



Initiation to Impacts: KSBB @20 & The 2024–25 Annual Report

**“Seeds, Stories, and Strategies
for a Most Biodiverse - Friendly Kerala”**



Kerala State Biodiversity Board



Kerala State Biodiversity Board

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Kerala State Biodiversity Board

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02 September, 2025.

MESSAGE

It gives me immense pride and satisfaction to extend my warm greetings to the Kerala State Biodiversity Board on the momentous occasion of its twentieth anniversary. Over the past two decades, KSBB has emerged as a beacon of ecological stewardship, transforming biodiversity governance in Kerala through innovation, participation, and foresight.

Since its inception in 2005, the Board has championed initiatives of national and global significance - from formulating India's first Organic Farming Policy and achieving universal preparation of People's Biodiversity Registers across local bodies, to pioneering Local Biodiversity Strategy and Action Plans that translate international commitments into local action. The declaration of Kerala's first Biodiversity Heritage Site, revival of sacred groves and riparian ecosystems, restoration of wetlands and marine habitats, and the recognition of our custodian farmers and Genome Saviours reflect a holistic vision that bridges tradition and modern science.

As we step into the third decade of KSBB's journey, I call upon every citizen, institution, and community to join hands in nurturing our State's biological wealth. Together, let us strive to make Kerala the most biodiverse-friendly state in India by 2030, ensuring that our natural heritage continues to sustain generations to come.

My best wishes.

Pinarayi Vijayan



Charting the Third Decade: From Inception to Impact (2005–2035)

As the Kerala State Biodiversity Board enters its third decade, we reflect with deep pride and renewed resolve on a journey anchored in ecological stewardship, participatory governance, and policy innovation. Over the past 20 years, KSBB has evolved into a dynamic institution, shaping pioneering frameworks, launching visionary campaigns, and mobilising communities to protect and celebrate Kerala's rich biodiversity conservation heritage.

We have charted bold new directions from India's first Organic Farming Policy and the universal rollout of People's Biodiversity Registers to the restoration of sacred groves, riparian zones, and marine habitats. The creation of the Kerala Biodiversity Museum, the expansion of biodiversity clubs, and the institutionalisation of Local Biodiversity Strategy and Action Plans stand as petals of a larger vision rooted in systemic change.

Backed by two decades of collaborative research 81 major programmes with Kerala's universities and R&D institutions KSBB has built a strong evidence-to-policy pipeline. This work underpins ABS implementation, ecological enterprise models, science-based invasive-species control, and has directly shaped the K-SBSAP 2025–2035.

As Chairman, I reaffirm our commitment to the One Big Goal: the conservation of biodiversity as the foundation of Kerala's ecological security, cultural identity, and sustainable development. To achieve this, we have adopted a tripartite strategy Protection, Sustainable Use, and Participatory Governance of Biodiversity symbolised by the three leaves of the KSBB logo. The twenty featured stories in this publication, like twenty flowers, bloom from the axils of each of these leaves, representing integrated action, innovation, and public commitment across landscapes and sectors in Biodiversity Governance.

This commemorative volume invites readers to witness how these twenty flowers now aim to set fruit and seeds, nurtured under the vigilant gaze of the two eyes depicted in our logo, symbolic of KSBB's commitment to guiding and monitoring the way forward. We envision the KSBB tree rooted in Kerala's ecological wisdom and nurtured by the spirit of its people flourishing across generations. Its branches reaching wider, its roots growing deeper, and its canopy sheltering all life under the ethos of harmony and resilience.

I invite every citizen, institution, and community to help us tend this tree, as stewards, storytellers, and co-creators of Kerala's biodiversity future.

Dr. V. Balakrishnan
Member Secretary

Nadesa Panicker Anil Kumar
Chairman

Executive Summary

KSBB@20 & Annual Report 2024–25

“Seeds, Stories, and Strategies for a Most Biodiverse-Friendly Kerala”



1. Purpose and Scope

This report commemorates the 20-year journey of the KSBB and presents its 2024–25 annual performance. It captures institutional evolution, field-level impacts, governance innovation, and strategic planning under the updated Kerala State Biodiversity Strategy and Action Plan (K-SBSAP) 2025–2035.

2. Key Milestones and Outcomes

- KSBB completed universal coverage of PBRs and initiated Local LBSAPs across over 100 LSGs
- Declared Kerala's first Biodiversity Heritage Site and 10 Local Biodiversity Heritage Sites.
- Launched major conservation efforts, including sacred grove restoration, riparian vegetation rejuvenation, and community-based marine and turtle protection.

- Operationalised ABS with pioneering inventories and compliance mechanisms, generating ₹ 96657 thousand
- Strengthened biodiversity outreach through India's first Biodiversity Museum, student clubs, fellowships, and knowledge platforms.

3. Programmatic Focus

KSBB's strategy is built on three thematic pillars:

- Conservation in Action: Ecosystem restoration, species red-listing, habitat protection.
- Sustainable Use & Benefit Sharing: Tradable bioresource mapping, microenterprise models, agrobiodiversity revival.
- People & Participation: Institutionalising BMCs, digitalising PBRs, youth-led stewardship, and inclusive governance.



Twenty representative field initiatives—documented as success stories—illustrate impact across landscapes and communities, symbolically aligned with the “three-leaf” strategy of the KSBB emblem.

4. Governance and Finance

KSBB functions as a statutory body under the Department of Environment, supported by the Board, State Steering Committee, Virtual Biodiversity Cadres, and district-level coordination mechanisms. Budgetary allocation rose from ₹5 lakh in FY 2005–06 to ₹6.37 crores in FY 2024–25, with high fund utilisation and supplementary support from national and international partners. The 2025–2030 financial roadmap outlines a ₹200 crore investment plan supported by statutory instruments, donor networks, ABS revenues, and CSR engagement.

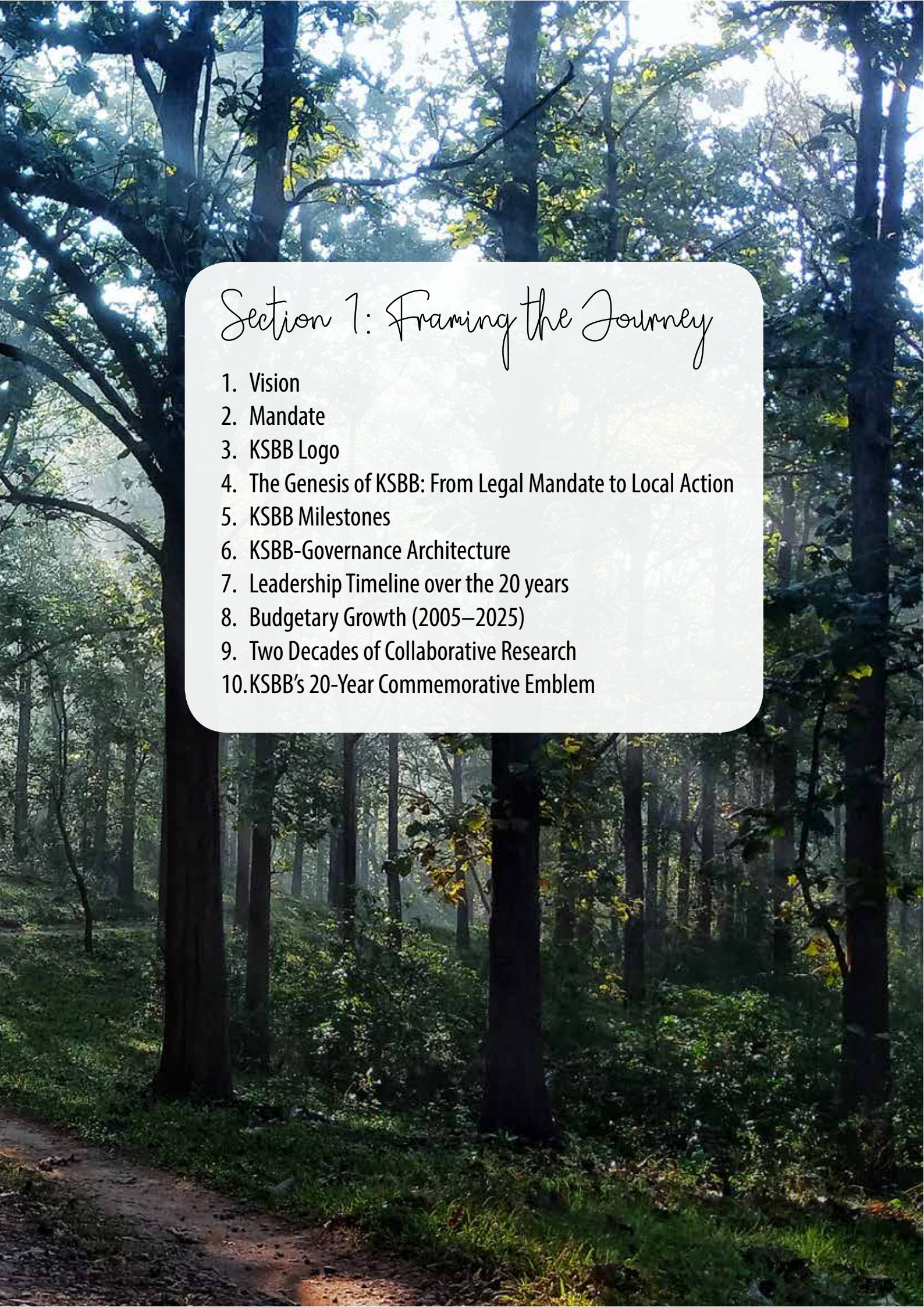
5. Strategic Forward Pathways

Looking ahead, KSBB aims to transform Kerala into India’s most biodiverse-friendly state by 2035 through:

- Strengthened decentralised governance and expanded K-SBSAP implementation
- Mainstreaming biodiversity across development sectors through nature-based solutions
- Gender-inclusive and youth-driven programs such as She-Bio and Student Biodiversity Congress
- Digital knowledge systems (KBIR and TKDL) for decision support and legacy preservation
- Systemic integration with national and global biodiversity platforms

KSBB’s trajectory reflects Kerala’s commitment to ecological integrity, cultural resilience, and participatory action. The 2024–25 report affirms the Board’s strategic vision and evolving role in building a sustainable, inclusive, and biodiverse future rooted in collective stewardship.



A photograph of a forest path with tall trees and sunlight filtering through the leaves. A white rounded rectangle is overlaid on the right side of the image, containing the text.

Section 1: Framing the Journey

1. Vision
2. Mandate
3. KSBB Logo
4. The Genesis of KSBB: From Legal Mandate to Local Action
5. KSBB Milestones
6. KSBB-Governance Architecture
7. Leadership Timeline over the 20 years
8. Budgetary Growth (2005–2025)
9. Two Decades of Collaborative Research
10. KSBB's 20-Year Commemorative Emblem



To protect, conserve, and enrich Kerala's biological diversity and associated traditional knowledge, ensuring its sustainable use and equitable benefit-sharing for present and future generations.

