<ul style="list-style-type: none"> <li>• Secondary data may be collected from working plan &amp; survey data of Forest Dept.</li> <li>• Data from R&amp;D Institutions.</li> </ul>
Mode of data collection- eg: No. of meetings (RRA & PRA) to be held in each panchayat, volunteer group (VSS, EDCs, etc.) Duration of data collection	<ul style="list-style-type: none"> <li>• Documentation of tribal knowledge must be done in their language. Need support of Tribal dept.</li> <li>• Volunteers shall be identified from mentor teachers, tribal promoters, tribal instructors for primary data collection.</li> <li>• Stakeholders- ITDP, Forest dept., R&amp;D institutions, VSS, SC/ST Federations, local NGOs, BMCs</li> <li>• Project period – initially for a period of 1 year</li> </ul>
Role of Range Forest officers and support required from Forest department	<ul style="list-style-type: none"> <li>• RFOs may act as facilitator and provide awareness and training.</li> </ul>
Data consolidation – whether Range wise/ District wise.	<ul style="list-style-type: none"> <li>• Data collected at range level shall be pooled at local level with the support of BMCs/local bodies through sensitisation.</li> </ul>
Approximate Budget	<ul style="list-style-type: none"> <li>• Budget may be enhanced to at least Rs. One lakh for each panchayat</li> </ul>





**Riverine Biodiversity rejuvenation  
(RKI project)- Major Components of project**



**Agenda 3:**  
**Riverine Biodiversity Rejuvenation**  
**(RKI project)- Major Components of project**  
**Points for Discussion**

<p>Methodology for Riparian biodiversity rejuvenation by BMCs</p>	<ol style="list-style-type: none"> <li>1. Land up to 50 m. on both sides of the main river or up to the extent of the natural forest whichever is high should be declared as Riparian area</li> <li>2. Only mixed species, especially indigenous ones of local varieties shall be used.</li> <li>3. Existing natural vegetation should be protected and propagated.</li> <li>4. Soil binding species to be used in the immediate banks.</li> <li>5. Tuber crops should not be permitted within the riparian area of 50 m, as they aggravate soil erosion.</li> <li>6. No new constructions shall be allowed along the 50 m. width.</li> <li>7. Waste disposal to the river should be banned and monitored.</li> <li>8. Use of Coir geotextiles at erosion prone places of the river bank.</li> </ol>
<p>Key Stakeholders</p>	<ol style="list-style-type: none"> <li>1. Local communities</li> <li>2. Kudumbasree</li> <li>3. MGNREGS</li> <li>4. N.G.Os</li> <li>5. LSG/BMC</li> <li>6. Departments of Irrigation, Forest, Agriculture, Animal husbandry, Fisheries. Dpt. of Revenue, Environment, Mining and Geology</li> <li>7. Educational Institutions/R &amp;D Institutions</li> <li>8. Biodiversity clubs, Bhoomithrasena</li> </ol>
<p>IEC Programs</p>	<ol style="list-style-type: none"> <li>1. Awareness programmes for all stakeholders</li> <li>2. Audio/Video support.</li> <li>3. Exhibition of information panels in all LSGs and at appropriated places including public places, Educational institutions, NGOs</li> </ol>
<p>Training requirements for Kudumbasree, MNREGS and others</p>	<ol style="list-style-type: none"> <li>1. Production of leaflets/brochures for: 1. Need for river bank protection, 2. species for planting, 3. nursery raising, 4. planting methods, 5. protective measures such as watering, protection from cattle grazing, providing shade etc.</li> <li>2. Information booklet on general biodiversity.</li> <li>3. Preparation of a training module.</li> <li>4. Training Programmes for BMC, Kudumbasree, MGNREG, Line departments.</li> </ol>
<p>Best practices of Riverine biodiversity rejuvenation in Kerala</p>	<ol style="list-style-type: none"> <li>1. River bank afforestation by BMC of Mavoor GP</li> <li>2. Varattar rejuvenation programmes by Eraviperoor gramapanchayat.</li> <li>3. Killiyar rejuvenation.</li> </ol>