Mandate

The Kerala State Biodiversity Board (KSBB), established under Section 22 of the Biological Diversity Act, 2002, is the statutory authority responsible for:

- Advising the State Government on biodiversity conservation, sustainable use, and benefit-sharing
- Supporting the formation and functioning of Biodiversity Management Committees (BMCs) and People's Biodiversity Registers (PBRs)
- Regulating access to biological resources and associated traditional knowledge
- Operationalising Access and Benefit Sharing (ABS) mechanisms
- Facilitating the preparation and implementation of the Kerala State Biodiversity Strategy and Action Plan
- Mainstreaming biodiversity into local governance, sectoral planning, and development programs
- Coordinating with national and global platforms, including the NBA, CBD, IPBES, and IUCN

KSBB Logo



KSBB's Logo encapsulates a harmonious blend of nature, culture, and the commitment to conserve Kerala's rich biodiversity. It features four colors—Green, White, Blue, and Black—each carrying profound symbolic meaning. Green represents lush vegetation, floral biodiversity, and terrestrial ecosystems, emphasizing the state's verdant landscapes and ecological wealth. Blue highlights the vast waterscapes, particularly marine ecosystems and the life thriving beneath. White symbolizes peace, harmonious coexistence with nature. Black represents carbon to reflect the fact that biodiversity is the best stock of carbon. The design incorporates key elements that capture the essence of KSBB's vision and mission:

The three leaves embody the Board's triple objectives: conservation of biodiversity, sustainable use of its components, and the fair and equitable sharing of benefits arising from genetic resources.

The bottom leaves subtly depict two curious eyes, which, combined with the white backdrop, form the face of Kathakali, Kerala's iconic traditional dance form. This artistic representation celebrates the deep interconnection between Kerala's cultural heritage and biodiversity. The observant eyes also signify KSBB's vigilant role in safeguarding biodiversity.

Blue waves at the base represent Kerala's vast and interconnected aquatic ecosystems including the Arabian Sea, intricate backwater networks, and inland waterbodies.

A white trophy cup rises against a tall, lush green vertical square, symbolizing dedication, sacrifice, and teamwork in protecting Kerala's biodiversity. The green backdrop represents the richness of nature, while the trophy honors those who work selflessly for conservation.

The inscription "KSBB" in English appears at the base, while the Malayalam rendering of "Kerala State Biodiversity Board" arches prominently above the three-leaved branch highlighting the vital role of regional language in fostering biodiversity awareness and empowering local communities as stewards of Kerala's ecological heritage.

The Genesis of KSBB: From Legal Mandate to Local Action

Kerala's biodiversity governance journey began in response to India's early commitment to the Convention on Biological Diversity. The Indian Parliament enacted the Biological Diversity Act in 2002, followed by the Biodiversity Rules in 2004. These provided the legal scaffolding for states to establish their biodiversity institutions. Kerala acted swiftly on 25 January 2005, the then Chief Minister approved the formation of the

Kerala State Biodiversity Board, which was formally constituted through GO (Ms) No. 1/2005/STED dated 28 February 2005 and gazetted on 1 June 2005.

Initially, KSBB functioned under the Science, Technology and Environment Department and the Kerala State Council for Science, Technology and Environment (KSCSTE). In 2006, with the creation of a dedicated Environment Department [GO (Ms) No. 10/2006/GAD], the Board was transferred to this new administrative home [GO (Ms) No. 64/2006/GAD]. The Kerala State Biodiversity Rules, notified in 2008, further clarified the Board's mandate and operational procedures, enabling it to function with greater autonomy and legal clarity.

Since its inception in 2005, KSBB has grown into a nationally acclaimed institution for decentralised biodiversity governance. Through visionary leadership, scientific innovation, and community participation, KSBB has mainstreamed biodiversity into Kerala's development agenda and aligned its strategies with frameworks like the Kunming-Montreal Global Biodiversity Framework and the National Biodiversity Strategy and Action Plan.



KSBB Milestones (Chronologically Descending: 2025 → 2005)

<i>Year</i>	<i>Milestone</i>
2025 (By October)	Commemorative programmes of KSBB 20 years Updated K-SBSAP 2025-2035
2024	Completed People's Biodiversity Registers (PBRs) in all elected LSGs
2024	Declared 10 Local Biodiversity Heritage Sites
2024	Initiated Pampa River Riparian Vegetation Rejuvenation Programme
2023	Inventoried the ABS potential of Kerala's tradable bioresources
2023	Organized a network of 800+ Genome Saviours of Agrobiodiversity
2022	Developed Kerala's Bio-invasive Management Policy Document
2022	Launched an exclusive Traditional Knowledge Digital Library
2021–22	Initiated Local Biodiversity Strategy and Action Plans (LBSAPs)
2021	Initiated Red Listing of major taxonomic groups in Kerala
2019	Constituted BMCs in all GPs, Municipalities, and Corporations (first in India)
2018	Established India's first exclusive Museum for Biodiversity
2017	Hosted the 3rd National Biodiversity Congress (NBC)
2017	Launched Doctoral and Post-Doctoral Fellowship Programmes
2015–2024	Institutionalised student internships and dissertation programs
2015–2024	Expanded Student Biodiversity Clubs to over 2,000 institutions
2012–2024	Conducted regular biodiversity seminars and awareness campaigns
2012–2024	Organised annual Children's Biodiversity Congresses and Science Fests
2010–2024	Conferred Biodiversity Conservation Awards across sectors
2009–2024	Implemented integrated <i>in-situ</i> , <i>ex-situ</i> , and on-farm conservation projects
2010	Hosted the 1st Indian Biodiversity Congress
	Contributed to Kerala's pioneering Organic Farming Policy
2007–2012	Statewide formation of BMCs and launch of People's Biodiversity Registers
2005	Establishment of KSBB under the Department of Environment

KSBB- Governance Architecture

Since 2008, KSBB has championed a decentralised model of biodiversity governance. By April 2024, it had facilitated the formation of Biodiversity Management Committees in all 1,200 local bodies across Kerala, including 941 Gram Panchayats, 152 Block Panchayats, 14 District Panchayats, 87 Municipalities, and 6 Corporations. These BMCs serve as grassroots institutions for biodiversity conservation, engaging local communities, including tribal and marginalised groups, in the sustainable use and protection of biological resources.

KSBB- Board

The Board, as defined under the Biological Diversity Act, 2002 and the Kerala Biological Diversity Rules, 2008 (as amended), refers specifically to the apex leadership body of the Kerala State Biodiversity Board comprising the Chairman, Member Secretary, ex-officio departmental representatives, and nominated non-official expert members. This statutory body functions as the institutional brain trust of KSBB, entrusted with policy formulation, strategic oversight, and regulatory guidance.

The wider organisational structure of KSBB includes the operational arms such as staff, technical units, project teams, and district-level coordinators who implement the Board's programs and drive its biodiversity mission forward across Kerala.

- Chairman: **Dr. N. Anil Kumar**
- Member Secretary: **Dr. V. Balakrishnan**

Ex-Officio Members

- Executive Vice-President, Kerala State Council for Science, Technology & Environment
- Secretary/Principal Secretary/Additional Chief Secretary, Department of Forest & Wildlife

- Secretary/Principal Secretary/Additional Chief Secretary, Department of Fisheries
- Agriculture Production Commissioner, Government of Kerala
- Secretary/Principal Secretary/Additional Chief Secretary, Department of Environment

Non-Official Expert Members

- **Dr. R. V. Varma** – Former Director, Kerala Forest Research Institute (KFRI)
- **Dr. Pramod G. Krishnan, IFS** – Additional Principal Chief Conservator of Forests, Kerala Forest Department
- **Prof. (Dr.) S.D. Biju** – Professor, Department of Environmental Studies, Delhi University;
- **Dr. A.V. Santhoshkumar** – Professor & Head, Forest Biology & Tree Improvement, College of Forestry, Kerala Agricultural University
- **Dr. Minimol J.S.** – Professor & Head, Plant Breeding & Genetics, Cocoa Research Centre, Kerala Agricultural University.

The State-Level Steering Committee

A State-level Steering Committee constituted through G.O. 60/2018/Env't & G.O. 31/2020/Env't, functions as the apex interdepartmental mechanism guiding the implementation of the K-SBSAP. Chaired by the Additional Chief Secretary of the Environment Department, the committee comprises senior secretaries from key line departments, including Local Self Government, Forests, Water Resources, Agriculture, Fisheries, Tourism, Animal husbandry, KSCSTE and DoECC. Its principal mandate is to steer the strategic direction of K-SBSAP, facilitate cross-sectoral integration of biodiversity objectives, monitor progress, and address institutional challenges.

Virtual Biodiversity Cadres and the District Biodiversity Coordination Committee

The committee is supported by a Virtual Biodiversity Cadre comprising nodal officers from 28 departments and District Biodiversity Coordination Committees (DBCCs), which enable decentralised coordination and foster convergence at the field level.

Biodiversity Management Committees (BMCs)

BMCs are the cornerstone of Kerala's decentralised biodiversity governance, functioning across all levels of local bodies. Since its inception in 2005, KSBB has worked in close association with these bodies to advance inclusive and community-based conservation.

Local Self-Governments (LSGs)

KSBB is deepening its collaboration with Local Self-Governments (LSGs), aiming to empower BMCs to go beyond their routine roles supporting Access and Benefit Sharing (ABS), identifying endemic species and heritage sites, and fostering biodiversity awareness. LSGs, in turn, are being equipped to integrate biodiversity into local planning, allocate Local Biodiversity Funds (LBFs), and mainstream LBSAPs across development sectors.

Participatory Stewardship

In collaboration with the NBA, the Environment Department, and KSCSTE, KSBB has developed a participatory governance approach to guide the acquisition, storage, and dissemination of biodiversity information/skills in biodiversity

conservation. This includes action in the following three areas.

a. People's Biodiversity Registers: A Statewide Achievement

A cornerstone of KSBB's community engagement has been the preparation of People's Biodiversity Registers (PBRs). These registers document local biodiversity, traditional ecological knowledge, and conservation practices. As of 2024, over 1,034 PBRs have been completed, making Kerala the first state in India to achieve near-universal PBR coverage across its elected local bodies.

b. Coordination with National and Global Frameworks

KSBB operates in close coordination with the National Biodiversity Authority (NBA), the statutory body responsible for implementing the Biodiversity Act at the national level. While the NBA regulates access to biological resources and ensures compliance with international obligations, KSBB has focused on state-level implementation developing strategies, plans, and programs aligned with the NBSAP and the Nagoya Protocol on Access and Benefit Sharing.

c. Conservation, Knowledge, and Policy Integration

The Board has actively promoted both *in situ* and *ex-situ* conservation of biological resources, including cultivars, folk varieties, and landraces. It has supported research, training, and public education initiatives to raise awareness about biodiversity. KSBB has also advised the State Government on integrating biodiversity into sectoral and cross-sectoral policies, ensuring that conservation is embedded in agriculture, urban planning, education, and infrastructure development.

Leadership Timeline over the 20 years



Nadesapanicker Anil Kumar

Chairman

Chairmen (Full-Term)

Dr. A.M. Michael (2005–2007)
Dr. V.S. Vijayan (2007–2010)
Dr. R.V. Varma (2010–2012)
Prof. (Dr.) Oommen V. Oommen (2012–2017)
Dr. S.C. Joshi IFS (2017–2020)
Dr. C. George Thomas (2021–2024)
Dr. N. Anil Kumar (2024–present)

Interim Chairpersons (Government Deputation)

Shri. C.S. Yalaki IFS (Nov–Dec 2014)
Shri. James Varghese IFS (Dec 2016–Jan 2017)
Dr. Usha Titus IAS (Sep 2020–Jan 2021)
Dr. Venu V. IAS (Feb 2021)
Dr. Rathan U. Kelkar IAS (Feb–Sep 2024)



Dr. V. Balakrishnan

Member Secretary

Member Secretaries (2005- present)

Dr. J.K. Sharma
Dr. R.V. Varma
Shri. G. Rajeev
Dr. K.P. Laladhas
Dr. Dineshan Cheruvat
Dr. V. Balakrishnan (two terms:
1 Nov 2018–9 Jun 2020; 4 Sep 2023–present)
Smt. Reni R. Pillai
Dr. Santhosh Kumar A.V
Shri. V. Anil Kumar (i/c)
Shri. Saji B (i/c)
Smt. Mini V (i/c)

Expert & Non-Official Members (Selected)

Dr. A.D. Damodaran, Dr. K.V. Ahamed Bavappa, Dr. A.K.K. Unni, Prof. M.K. Prasad,
Dr. Indira Balachandran, Dr. A. Gopalakrishnan, Dr. P.M. Radhamany, Dr. K. MohanaKurup,
Dr. Achuthsankar S. Nair, Dr. K.G. Sreekumar, Dr. N. Omanakumari, Dr. A.K. Sherief,
Dr. K. Satheesh Kumar, Dr. T.S. Swapna, Dr. K.T. Chandramohan, Shri. K.V. Govindan,
Dr. Pramod G. Krishnan IFS, Shri. A.K. Dharni IFS, Dr. S. D. Biju, Dr. Minimol,
Dr. R.V. Varma and Dr. Santhosh Kumar A.V



Budgetary Growth 2005–2025

Over the past two decades, KSBB has evolved from a modestly funded statutory body into a strategically positioned institution with diversified financial streams. Starting with an allocation of just ₹5 lakh in 2005–06, the Board’s annual budget steadily increased, crossing ₹1.5 crore by 2010–11 and peaking at ₹5.33 crore in 2015–16. Between 2019–20 and 2021–22, allocations remained robust, with select years witnessing disbursements of over ₹ 7 crore, including support from the Rebuild Kerala Initiative (RKI). In 2020–21, the receipt to KSBB stood ₹7,06,73,464crores the highest planned allocation to date reflecting the state’s renewed commitment to biodiversity governance under the Kunming-Montreal Global Biodiversity Framework (KM-GBF)(See Table-1)

In parallel, KSBB has mobilised substantial external resources from national and international partners. The National Biodiversity Authority has been a consistent contributor, supporting biodiversity documentation, PBR verification, capacity building, and contractual staffing. The UNDP-funded High Range Mountain Landscape Project in Munnar enabled landscape-level planning between 2015 and 2021. Notably, the Access and Benefit Sharing (ABS) mechanism emerged as a notable funding stream in 2020–21, contributing over ₹77.5 lakh in a single year, with continued inflows through 2023–24. These funds reflect KSBB’s efforts to operationalise the Nagoya Protocol and monetise Kerala’s bioresource potential, with future projections estimating up to ₹100 crore over a plan period of 5 years, if fully enforced.

Additional support from NMPB, NABARD, NCSCM, and corporate donors like Lulu Mall has further diversified the Board’s funding base. KSBB has consistently maintained high fund utilisation across both plan and non-plan heads, with expenditures directed toward PBR preparation, BMC strengthening, ecosystem restoration, and public engagement. Looking ahead, the Board’s 2025–26 fundraising roadmap outlines a shift toward multi-source, impact-driven financing, leveraging the full potential of ABS revenues, CSR partnerships, consultancy services, and global donor networks to sustain and scale its biodiversity mission.

Table 1: Income & Expenditure of Plan and Non Plan Fund (2005–2025)

Financial Year	Income (₹)	Expenditure (₹)
2005–06	5,01,458.00	4,25,000.00
2006–07	36,66,610.00	32,50,000.00
2007–08	55,04,853.00	53,05,000.00
2008–09	78,83,697.00	76,25,567.00
2009–10	1,45,58,575.00	1,42,38,718.00
2010–11	2,23,52,380.00	2,19,49,863.00
2011–12	2,53,88,555.00	2,51,02,357.00
2012–13	3,84,48,280.00	3,73,53,806.00
2013–14	3,50,26,820.00	3,51,00,131.00
2014–15	3,85,98,627.00	3,63,35,555.00
2015–16	5,13,00,702.00	4,99,34,950.00
2016–17	4,89,05,249.00	4,80,73,501.00
2017–18	6,77,53,937.00	6,39,81,936.00
2018–19	6,74,42,089.00	6,21,33,344.00
2019–20	4,30,92,091.00	4,18,38,295.00
2020–21	7,06,73,464.00	6,23,13,369.00
2021–22	6,79,29,101.00	7,18,67,417.00
2022–23	5,56,07,904.00	5,53,90,848.00
2023–24	5,10,83,459.00	4,89,44,226.00
2024–25	6,37,50,000.00	6,29,70,192.00

Table 2 : Total Income & Expenditure of External funds (2014–2025)

Financial Year	Income (₹)	Expenditure (₹)
2014–15	59,69,456.00	61,94,346.00
2015–16	74,35,007.00	49,85,876.00
2016–17	27,17,089.00	39,51,682.00
2017–18	26,39,249.00	39,38,551.00
2018–19	58,19,961.00	26,88,094.00
2019–20	36,49,936.00	47,16,420.00
2020–21	99,86,989.00	46,89,095.00
2021–22	45,39,501.00	96,89,734.00
2022–23	20,40,178.00	45,11,055.00
2023–24	37,56,801.00	23,49,927.00
2024–25	28,00,000.00	33,87,507.00

**Table: Total Income & Expenditure consolidated for the last 20 years (2005–2025)
Plan and Non Plan Fund**

Financial Year	Income (₹)	Expenditure (₹)
2005–06	5,01,458.00	4,25,000.00
2006–07	36,66,610.00	32,50,000.00
2007–08	55,04,853.00	53,05,000.00
2008–09	78,83,697.00	76,25,567.00
2009–10	1,45,58,575.00	1,42,38,718.00
2010–11	2,23,52,380.00	2,19,49,863.00
2011–12	2,53,88,555.00	2,51,02,357.00
2012–13	3,84,48,280.00	3,73,53,806.00
2013–14	3,50,26,820.00	3,51,00,131.00
2014–15	4,45,68,083.00	4,25,29,901.00
2015–16	5,87,35,709.00	5,49,20,826.00
2016–17	5,16,22,338.00	5,20,25,183.00
2017–18	7,03,93,186.00	6,79,20,487.00
2018–19	7,32,62,050.00	6,48,21,438.00
2019–20	4,67,42,027.00	4,65,54,715.00
2020–21	8,06,60,453.00	6,70,02,464.00
2021–22	7,24,68,602.00	8,15,57,151.00
2022–23	5,76,48,082.00	5,99,01,903.00
2023–24	5,48,40,260.00	5,12,94,153.00
2024–25	6,65,50,000.00	6,63,57,699.00

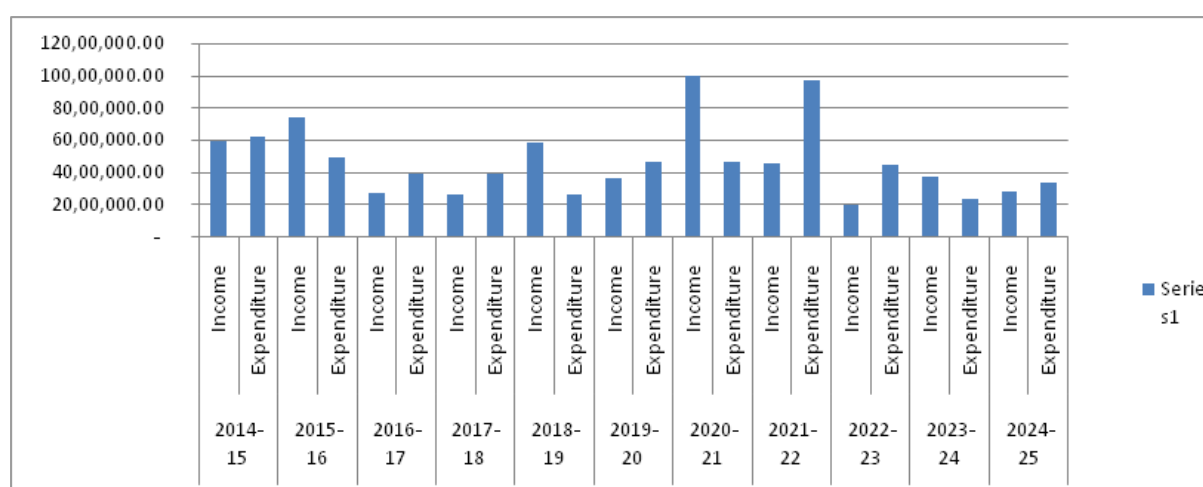


Fig 1. Income and Expenditure through the Plan Fund since 2014-2015

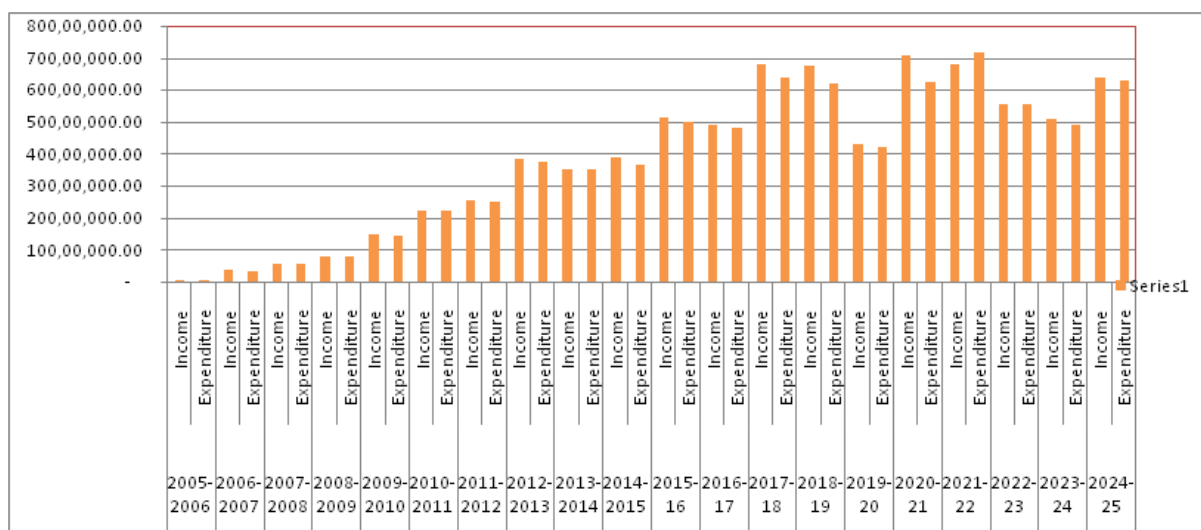


Fig. 2. The Total Income and Expenditure over the last 20 years:

Note: Between 2005 and 2008-09, KSBB received an annual grant-in-aid ranging from ₹52 to ₹70 lakhs. This amount increased substantially during the financial years 2009-2010 to 2011-12, rising to between ₹1.5 and ₹2.5 crores per year. From 2012-13 to 2014-15, the allocation further stabilised at approximately ₹3.8 crores annually. This has increased from 2015-16 to 2023-24, KSBB by receiving an average of ₹5 crores each year, except in FYs 2019-20 and 2021-22, when enhanced budgetary allocations resulted in approximately ₹7 crores annually. For FY 2024-25, the grant-in-aid stands at ₹6 crores, reflecting continued institutional support.