<p>Project Monitoring and Sustainability plan</p>	<ol style="list-style-type: none"> <li>1. Continuous monitoring by BMC including representatives of local community, NGOs, Educational / R&amp;D institutions, Residents Associations.</li> <li>2. Enforcing protective measures by BMC/LSG.</li> <li>3. Quarterly progress report of the programmes of each BMC to KSBB.</li> <li>4. FOR SUSTAINABILITY of the project income generating source such as sand mining based on sand auditing in the public sector, nursery raising and sale of saplings.</li> <li>5. Responsible tourism activities including water sports and adventure tourism without damaging the ecological variables.</li> <li>6. A white paper on water in each panchayat shall be published in each year.</li> <li>7. Sustainable harvesting of bioresources.</li> </ol>
<p>Linkages with schemes of line departments</p>	<ol style="list-style-type: none"> <li>1. All line departments especially, Forest Department (afforestation, Silviculture), Agriculture (horticulture), Fisheries (rearing of indigenous species) shall be associated for ensuring sustainability of the programme.</li> <li>2. All the 3 block panchayats and 11 BMCs should strive to place project proposals in their annual budget.</li> <li>3. Sourcing of River Management Fund for river bank afforestation programme and monitoring</li> </ol>



**BHS - Notification and Management of BHS  
Asramom BHS Management Plan**





**Agenda 4**  
**BHS - Notification and Management of BHS**  
**Asramom BHS Management Plan**  
**Point for Discussion**

Framework of Management Plan	<ol style="list-style-type: none"> <li>1. Physical demarcation without hampering ecosystem (without hard structures)</li> <li>2. Proper boards with details of BHS and legal status,</li> <li>3. Land use change study – 5 temporal data covering 25 years to identify the threats with 500 m aerial buffer,</li> <li>4. Collation of tidal calendar</li> <li>5. Ecosystem study and Identification of Ecosystem services</li> <li>6. Species inventory and Zonation/stratification,</li> <li>7. Stakeholder and use identification</li> <li>8. Threat identification             <ol style="list-style-type: none"> <li>a. Encroachment</li> <li>b. Accretion/erosion</li> <li>c. Invasive alien species</li> <li>d. Tourism</li> <li>e. Dumping of Waste/Litter</li> <li>f. Sewage/seepage from adjoining establishments (oil and chemical contamination from KSRTC depot, YathriNivas, Beverages Godowns, Fish processing centre, recreation spaces.</li> </ol> </li> </ol>
Suggested Major Activities	<ol style="list-style-type: none"> <li>1. Facilitating the natural regeneration</li> <li>2. Ecorestoration             <ol style="list-style-type: none"> <li>a. Eradication of invasive</li> <li>b. Introduction of true mangroves, mangrove associates</li> </ol> </li> <li>3. Identification and declaration of buffer zone – both land and lake</li> <li>4. Regulation of activities             <ol style="list-style-type: none"> <li>a. Tourism</li> <li>b. R &amp; D</li> <li>c. Collection of Calamus rotang and other threatened species</li> </ol> </li> <li>5. Prohibition of activities             <ol style="list-style-type: none"> <li>a. Waste dumping</li> <li>b. Cutting of mangroves</li> <li>c. Reclamation</li> </ol> </li> <li>6. Participatory management &amp; conservation ensuring sustainable livelihood (with involvement of all stakeholders)</li> <li>7. Awareness creation</li> <li>8. Conservation research</li> <li>9. Biological Impact Assessment</li> <li>10. Interpretation centre (in existing structures by KSBB)</li> </ol>