Two Decades of Collaborative Research

For the last twenty years, a key part of KSBB's mission has been to bridge the gap between scientific research and practical policymaking. To achieve this, we have conducted 81 major research programmes in close partnership with Kerala's leading universities and R&D institutions.

This long-term collaboration covers a wide range of critical areas: (i) Conservation of Plant Genetic Resources & Agrobiodiversity, (ii) Sustainable Use & Value Addition of Bio-resources, (iii) Ecosystem Studies & Management, (iv) Aquatic and Faunal Monitoring, (v) Red Data Books & Threatened Species Assessments, (vi) Policy, Livelihoods & Institutional Strengthening, and (vii) Establishing Ethnobotanical Gardens.

The solid evidence from all this work has become the backbone for important state initiatives. It supports the implementation of Access and Benefit Sharing (ABS) mechanisms, helps develop eco-friendly business models, guides the management of invasive species, and aids in recognising those who conserve genetic diversity. This seamless link from research to action is a hallmark of KSBB's strategy. The most direct result of this effort is its clear influence on shaping the new Kerala State Biodiversity Strategy and Action Plan (K-SBSAP) for 2025–2035.

This isn't just a stack of reports; it's a clear roadmap for Kerala's ecological future. It highlights the urgent need to integrate biodiversity into all development planning and will continue to guide our policies, conservation work, and new ideas for years to come.



KSBB's 20-Year Commemorative Emblem

The KSBB 20-year Commemorative emblem features the figure “20”, commemorating two decades of KSBB’s contributions to biodiversity conservation and policy leadership in Kerala, where the figure “2” is composed of 18 interwoven blue (10) and white (8) lines. With the inscription “Kerala Biodiversity Board” at its horizontal base, it is anchored on the figure “0”, which artistically symbolises the K-MGBF Biodiversity Wheel enlisting 23 K-MGBF Targets, accompanied by the tagline: “Kerala – Most Biodiversity-Friendly State.”



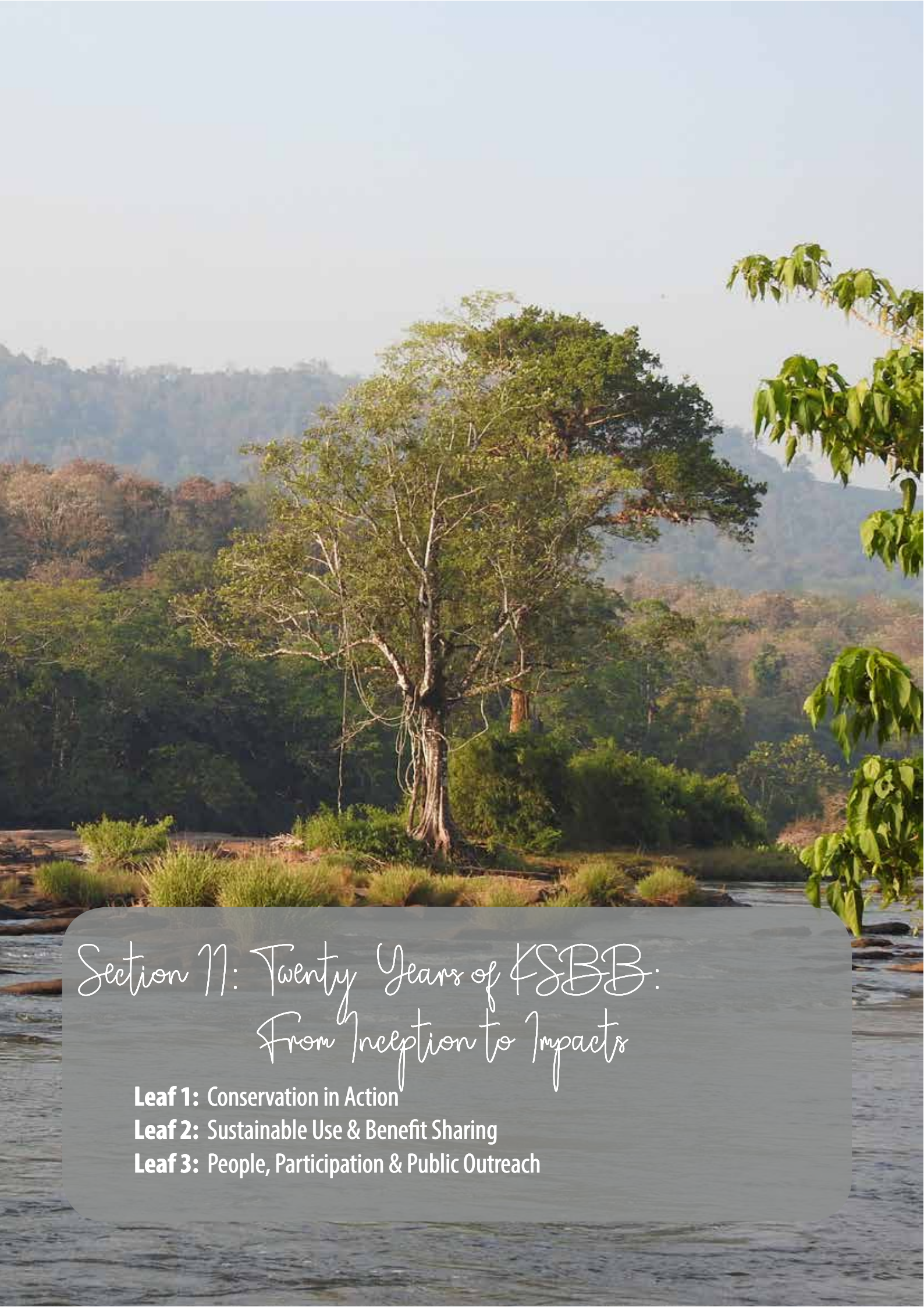
The 8 white lines integrated into the arm and horizontal base of the figure “2” symbolize the eight strategic target areas of the Kerala State Biodiversity Strategy and Action Plan (K-SBSAP) 2025–2035. These lines are organized into two interrelated clusters, the arm with four Vertical Mainstream Biodiversity Target Areas, comprising Forest Ecosystem and Biodiversity Management, Integrated Coastal, Marine and Inland Biodiversity Management, Community-Centric Agrobiodiversity Management, and Domesticated Biodiversity and Animal Husbandry; and four Cross-Cutting Socio-Environmental Production Target

Areas on the horizontal base, which include Climate Change, Bio-cultural Diversity and Traditional Knowledge, Local Governance Institutions for Biodiversity Mainstreaming, and Nature-based, Climate-Resilient Rural and Urban Infrastructure.

The 10 Blue Lines denote the ten-year strategic horizon (2025–2035) under the Kerala State Biodiversity Strategy and Action Plan (K-SBSAP). Each line symbolizes year-wise progress in contributing to both the KM-GBF Targets and KSBB’s overarching goal of transforming Kerala into India’s most biodiversity-friendly state.







Section 11: Twenty Years of KSBB: From Inception to Impacts

Leaf 1: Conservation in Action

Leaf 2: Sustainable Use & Benefit Sharing

Leaf 3: People, Participation & Public Outreach

Leaf 1: Conservation in Action

1. *In-situ* Conservation of Biodiversity by Protecting the Sacred Groves of Kerala
2. KSBB's Community-Led Heritage Site Model
3. Restoring the Riparian: Pampa River Vegetation Rejuvenation
4. Red Lists & Rare Species: Towards a Science-Based Conservation Agenda
5. Urban Biodiversity: Miyawaki Forests, Butterfly Gardens & Green Corridors
6. Promoting Sustainable Wetlands Management
7. Fish for the Future: Native Inland Fish Stock Enhancement Project
8. Guardians of the Coast: Marine Biodiversity Registers in South Kerala
9. Sea Turtle Conservation: A Community-Led Effort to Protect Kerala's Coastal Nesters
10. Restoring Marine Ecosystems: Ghost Net Removal along the Thiruvananthapuram Coast

1. *In-situ* Conservation of Biodiversity by Protecting the Sacred Groves of Kerala

KSBB has taken proactive steps to conserve the sacred groves of Kerala, recognising their unique ecological, cultural, and spiritual significance. These groves, known locally as Kavus (SarpaKavu, BhagavathiKavu, PunyaVanam) are repositories of endemic biodiversity and vital elements of Kerala's biocultural heritage. In response to mounting pressures from urbanisation, land-use change, and the erosion of traditional practices, KSBB has developed a multi-pronged strategy to support their long-term protection.

In collaboration with the Malabar Botanic Garden and Research Centre, KSBB has also undertaken detailed surveys and baseline documentation of sacred groves, particularly along the coastal belt. This project report listed 745 coastal sacred groves across 113 panchayats, documenting species richness, water features, and threats such as encroachment and invasive species. This data has informed site-specific restoration plans and prioritisation for further action, including potential eco-tourism integration.

A key initiative followed by this survey and study has been the institution of Biodiversity Conservation Awards, which honour the best-preserved sacred groves and acknowledge exemplary efforts by local communities and Biodiversity Management Committees

(BMCs). These awards not only encourage community stewardship but also raise public awareness of the value of sacred groves as ecological sanctuaries and cultural landmarks.

KSBB has also prioritised the identification and declaration of sacred groves as Biodiversity Heritage Sites (BHS). Sites like Poilkavu in Kozhikode, spread over 11 acres and home to 197 documented plant species including 16 listed under IUCN threat categories have been taken up for such recognition. Public consultations have been held to build consensus for these declarations, which aim to secure legal protection while promoting conservation in a culturally sensitive manner.



The Board has consistently recognised the grassroots efforts in biodiversity conservation through the conservation of sacred groves, a powerful symbol of biocultural resilience.

- In 2022, the award for Best Sacred Grove Conservation was conferred on PonnakudamKaavu in Thevakkal, Ernakulam. Managed by the SreePonnakudamBhagavathyDevaswom Trust and stewarded by botanist P.K. Ramachandran, the grove harbours over 600 plant species including 19 on the IUCN Red List alongside 63 bird and 23 butterfly species. Amidst rapid urbanisation, it stands as a model for ecological restoration and environmental education.
- In 2023, Poyilkavu in Kozhikode district received the same honour, recognised for its sustained biodiversity values and active community engagement. The award included a ₹50,000 cash prize and a citation, reinforcing the role of traditional ecological knowledge in contemporary conservation.
- Another significant intervention is the integration of information and TK related to sacred groves into the People's Biodiversity Registers(PBRs). As part of the state-wide PBR revision and digitisation campaign, KSBB has mandated the listing of sacred groves along with detailed documentation of associated traditional knowledge, rituals, and folklore. Training programs are being conducted for BMCs to equip them with the skills to carry out this work using participatory tools and digital platforms, ensuring that the cultural dimensions of conservation are captured alongside biological data.

2. KSBB's Community - Led Heritage Site Model

KSBB has proactively strengthened the state's capacity to identify and safeguard ecologically rich areas through a dual pathway of formal Biodiversity Heritage Sites (BHS) and locally empowered Local Biodiversity Heritage Sites (LBHS). Guided by the National Biodiversity

Authority's framework under Section 37 of the Biological Diversity Act (2002), KSBB developed a state-specific LBHS protocol (GO No. 4075/20/Env, dated 28 October 2020) that simplifies the declaration process and enhances local ownership.



Since its launch in 2019, the LBHS initiative has recognized over 10 distinct ecosystems and important tree species across Kerala, each with significant ecological and cultural value. The first LBHS in Kerala was the Pannivelichira impoundment in Mallappuzhassery Grama Panchayat, Pathanamthitta, declared on 26 October 2019. This ecologically important wetland supports diverse fauna and provides irrigation to nearly 300 hectares of paddy fields. Facing increasing threats from urbanization and encroachment, it was declared an LBHS by the local BMC to ensure its protection. A pioneering model of freshwater biodiversity conservation is Neyyamkayam in Muliya Grama Panchayat, which became the first LBHS of Kasaragod district on 1 June 2020. Located in the deepest part of the Payaswini River, Neyyamkayam is home to 22 endemic fish species and over 111 plant species, including 20 that are regionally endemic making it a critical hotspot for aquatic and riparian biodiversity.

Under this model, empowered BMCs collaborate with KSBB's technical teams to autonomously identify ecologically or culturally significant landscapes, such as sacred groves, wetlands, large heritage trees, and community-managed commons. These

zones are then officially notified through state-level orders, bypassing time-consuming national-level consultations and allowing timely legal protection.

Among this initiative, the designation of the Asramam Biodiversity Heritage Site (BHS) in Kollam the first BHS in Kerala covering 57.5 hectares of urban mangroves along Ashtamudi Lake is noteworthy. This heritage site protects over 160 plant species (including the critically endangered *Syzygium stocksii*), notable birds, fish, and aquatic diversity, and the adjacent octopus-shaped Ashtamudi Lake an internationally recognised Ramsar wetland supporting more than 370 animal species. Facing threats from pollution, encroachment, fragmentation, and tourism pressures, KSBB implemented a 2020–26 management plan integrating habitat restoration, biodiversity monitoring, eco-education, and rigorous policy enforcement to protect this urban ecological gem.

Together, these two complementary mechanisms have empowered KSBB to extend conservation beyond formal reserves. By decentralising authority, offering technical guidance, and legally recognising locally valued ecosystems, KSBB has instituted a dynamic, community-led conservation architecture.

3. Restoring the Riparian Biodiversity: River Vegetation Rejuvenation

KSBB has launched a comprehensive riparian biodiversity restoration programme across key river basins including Pampa, Periyar, Chalakudy, Kabini, and Bharathapuzha to revive riverbank ecosystems devastated by recurring floods and erosion. Central to this initiative is the propagation and planting of native riparian species, with KSBB establishing propagation protocols and distributing up to 2.5 lakhs saplings across at least 25 indigenous plants such as Nirmaruthu, Vembala, Kadambu, Neerchamba, and Maruthu to support local

Biodiversity Management Committees (BMCs) in rejuvenating flood-affected zones.

In response to severe damage to riparian flora during the 2018 Kerala floods, KSBB launched the Pampa River Rejuvenation Project (2020–21) as part of the Rebuild Kerala initiative. The project covers nearly 93 km of riverbanks across 10 panchayats in Pathanamthitta such as Cherukole, Ranni, and Ayiroor with the restoration of 94 riverine species, including several threatened taxa. Scheduled to be inaugurated by the Chief Minister, this work combines nursery-based sapling growth, community planting, and public engagement programmes (via Kudumbashree networks) to ensure social ownership.

To replicate the successes, KSBB has partnered with 14 BMCs along the Pampa River to plant approximately 250,000 saplings, incorporating species like vetiver for bank stabilisation. The initiative also includes river clean-up and desilting operations, implemented in coordination with the Irrigation Department through KSBB-supported tenders for civil works in Pathanamthitta's tributaries.



The riparian restoration efforts span other river basins including Wayanad's Kabani, Alappuzha's Periyar, Ernakulam's Chalakudy, and Bharathapuzha where KSBB's propagation programme supports local BMCs with saplings and planting resources. KSBB's riparian restoration strategy is a multi-pronged model for ecological recovery: it

blends nursery-based propagation, large-scale community planting, technical stabilisation measures, and social participation.

4. Red Lists and Rare Species: Towards a Science-based Conservation Agenda

The Kerala State Biodiversity Board has been actively involved in the identification and conservation of rare, endangered, and threatened (RET) species through a combination of scientific assessment, legal recommendations, and on-ground conservation action. In collaboration with institutions like the Jawaharlal Nehru Tropical Botanic Garden and Research Institute (JNTBGRI), KSBB supported the production of Kerala's first Red Data List of Plants, which documents 264 threatened flowering plants, along with other plant groups. To promote *ex-situ* conservation, KSBB initiated a state-wide scheme in 2023, encouraging academic and research institutions to establish conservatories for red-listed species, providing financial and technical assistance for propagation and safeguarding of biodiversity outside natural habitats.

On the fauna front, a comprehensive study conducted by the Zoological Survey of India (ZSI) and funded by KSBB revealed that 214 animal species in Kerala face extinction threats, including mammals, birds, amphibians, reptiles, butterflies, odonates, freshwater crabs, and fishes. Based on this, KSBB proposed 37 high-priority species for legal protection under Section 38 of the Biological Diversity Act, including endemic and iconic species like the Denison's barb (*Sahyadria denisonii*), Malabar banded peacock butterfly (*Papilio buddha*), and Malabar civet (*Viverra civettina*). The Board has also supported community-level initiatives and academic collaborations for species recovery, such as captive breeding and restocking of threatened freshwater fishes like *Dawkinsia exclamatio*.

These efforts reflect KSBB's integrated approach that combines red-listing, habitat and species recovery, legal protection, and community stewardship, laying the groundwork for long-term conservation of Kerala's unique and fragile biodiversity.

5. Urban Biodiversity: Bio Parks, Miyawaki Forests and Butterfly Gardens

One of KSBB's key focus areas has been the promotion of Miyawaki-style urban forests, with over 100 micro-forests established across Kerala. These have been implemented in collaboration with BMCs, schools, and public institutions to restore native vegetation in small urban and peri-urban pockets, supported financially by the State Biodiversity Fund.



In the field of pollinator and butterfly conservation, KSBB has funded and guided the development of butterfly gardens at strategic sites, such as the Asramam Biodiversity Heritage Site in Kollam (with technical assistance from JNTBGRI). A particularly notable example of KSBB's integrated approach is the establishment of a Biodiversity Park at Poothakkulam GramaPanchayat in Kollam District, launched in May 2022. The park is designed for *ex-situ* conservation of native plant species and acts as an educational and ecological hub for the local community.

As part of its 2022–2024 action plans, KSBB launched a scheme to support the conservation of rare, endemic, and

threatened (RET) plant species by setting up *ex-situ* bio-conservatories in collaboration with 20 institutional partners. These conservatories function as living repositories for red-listed and ecologically sensitive flora, focusing on propagation, seed banking, ecological research, and public awareness. Complementing this effort, KSBB has also sanctioned the development of model ethnobotanical gardens at four institutions to document and preserve plants of medicinal and cultural significance used in traditional healing systems including tribal medicine.

These gardens serve as platforms for ecological education and community engagement, highlighting the biocultural heritage of Kerala. Implementation of these initiatives involves close collaboration with local research institutions, colleges, NGOs, and Biodiversity Management Committees (BMCs), with KSBB providing technical guidance, species selection support, and financial assistance.

6. Promoting Sustainable Wetlands Management

The Board has adopted a comprehensive ecosystem-level approach to safeguard the vital coastal wetlands of Kerala, recognizing their profound ecological and socio-economic significance. Building on its work across Ramsar sites including Sasthamcotta, Ashtamudi, and Vembanad Kol KSBB has upgraded and verified People's Biodiversity Registers (PBRs) for all coastal wetland bodies to document biodiversity, traditional ecological knowledge, and socio-cultural linkages. In 2023–24, many BMCs received training and financial assistance to produce detailed Local Biodiversity Strategy and Action Plans (LBSAPs) that explicitly include coastal ecosystems.

In parallel, a wetland gift of a Mangrove Ecosystem in the heart of Kollam city was declared as the first Biodiversity Heritage Site of Kerala, under Section 37, thanks to the

effort of the Board. Beyond Asramam, KSBB's ecosystem restoration initiatives include the Native Inland Fish Stock Enhancement project, aimed at bolstering fish diversity in floodplain wetlands, and pilot schemes to control invasive species in wetland environments. The board's 2017 collaboration with Kerala Forest Research Institute (KFRI) produced a detailed 1:50,000 wetland map, identifying critical conservation zones across Vembanad–Kole, Ashtamudi, and Sasthamkotta lakes.



In the iconic Vembanad–Kuttanad ecosystem the state's largest and India's longest lake KSBB's holistic efforts encompass strengthening PBRs, LBSAP planning, biological inventories of waterbirds and aquatic species, and raising community awareness about hydrological threats such as pollution and encroachment. The board actively fosters collaborations with local bodies to integrate biodiversity conservation into development planning across these wetland mosaics. In February 2025, the Board initiated comprehensive documentation of research and development efforts related to three major wetland agro-ecosystems -Kole, Kaippad, and Pokkali. These ecologically fragile yet highly productive landscapes play a critical role in enhancing the resilience and adaptive capacity of coastal communities and the broader region.