Institutional Structure	<ol style="list-style-type: none"> <li>1. KSBB &amp; BMC</li> <li>2. Kollam corporation</li> <li>3. District administration</li> <li>4. KCZMA</li> <li>5. Tourism - DTPC</li> <li>6. Fisheries</li> <li>7. Forest Dept. (Social forestry)</li> <li>8. Revenue Dept.</li> <li>9. Irrigation Dept.</li> <li>10. District Pollution Control Board</li> <li>11. Suchitwa Mission</li> <li>12. Inland navigation Dept.</li> <li>13. Mining and geology</li> <li>14. CSIR</li> <li>15. CMFRI</li> <li>16. Local academic Institutions</li> </ol>
Linkages with existing schemes	<ol style="list-style-type: none"> <li>1. RAMSAR secretariat</li> <li>2. Ashtamudi Management Plan</li> <li>3. Fisheries dept.</li> <li>4. District Tourism Plan</li> <li>5. Development of Inland waterways</li> </ol>
Budget and source of funding	<ol style="list-style-type: none"> <li>1. NBA</li> <li>2. KSBB</li> <li>3. MoEFCC</li> <li>4. DST</li> <li>5. Fisheries Dept</li> <li>6. Promoting inland cage farming</li> <li>7. MP &amp; MLA funds</li> </ol>
	<ol style="list-style-type: none"> <li>8. Kollam corporation &amp; District Administration</li> <li>9. Forest Dept.</li> <li>10. Dept/ of Ocean development</li> </ol>
Monitoring and Sustainability Plan	<ol style="list-style-type: none"> <li>1. State Level BHS committee under KSBB</li> <li>2. Permanent Monitoring Committee – 2 year term (Peoples elected representatives, including all line depts. &amp; enforcing agencies, Biodiversity experts, Local NGOs, stakeholders, R &amp; D institutions, Green Corps)</li> <li>3. Monitoring and revision of the management plan in every 5 years to ensure sustainability</li> </ol>

### **Criteria**

1. Geological and Landscape value areas
2. Species diversity & Richness, Rarity and endemism
3. Unique Agro ecosystems
4. Urban Green area
5. Unique wetlands - attracting migrant species,
6. Biocultural areas – Sacred groves, tree groves, community conserved areas, areas with spiritual significance
7. Heritage villages (with unique harvest system, traditional seeds, traditional value addition, indigenous knowledge, traditional occupation

8. Research and Educational value
9. Livelihood & Social value
10. Threatened & unique habitats like lateritic hills and Myristica swamps
11. Turtle nesting sites
12. Spawning grounds
13. Aquifers & springs
14. Area with high adaptability and resilience in the scenario of climate change (Pokkali, Kaippad)
15. Heronries and roosting sites
16. Unique and pristine riparian vegetations and river stretches (like Kaithakundu)
17. High biodiversity areas under water

Declaration methodology

Demand from local community through BMC.

Uniqueness should be evaluated by a committee and based on their report declaration as LBHS