7. Fish For the Future: Native Inland Fish Stock Enhancement Project

By noting 27% of Kerala's 196 freshwater fish species being endemic and 52 classified as threatened, KSBB, in collaboration with academic institutions, the Fisheries Department, and local Biodiversity Management Committees (BMCs), has launched in 2022, an inland fish stock enhancement initiative called the Ootha Project aimed at conserving Kerala's endangered native freshwater fish species. The project is designed to protect migratory and breeding fish during the monsoon season, traditionally referred to as "oothakayattam", a period when overfishing threatens spawning populations. In another similar initiative, KSBB has partnered with the Kerala University of Fisheries and Ocean Studies (KUFOS) and the Department of Aquatic Biology, University of Kerala, to develop captive breeding protocols and facilitate the release of fingerlings of rare and endemic species into natural inland water systems.



In its initial phase, ten threatened species including *Hypselobarbus thomassi*, *Dawkinsia exclamatio*, and *Horabagrus nigricollaris* are being targeted for conservation through captive breeding and participatory stewardship. In June 2025, 2,000 fingerlings of *Dawkinsia exclamatio*, bred at KUFOS, were released into a tributary of the Kallada River near Thenmala. This initiative exemplifies how traditional ecological knowledge and scientific innovation can converge to restore

endangered species while engaging local fishers in sustainable practices.

Together, these efforts reflect a scalable model for community-driven aquatic biodiversity conservation, blending ecological restoration with economic resilience in Kerala's upper catchments.

8. Guardians of the Coast: Marine Biodiversity Registers in the southern districts of Kerala

KSBB has initiated the preparation of Marine Biodiversity Registers (MBRs) as part of its broader mandate to document and conserve the state's biological diversity. Expanding the PBR model to marine ecosystems, KSBB's MBR project seeks to systematically record marine species, habitats, and traditional ecological knowledge of coastal fishing communities.

The initiative is intended to serve as a scientific and community-based tool to guide sustainable marine resource management, policy planning, and the establishment of marine protected areas.



The first phase of the MBR was carried out along a 78 km stretch of the Thiruvananthapuram coast (Valiathura to Pozhiyoor) in 2012–13, documenting nearly 220 marine species, including reef and bottom-dwelling organisms. This included fish, molluscs, crabs, jellyfish, and seabirds, as well as ecological features like reefs, tidal

flows, and spawning grounds. Importantly, the register also integrated traditional fisherfolk knowledge including fish behaviour during different lunar phases, local navigation systems like “kanicham,” and gear-specific fishing patterns collected through detailed oral history interviews.

Building on the success of the pilot, the second phase in 2014–15 extended the survey to the Kollam coast, covering a 50 km coastal and nearshore marine zone. This expanded effort significantly enriched the species inventory and offered important insights into spawning grounds, reef structures, and the presence of several under-recorded or new marine species. The documentation identified nine previously unreported species on the Kerala coast, such as *Sirembo jerdoni* (brown-banded cusk-eel), *Albunea symmysta* (a rare sand crab), *Okamejei powelli* (Indian ringed skate), and *Gymnothorax meleagris* (turkey moray). These findings demonstrated the ecological richness and under-explored biodiversity of Kerala’s nearshore marine environment.

The MBR project was carried out in collaboration with NGOs such as Protsahan, scientific institutions like CMFRI and KUFOS, and local fishers, who played a central role in knowledge-sharing and ecological mapping. The initiative was widely regarded as a pioneering example of integrating community knowledge with scientific documentation. However, it also faced criticism.

As the third phase, the MBR approach has begun to be replicated at the panchayat level, such as in Kadalundi (Kozhikode district), indicating a growing recognition of the importance of localised marine biodiversity registers for community-led marine governance. KSBB’s MBR initiative represents a landmark effort in Indian coastal conservation, blending participatory documentation, scientific validation, and

traditional knowledge to promote responsible stewardship of marine ecosystems.

9. Sea Turtle Conservation at Veliyankode: A Community-Led Effort to Protect Kerala’s Coastal Nesters

The Olive Ridley Sea Turtle is an endangered species that visits Kerala’s coastline annually to nest. While nesting activity is concentrated along select beaches such as Kasaragod–Payyannur, Thrissur–Chavakkad, and Malappuram–Ponnani–Veliyankode—the eggs laid during the December to April breeding season face significant threats. Misconceptions about their medicinal value, coupled with habitat disturbance and predation, often result in widespread egg destruction.

In response, the Veliyankode Grama Panchayat Biodiversity Management Committee in Malappuram district launched Kerala’s first large-scale, BMC-led sea turtle conservation initiative. Supported by the Kerala State Biodiversity Board and implemented in collaboration with the Social Forestry Department, the project was carried out along the Patumuri coast with strong community participation.



The initiative focused on four key actions: raising public awareness, collecting and safeguarding sea turtle eggs, ensuring controlled incubation, and releasing hatchlings into the sea. A dedicated Sea Turtle Conservation Committee was formed

to coordinate local engagement and monitor nesting activity. Over two breeding seasons, more than 4,500 eggs were collected and incubated under protected conditions. Despite challenges such as extreme heat, over 450 hatchlings were successfully released into the sea in a phased manner.

The Veliyankode BMC's ongoing efforts exemplify the potential of decentralised biodiversity governance. By mobilising local knowledge and fostering stewardship, the project has not only contributed to the recovery of a threatened marine species but also strengthened the role of BMCs in coastal conservation. It stands as a replicable model for community-led action in safeguarding Kerala's fragile marine ecosystems.

10. Restoring Marine Ecosystems: Ghost Net Removal along the Thiruvananthapuram Coast

In response to the growing threat of ghost fishing nets abandoned, lost, or derelict fishing gear (ALDFG) that continue to trap marine life and degrade seabed habitats KSBB launched a pioneering initiative along the Thiruvananthapuram coast in 2025. The project, is being implemented in collaboration with ICAR-CMFRI Vizhinjam Regional Centre, local fishers, and civic bodies, addresses the ecological aftermath of Cyclone Ockhi, which left behind thousands of km of drifting nets that now smother coral reefs and benthic ecosystems.

The initiative was designed with a dual focus: scientific precision and community stewardship. It began with a consultative workshop on April 9, 2025, bringing together experts, citizen scientists, fishers, the Clean Kerala Company, Haritha Karma Sena, and local governance and religious leaders. Ghost net hotspots were identified through underwater surveys and local knowledge, with trained SCUBA divers and fishers leading the eco-sensitive retrieval operations.

To ensure sustainability, the project partnered with recycling and waste management agencies for the responsible disposal of retrieved nets. Early ecological monitoring has shown promising signs of reef recovery, including improved water clarity, increased fish activity, and the return of benthic organisms indicators that the marine ecosystem is beginning to regenerate.

Beyond ecological gains, the project has catalysed a shift in community awareness. Fishers, once unaware of the long-term impacts of lost gear, are now active participants in marine conservation. Training programs have empowered them to identify, remove, and manage ghost nets, blending traditional knowledge with scientific methods. The initiative also laid the groundwork for policy development, with draft recommendations under preparation to regulate ghost net deployment and incentivise recovery. These will be submitted to the Government of Kerala for consideration as part of a broader coastal biodiversity governance framework.

By integrating science, policy, and grassroots action, the Thiruvananthapuram Coast Ghost Net Project offers a replicable model for restoring marine ecosystems and building resilient coastal communities a vital step toward securing Kerala's Ocean heritage.







Leaf 2: Biodiversity use, Access & Benefit Sharing

1. ABS Inventories: Mapping Kerala's Tradable Bioresources
2. Sustainable Micro Enterprise Models rooted in Local Ecology
3. Policy Innovations: Advancing Ecological Agriculture through Organic Farming Practice
4. Policy Innovations: Bio-Invasives Management & LBSAPs
5. Genome Saviours: Recognising Custodians of Agrobiodiversity

1. ABS Inventories: Mapping Kerala's Tradable Bioresources

In Kerala, the ABS mechanism is operationalised under Sections 7 and 21 of the Act and the Kerala Biological Diversity Rules, 2008. The ABS Guidelines issued by the Ministry of Environment, Forest and Climate Change in 2025 provide the procedural foundation for implementation. As part of its mandate, KSBB regulates access to bioresources for commercial use and ensures equitable benefit sharing with local communities and BMCs.

Kerala's rich biodiversity spanning forest produce, medicinal plants, marine resources, and agro-biodiversity forms the backbone of several traditional and emerging economic sectors. Recognising the need to document and regulate the commercial use of these resources, the Board undertook a pioneering initiative to identify and assess tradable bioresources across the state. This study, conducted between 2021 and 2023, estimated Kerala's annual ABS potential at ₹105 crore, based on the raw material procurement costs of industries. This includes high-demand species such as wild honey, forest spices, medicinal herbs, and marine bioresources. The study emphasised the importance of transparent supply chains, registration of bioresource-based industries, and local-level monitoring through Biodiversity Management Committees.

The initiative, supported by RKI, focused on developing a comprehensive database of bioresources that are actively traded in Kerala. The study mapped species used in Ayurveda, food processing, cosmetics, and marine sectors, and traced their flow through local and regional supply chains. It also identified gaps in traceability, benefit-sharing, and ecological safeguards, highlighting the need for regulatory and institutional interventions.

Building on this, KSBB has proposed earmarking 5% of high-value timber auction proceeds such as those from sandalwood for ABS, which could yield ₹3–3.5 crore annually. In the marine sector, a roundtable convened with MPEDA explored the introduction of a 0.5% benefit-sharing ratio for marine and inland bioresources, laying the groundwork for sector-specific ABS models.

The tradable bioresources initiative has laid the groundwork for a new generation of eco enterprises rooted in sustainable harvesting, value addition, and community benefit. It supports the development of sector-specific ABS models particularly in Ayurveda, marine, and forest-based industries and informs policy recommendations on pricing, licensing, and benefit-sharing ratios. By integrating biodiversity documentation with economic valuation and governance reform, KSBB is creating a replicable model for ethical bio trade and biodiversity-based livelihoods.

Strengthening ABS Compliance: To date, four ABS agreements have been executed in the state, generating ₹96,657 in benefit-sharing contributions. These funds were reinvested in a stingless beekeeping initiative for tribal farmers in Kuttichal GramaPanchayat, Thiruvananthapuram, demonstrating how ABS can directly support sustainable livelihoods and biodiversity-friendly enterprises. KSBB has also issued notices to over 700 industries engaged in the commercial use of bioresources particularly in the Ayurvedic and marine sectors to ensure compliance with ABS provisions.

However, the implementation process has not been without challenges. Six major companies, including Arjuna Natural Ltd., Synthite Industries, and Vaidyaratnam Oushadasala, contested KSBB's notices in court, resulting in a stay order. In response, KSBB appointed standing counsel and is actively pursuing legal remedies to uphold its regulatory authority, which was reaffirmed by the Uttarakhand High Court in the landmark *Divya Pharmacy vs. Union of India* judgment in 2018.

Community Innovation: At the community level, the Thavinjal GramaPanchayat BMC in Wayanad set a precedent by passing a resolution to levy a 2% cess on bioresource collection from forest areas for commercial use. This decentralised model of ABS enforcement has been recognised as a replicable best practice.