Recommendations by R & D institutions with local support





**Access and Benefit Sharing (ABS)  
Point for Discussion**



**Agenda 5 :**  
**Access and Benefit Sharing (ABS)**  
**Point for Discussion**

<p>Guidelines for Levy of collection fees by BMC</p>	<p><b>Collection charges (levy) of BMC for collecting the bioresources:</b></p> <ul style="list-style-type: none"> <li>• The levy of collection fee should be resource specific according to the fair base price of the bio resource (raw materials).</li> <li>• The fair base price can be location specific. It should be fixed for the different bioresources commonly collected from each locality.</li> <li>• The fair base price shall be derived based on the amount paid by the end users for the bioresources (purchasing price paid by the end user). [ In situations where there are no voluntary declarations by end users appropriate mechanisms may have to be evolved for ascertaining / identifying the amount paid by the end users</li> <li>• The availability, utility and seasonal nature of the bio-resource should be a criteria while assessing fair base price. (But if the source is rare the price can be made higher if it is allowed to be collected,</li> <li>• It is ideal for the State Board itself to determine the fair base price of the bioresources (to begin with the tradable bioresources).</li> <li>• The fair base price so determined should be revised annually or seasonally.</li> <li>• The collection fee levied by the BMC should be a definite percentage of the fair base price of the specific bioresources.</li> <li>• The levy collected should be used for ensuring the sustainability of the bioresources ( ideally the specific bio-resource in respect of which the collection fee was levied)</li> <li>• The area specificity of the bioresources (preferably geographical coordinates) must be insisted while receiving applications for access to bioresources.</li> <li>• The percentage of levy may be fixed by the KSBB after due deliberations and a communication (by way of a notification) can be issued to all BMCs regarding levy of the collection fee.</li> </ul> <p><b>Additional points</b></p> <ul style="list-style-type: none"> <li>• Proper training and awareness creation should be given to the BMC's and village officials about the importance of area wise biodiversity.</li> <li>• Seasonal importance should be considered for collecting the bioresources</li> <li>• The areas of endangered species should be identified and declared as protected areas through mapping with the help of NGO's or kudumbashree.</li> <li>• An additional expert data containing the local data of the flora and fauna should be prepared in all the panchayaths through experts like students and staffs of colleges and schools during semester break of academic years. Internship should be implemented for updation of PBR.</li> <li>• Material flow chart should be identified for the various bioresources and should be made mandatory for companies. (it may possible only through reverse tracking process.)</li> </ul>
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<p>Guidelines for Inclusion of Green Cess through BMCs in Compensatory afforestation plan while granting Environmental clearance to Quarries</p>	<ul style="list-style-type: none"><li>• 1% of the annual turn-over declared by the quarry may be considered for green cess.</li></ul>
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**Mainstreaming Biodiversity in  
Government departmental/sectoral schemes**



**Agenda 6**  
**Mainstreaming Biodiversity in Government departmental/sectoral schemes**  
**Points for Discussion**

Themes	Prioritized Area/Species for intervention	Threat	Reasons	Possible solutions/Interventions	Suggested Policy changes	Best practices	Action for mainstreaming biodiversity in Government departmental /sectoral schemes	Research studies required	Extension needs
Agriculture 1.Paddy	<b>A. Low land rice Paddy Systems</b> 1. Pokkali 2. Kaippad 3. Kuttanad Area (Below sea level) 4.Kole <b>B.Other speciality varieties grown in upland low land</b>	1.Climate change 2.Paddy land conversion	8.Purely dependent on climate 9.Unecological	5.Payment for ecosystem services 6.Value addition 7. Marketing through farmers produce organization 8.Ensure linkage with elite customers 9. Integrated faming (Prawn Fish, and duck) 10. Minimum support price for GI tag varieties has to be fixed by the government.	7.MSP has to be fixed based on conservation, nutrition and other speciality characters like GI 8.Financial assistance for ensuring diversity of crops and allied sectors		1.Constitute a technical advisory committee with agriculture officer of the panchayat as one of member who will be advising issues related to agriculture 2. As biodiversity cross cutting area it has to be given a larger involvement in the working groups, comities and planning for implementing of various development schemes	1.Promote research to solve the issues 2. R&D for product diversification and marketing	1.Seed village programmes 2.Training and awareness programme on ecological importance and nutritional significance at producers and consumers level 3.Recognition for best practices

2. Little known millets				1. Product diversification 2. Post harvest processing facility in public sector				Provide seeds of little known millets for farmers who are ready to take up millet cultivation in dry land areas at subsidised rates procured from local custodian farmers	R&D for product diversification	Millet village programmes Training and awareness programme nutritional significance at producers and consumers level
3. Spices		1. Climate change 2. Soil fertility 3. Lower yield 4. Market fluctuations 5. Storage and marketing 6. Pest and diseases 7. Higher labour cost	1. Unscientific use of fertilisers 2. Competition from global market 3. Lack of storage and processing facilities	3. Adoption of INM and IPM 4. Product diversification and market intelligence 5. Post harvest storage and processing facility in public sector 6. Promote direct marketing	1. Spice Board should look in to the processing marketing	1. Market intelligence cell at University or any R&D institutions for giving predictions and guidance for farmers regarding global spices trends				
<b>Fisheries</b>	<b>1. Marine Fisheries-</b> <i>Sardinella sp.</i> , <i>Nemipterus sp.</i>	Population decline, catch decline	Over exploitation, Climate change, Juvenile fishing	Responsible fisheries, Participatory resource management, revisiting closed seasons, ban on juvenile fishing	Enactment, compensation in closed seasons, Ecosystem based management	Mesh size regulation, promotion of traditional fishing practices, Mariculture	Marine cage culture project taken up by Dept. Constitution of Fisheries management councils at three tier levels par with LSGD	Species specific climate impact study in marine fisheries	Community level Awareness programmes for fishermen in Resource conservation, management, and alternate livelihood	

	<p><b>2. Ornamental fisheries</b> Indigenous species</p>	<p>Population decline</p>	<p>Climate change, habitat change and pollution, over exploitation wild collection Introduction of exotic species</p>	<p>Ex-situ breeding and culture- Establishments of Hatcheries Habitat restoration and conservation</p>	<p>Enactment of wild collection</p>	<p>Development of hatchery techniques Ecolabelling Sustainable exploitation of indigenous species</p>	<p>Constitute a technical advisory committee with agriculture/fisheries/veterinary surgeon/range officer of the panchayat as one of member who will be advising issues related to agriculture</p>	<p>Investigations on population and ecology of wild populations of ornamental varieties</p>	<p>Village level training programmes for indigenous ornamental fish breeding and culture</p>
	<p><b>3. Inland fisheries</b></p>	<p>Depletion of indigenous varieties, catch and biodiversity</p>	<p>Introduction of exotic species, climate change, construction of dams and barriers across rivers and water bodies, Pollution, destruction of mangroves, sand mining from rivers.</p>	<p>Development of breeding techniques and hatcheries for indigenous varieties, strict regulations for introduction of exotic species, seasonal opening of barriers to allow breeding of fishes, mangrove replanting, control of sand mining activities through legal measures.</p>	<p>Policy for Introduction of exotic species for culture, research etc. Sustainable use of wetlands and rivers.</p>	<p>One paddy one fish/shrimp culture in Kuttanadu, Pokkali and Kaipadu wetland systems</p>	<p>Conservation and management of inland fisheries, promotion of indigenous varieties and scientific aquaculture practices through Janakeeya matsyakrishi project. Conservation project of Vellayani, Ashtamudi and Vembanad lakes</p>	<p>Development and standardization of breeding techniques of indigenous fishes</p>	<p>Awareness of local inland fisherman, and LSGD on promotion of aquaculture as a protein security programme</p>



The State level Thematic expert committee meeting funded by National Biodiversity Authority was held on February 17<sup>th</sup> at Govt Guest House, Trivandrum. Dr. V. Balakrishnan, Member Secretary, KSBB welcomed the distinguished guests. The meet was inaugurated by Dr. Usha Titus IAS, Principal Secretary, Department of Environment, Government of Kerala. Dr. Usha Titus explained about the key functions of the Thematic committee and the important role they have in guiding the Board in various issues. The committees were requested to look into the major issues and suggest appropriate policy changes and strategies. An overview of the major topics to be discussed by each of the committee was given by Member Secretary, KSBB. Dr. Satheesh Kumar, Board Member KSBB delivered the Vote of Thanks.

The discussions were held in five groups and the key topics discussed included

1. Management Plan for Asramom Biodiversity Heritage Site, Criteria for identification of Locally important Biodiversity Heritage site
2. Guidelines for identification of Custodian framers and Methodology for Agrobiodiversity mapping
3. Methodology to be adopted for PBR updation
4. Riparian Biodiversity rejuvenation
5. Guidelines for levy of collection fees by BMC and Guidelines for inclusion of green cess in compesatory afforestation plans

The Chair of the individual committees presented the key points in the prescribed format. The meeting was concluded by Mr K V Govindan, Board Member who responded to the major recommendation presented by the committees and the way forward for conservation of biodiversity. The details of the recommendations of the individual committees are presented in detail.



## **Kerala State Biodiversity Board**