KSBB is also promoting the establishment of ABS Cells in colleges and universities to ensure compliance in research and development involving bioresources.

2. Sustainable Micro Enterprise Models Rooted in Local Ecology

KSBB has supported a range of biodiversity-linked livelihood projects across Kerala. These include the inland fish stock enhancement initiative in collaboration with KUFOS

and local BMCs, which combines native species conservation with aquaculture-based income for fisherfolk. In Kuttichal, stingless beekeeping was introduced as a sustainable livelihood for tribal farmers using ABS-generated funds. In Wayanad and Idukki, forest spices and wild honey value chains have been strengthened through training, branding, and market access, enabling tribal communities to benefit from sustainable harvesting practices.

Ecosystem Restoration as Livelihood Strategy: In coastal regions, KSBB has integrated ecosystem restoration with employment generation. The Avasatheeram mangrove restoration project in Pothencode is one such example, where local fishers and farmers were trained in mangrove planting and protection, enhancing both ecological resilience and fishery productivity. These initiatives reflect KSBB's commitment to fostering biodiversity-based enterprises that are ecologically grounded, economically viable, and socially inclusive. By combining traditional knowledge, scientific innovation, and community participation, KSBB is building a resilient foundation for green livelihoods across Kerala.

Promoting Mushroom-Based Microenterprises: KSBB, in collaboration with JNTBGRI, has launched a focused initiative on the documentation and sustainable use of Kerala's edible mushroom biodiversity. Through the project "Documentation, Database and Conservation of Edible Mushroom Resources of Kerala," the Board has supported field surveys, species identification, and the development of educational tools to help communities distinguish edible from toxic varieties. The initiative promotes low-cost mushroom cultivation, value addition, and microenterprise development—particularly among women's groups and tribal collectives—linking fungal biodiversity with nutritional security and green livelihoods.

Non -Wood Forest Produce Value addition: KSBB has granted with a ₹1.26 crore initiatives by the Department of Science and Technology's Science for Equity, Empowerment & Development (SEED) Division to promote the sustainable use and value addition of select Non-Wood Forest Products (NWFPs), including honey, medicinal plants, amla and soap barks. The initiative is rooted in the SEED Division's mandate to empower marginalised communities through location-specific, science-driven interventions that are socially relevant and environmentally sustainable. By integrating indigenous knowledge systems with technological support, the project intends to foster skill development, income generation, and conservation-linked enterprise models.

3. Policy Innovations: Advancing Ecological Agriculture through Organic Farming Practice

KSBB played a pivotal role in initiating and shaping the 2010 Kerala State Organic Farming Policy. Under the visionary leadership of Dr. V.S. Vijayan, the then Chairman of KSBB, the Board emphasised the urgency of transitioning Kerala's agricultural landscape towards ecological sustainability. The Policy marked a transformative milestone in embedding ecological integrity within agriculture. Framed as a response to decades of chemical-intensive practices and agrarian distress, it positioned organic farming not merely as a food production method but as a regenerative force for biodiversity, farmer dignity, and human health. Anchored within Kerala's Biodiversity Strategy and Action Plan, the policy revived indigenous systems like Pokkali, Kaipad, Kole wetlands, and homestead farming, alongside the conservation of the GI-protected Wayanadan rice varieties such as Jeerakasala and Gandhakasala. Its objective was to regenerate farmlands, restore ecosystem services, and realign agriculture with cultural and ecological values.

In October 2023, the launch of the Jaiva Karshika Mission by the state Department of Agriculture institutionalised the policy into a coordinated framework with phased implementation targets, aiming to convert 5,000 hectares to organic within five years. This mission earmarked 10% of State Agriculture Department farms for organic transition and introduced continuity clauses to ensure beneficiaries maintain standards. The Directorate of Agriculture has aligned annual plans (2024–25) and allocated ₹6 crore towards schemes promoting certification (NPOP and PGS), decentralized organic manure production, SHG-led cultivation, and market integration. Models like Marappanmoola and Adat continue to guide collective farming practices, while Agro Service Centres and Kudumbasree groups anchor localized delivery.

Strategically, the policy introduced mechanisms like farmer-led seed banks, compact area farming groups, and the Participatory Guarantee System to simplify certification and reduce entry barriers. With support systems such as soil health cards, district-level organic outlets, biogas plants, and targeted incentives, the mission now addresses emergent challenges like high certification costs, input access disparities, and market fragmentation. The Jaiva Keralam campaign, inspired by the vision laid down in the original policy, remains central to consumer outreach, educational integration, and interdepartmental convergence, reinforcing ecological agriculture as a biodiversity-positive pathway.

4. Policy Innovations: Bio-Invasives Management & LBSAPs

Invasive Alien Species (IAS) are among the most pressing threats to Kerala's biodiversity, second only to habitat loss. These species—ranging from aggressive weeds and insect pests to invasive fish and aquatic plants—disrupt native ecosystems, reduce agricultural



productivity, and impose significant economic costs. Responding to this challenge, the Kerala State Biodiversity Board (KSBB) has developed a comprehensive policy and action framework for IAS management, grounded in scientific evidence, community participation, and alignment with the Kunming-Montreal Global Biodiversity Framework (Target 6).

The foundation for this policy was laid during the National Conference on Biodiversity (2022) and further refined through a state-level workshop in May 2024, where over 80 stakeholders including 28-line departments, BMCs, and scientific experts contributed to the draft policy titled “Status and Strategies for Control and Management of Priority Invasive Species in Terrestrial and Aquatic Ecosystems.” The policy outlines a multi-pronged approach encompassing prevention, early detection, control, and, where feasible, economic utilisation of IAS.

Key strategies include strict regulation of species introductions, enhanced quarantine and risk assessment at entry points, and the development of taxonomic validation protocols. The policy also emphasises community-based eradication, public awareness, and capacity building through local institutions and Biodiversity

Management Committees. A notable innovation is the proposal to establish Virtual Biodiversity Cadres—interdepartmental task forces trained to monitor and manage bio-invasives at the local level.

The policy identifies high-risk species such as *Mikania micrantha*, *Lantana camara*, *Parthenium hysterophorus*, *Senna spectabilis*, and *Oreochromis mossambicus*, and recommends targeted interventions across forest, agricultural, aquatic, and riparian ecosystems. Management tactics include mechanical removal, biocontrol, integrated pest management (IPM), and the use of environmentally safe herbicides. In cases where eradication is not feasible, the policy encourages economic utilisation of IAS for bio-fibre, biofuel, or compost production.

To support implementation, a monitoring framework has been developed with ecosystem-specific indicators, such as the rate of IAS establishment, number of new introductions, and documentation in People’s Biodiversity Registers (PBRs). These indicators are integrated into the updated Kerala State Biodiversity Strategy and Action Plan(2025–2035) and the emerging Local Biodiversity Action Plans (LBSAPs), such as the pilot project developed in Athirapilly.

5. Genome Saviours: Recognising Custodians of Agrobiodiversity

Launched in 2019 under the Rebuild Kerala Initiative (RKI), the Agrobiodiversity Conservation Project is a flagship effort by KSBB to revive and safeguard Kerala's indigenous agricultural biodiversity in the wake of the 2018 floods. With a financial outlay of ₹2 crore, the project was initially implemented across eight severely affected districts—Pathanamthitta, Alappuzha, Idukki, Ernakulam, Thrissur, Palakkad, Malappuram, and Wayanad.

At its core, the initiative recognises the vital role of custodian farmers in conserving traditional crop varieties and livestock breeds. KSBB identified 100 farmers per district using customised Open Data Kit (ODK) software, creating a network of 800 custodian farmers across the eight districts. These farmers were trained in agrobiodiversity documentation and supported through financial and technical assistance.

To scale outreach and knowledge transfer, 80 farm schools were established 20 in each district by selecting master farmers from

among the custodian farmers. Each school trained a minimum of 20 additional farmers, reaching over 4,000 farmers with hands-on learning in agrobiodiversity conservation and climate resilience. These schools now serve as decentralised hubs for traditional knowledge, seed saving, and sustainable farming practices.

The project also catalysed community engagement through district-level seed festivals, featuring seed exchanges, biodiversity expos, and awareness sessions that celebrated Kerala's rich agricultural heritage. These events helped revive interest in endemic and climate-resilient crop varieties, while fostering local seed networks. Encouraged by its success, KSBB is now expanding the initiative to the remaining districts in partnership with Krishi Vigyan Kendras (KVKs), Kerala Agricultural University, and research and development institutions, following a more structured implementation strategy. The project aligns with national and global biodiversity targets by promoting the conservation of genetic diversity in cultivated plants and domesticated animals.



Section II: 20 Years of KSBB: From Inception to Impacts



Leaf 3 : People, Participation & Public Outreach

1. PBRs for All: Institutionalising Biodiversity Documentation
2. Biodiversity Management Committees: Empowering Local Custodians
3. Local Biodiversity Strategy and Action Plan (LBSAP) by combining People's Leadership
4. Youth for Biodiverse Futures: Catalysing Knowledge Networks
5. Museum, Exhibitions & Media: Communicating Biodiversity

1. PBRs for All: Institutionalising Biodiversity Documentation

Kerala has achieved a historic milestone in decentralised biodiversity governance by becoming the first state in India to complete the preparation of People's Biodiversity Registers across all 1,034 local bodies—including 941 GramaPanchayats, 87 Municipalities, and 6 Corporations. Initiated in 2009, the PBR program was spearheaded by the Board in collaboration with BMCs, local institutions, and community knowledge holders. These registers serve as comprehensive inventories of local flora, fauna, ecosystems, and traditional knowledge, forming the foundation for grassroots biodiversity planning and conservation.

While the first volume of PBRs was completed by 2019, KSBB recognised the need to move beyond documentation toward dynamic, actionable biodiversity governance. In 2022, the Board launched a two-pronged strategy: (1) updating and enriching existing PBRs with new data and community insights, and (2) digitising the entire PBR system under the e-PBR framework. This digital transformation, aligned with NBA guidelines, ensures that biodiversity data is accessible,

updatable, and usable for research, planning, and benefit-sharing.

In 2023–24, KSBB undertook a major upgradation and verification campaign across 227 local bodies, including the preparation of second-volume PBRs for three Ramsar sites—Sasthamcotta Lake, Ashtamudi Wetland, and Vembanad-Kol Wetland. The updated PBRs place greater emphasis on traditional knowledge, climate change impacts, and emerging threats such as invasive species. Districts like Kannur and Kozhikode led the way, with multiple local bodies submitting revised PBRs to KSBB. The process involved trained volunteers, local students, and BMC members, reinforcing the participatory ethos of the program.

To ensure that PBRs inform local action, KSBB has linked them to the preparation of LBSAPs. As of 2024, 21 BMCs have successfully developed LBSAPs with direct financial and technical support from KSBB. These plans empower local bodies to manage biological resources sustainably, implement ABS mechanisms, and integrate biodiversity into local development and climate adaptation strategies.



2. Biodiversity Management Committees: Empowering Local Custodians

Kerala has emerged as a national leader in decentralized biodiversity governance through the establishment of BMCs in all Gram Panchayats, Municipalities, and Corporations, as mandated under the Biological Diversity Act, 2002 and the Kerala Biological Diversity Rules, 2008. These committees are the institutional backbone of local biodiversity stewardship, responsible for preparing PBRs, promoting conservation, and ensuring sustainable use of biological resources.

A major milestone was achieved in 2019 when all BMCs across the state completed their PBRs comprehensive inventories of local flora, fauna, ecosystems, and traditional knowledge. While this achievement laid a strong foundation, the potential of PBRs remained underutilized in local planning and natural resource management. Recognising this gap, KSBB launched a pioneering initiative in 2022 to support BMCs in preparing and implementing LBSAPs, as mandated under Section 20(15) of the State Rules.

A key focus of KSBB's training programs for BMCs has been on Section 41(3) of the Biological Diversity Act, which empowers BMCs to levy collection fees from commercial users of biological resources within their

jurisdiction. BMCs have been sensitised on how to operationalise this provision through the creation and management of Local Biodiversity Funds (LBFs). These funds are used to support conservation activities, awareness programs, and benefit-sharing with local communities. BMCs have also been trained on ABS mechanisms how to identify commercial use, issue prior intimation notices, and collaborate with KSBB to ensure equitable benefit-sharing in line with national ABS guidelines.

Model BMCs across districts have initiated diverse projects from mangrove restoration and turtle conservation to sacred grove rejuvenation and agro-biodiversity mapping. These efforts demonstrate the transformative potential of empowered BMCs in bridging traditional knowledge, scientific planning, and participatory governance. The LBSAP process has also enabled BMCs to address critical challenges such as habitat loss, invasive species, overexploitation, and climate change through locally grounded solutions.

By investing in institutional capacity, legal literacy, and financial autonomy, KSBB is building a robust and replicable model of community-led biodiversity governance. The success of Kerala's BMCs sets a national benchmark for local implementation of the KMGBF and reaffirms the role of grassroots institutions as vital custodians of India's biological heritage.



3. People's Leadership in Local Biodiversity Strategy and Action Plan (LBSAP)

KSBB has played a catalytic role in institutionalising biodiversity governance at the grassroots through the promotion of Local Biodiversity Strategy and Action Plans (LBSAPs). Drawing from the State Biodiversity Strategy and Action Plan (SBSAP) and aligned with the CBD and KMGBF targets, KSBB has enabled local bodies to translate global and national biodiversity goals into actionable, context-specific interventions. KSBB developed detailed LBSAP guidelines in 2022, followed by extensive capacity-building programs at the state and district levels. These trainings equipped BMC members with the skills to analyse PBR data, identify local conservation priorities, and translate them into actionable plans. In 2023, the guidelines were revised to align with India's updated national biodiversity targets and the KMGBF. By 2024, 21 BMCs had successfully prepared LBSAPs, with 74 receiving direct financial and technical support, making Kerala the first state in India to institutionalise biodiversity action planning at the local level.

The LBSAPs are utilised by the Working Groups on Environment and Biodiversity within LSGIs to formulate biodiversity-sensitive projects for inclusion in annual plans. This has enabled the mainstreaming of

biodiversity into sectors such as agriculture, water management, tourism, and education, ensuring that ecological considerations are integrated into local governance frameworks.

Enabling LBSAP Implementation through Digital Knowledge Platforms To strengthen the LBSAP application through science-policy linkages and empowering BMCs with this objective, KSBB is initiating two digital platforms—Kerala Biodiversity Information Repository (KBIR) and the Kerala Traditional Knowledge Digital Library (Kerala TKDL)—that will serve as critical enablers of LBSAPs. Designed to support PBR preparation, KBIR and Kerala TKDL will facilitate real-time decision-making at the local level and strengthen technical capacities for biodiversity mainstreaming.

Kerala TKDL will have projects to digitise and protect community-based ecological knowledge—including agricultural practices, medicinal systems, and biocultural traditions thereby enhancing ABS documentation, safeguarding against biopiracy, and promoting ethical use of traditional wisdom. Both platforms will strengthen transparency, inclusivity, and resource mobilisation under Section 41(3) of the BD Act, enabling LSGIs to design LBSAP-linked development projects rooted in ecological intelligence and cultural resilience.



4. Youth for Biodiverse Futures: Catalysing Knowledge Networks

Kerala's youth have emerged as pivotal champions in the biodiversity movement, thanks to KSBB's visionary platforms that blend environmental learning, civic engagement, and research mentorship. Through school clubs, student congresses, citizen science, and knowledge fellowships, the Board is nurturing a generation of future-ready biodiversity stewards equipped to lead ecological action and innovation.

Student's Biodiversity Congress & Student Clubs: Nurturing Future Stewards

For the past 17 years, the Board has been organising the Students' Biodiversity Congress, a cornerstone initiative in environmental education aimed at inspiring and educating young minds on the importance of biodiversity conservation. Conducted in two phases, the Congress begins with district-level competitions in painting, pencil drawing, essay writing, project presentations, and homestead biodiversity conservation. Students from junior, senior, and college levels participate enthusiastically, with district winners advancing to the state-level event.

The 17th edition of SBC culminated on International Biodiversity Day, May 22, 2025, in a grand celebration held in Thiruvananthapuram. Themed "Igniting Young Minds for Biodiversity Conservation," the event recognised outstanding student talent with cash prizes and mementoes. Over the years, SBC has engaged thousands of students across all 14 districts, nurturing a generation of eco-conscious individuals and reaffirming KSBB's commitment to youth-led conservation.

To complement SBC, KSBB has supported the formation of Biodiversity Clubs in schools and colleges across Kerala. These clubs serve as hubs for experiential learning, involving

students in activities such as medicinal plant gardens, butterfly habitats, rice diversity plots, and biodiversity surveys. A unique feature is the creation of Shanthisthal—sacred groves planted with RET species on school campuses. These living classrooms promote in situ conservation and foster a deeper connection between students and their local ecosystems.



The clubs also collaborate with local BMCs to support PBRs, seed festivals, and awareness campaigns. By embedding biodiversity into the school environment, KSBB is cultivating long-term ecological literacy and stewardship.

Fellowships, Internships & Citizen Science: Building Knowledge Networks

KSBB has instituted the Biodiversity Fellowship Program to foster research that directly contributes to the conservation, documentation, and sustainable use of Kerala's biological wealth. Since its inception in 2014, the program has supported over 30 doctoral and post-doctoral researchers working across disciplines—from taxonomy and ecology to policy and community-based conservation. The fellowship encourages applied, policy-relevant research aligned with the Biological Diversity Act, 2002 and the K-SBSAP.

Key focus areas include conservation strategies for threatened species and habitats, taxonomic and ecological documentation of lesser-known taxa, aquatic biodiversity research, legal and policy analysis, and participatory conservation involving BMCs

and indigenous communities. Fellows are also encouraged to develop biodiversity education tools and outreach programs. As of 2024–25, six doctoral fellowships are ongoing, each receiving ₹25,000 per month. The program has evolved to emphasise interdisciplinary research and direct engagement with KSBB's conservation priorities, including ABS, invasive species management, and climate resilience.



Internships and Student Engagement

KSBB has further expanded its youth engagement through a Biodiversity Internship Scheme for undergraduate and postgraduate students, offering hands-on experience in biodiversity documentation, legal frameworks, and conservation planning. These short-term placements offer hands-on experience in biodiversity documentation, legal frameworks, and community-based conservation. Interns are placed with KSBB, BMCs, or partner institutions and contribute to projects such as PBR upgradation, LBSAP preparation, and biodiversity awareness campaigns. The internship program not only builds capacity among young professionals but also strengthens the knowledge base of local biodiversity governance.

In 2023, KSBB launched a Biodiversity Ideation Challenge, inviting students and startups to propose innovative solutions for agrobiodiversity, aquatic ecosystems, and forest restoration. These programs are complemented by exhibitions, eco-

literacy campaigns, and thematic workshops conducted in partnership with educational institutions and local governments.

Citizen Science and Public Participation



KSBB actively promotes citizen science as a tool for participatory biodiversity monitoring. Through initiatives like the e-PBR platform and community-based species surveys, residents, students, and amateur naturalists are trained to document flora, fauna, and traditional knowledge. These efforts are supported by awareness campaigns, biodiversity walks, and digital tools that make biodiversity data collection accessible and inclusive. KSBB also collaborates with institutions like the Kerala Forest Research Institute's Centre for Citizen Science and Biodiversity Informatics (CCSBI) to build long-term citizen science networks.



Together, these initiatives reflect KSBB's holistic approach to biodiversity education—combining creativity, science, and community action. By empowering students, KSBB is laying the foundation for a biodiversity-conscious generation committed to safeguarding Kerala's ecological heritage.

5. Museum, Exhibitions & Media: Communicating Biodiversity

Inaugurated on June 5, 2018, the Kerala Biodiversity Museum at Vallakadavu, Thiruvananthapuram, is India's first dedicated biodiversity museum. Developed by the Kerala State Biodiversity Board (KSBB), the museum serves as a dynamic public education space that brings biodiversity to life through immersive storytelling. Housed in a heritage boathouse, the museum features interactive exhibits, life-size models, dioramas, and digital installations that trace the evolution of life from the Big Bang to present-day ecosystems.



Key attractions include a 3D theatre on biodiversity conservation, a Science-on-Sphere projection system simulating planetary systems, and thematic galleries on Kerala's ecosystems, endangered species, and traditional knowledge. The museum also hosts an aquarium, a medicinal plant garden, and curated displays of traditional rice varieties, marine shells, and forest products. Designed to engage students, farmers, artisans, and the public, the museum has become a hub for biodiversity education, eco-literacy, and cultural interpretation.

Exhibitions and Public Outreach

KSBB regularly organises mobile exhibitions, biodiversity fairs, and thematic displays across districts to raise awareness on conservation issues. These exhibitions are

often held in conjunction with International Biodiversity Day, World Wetlands Day, and the Children's Biodiversity Congress. In 2025, KSBB launched a series of "Local Biodiversity and Traditional Knowledge Exhibitions" in collaboration with BMCs and educational institutions. These exhibitions showcased community-curated materials such as ethnobotanical specimens, traditional tools, folk art, and oral histories, highlighting the deep interlinkages between biodiversity and Kerala's cultural heritage.

KSBB also supports travelling exhibits and biodiversity corners in schools and public libraries, and has developed interactive kiosks and digital panels for use in local museums and eco-tourism centres. These efforts are designed to decentralise biodiversity communication and make it accessible to both rural and urban audiences.

Media Campaigns and Creative Communication

To amplify its outreach, KSBB has embraced multimedia and creative communication strategies. The Board has produced short films, radio jingles, biodiversity-themed songs, and social media campaigns to engage diverse audiences. Notable campaigns have focused on pollinator conservation, wetland protection, and the role of traditional knowledge in climate resilience. KSBB also recognises the role of media in conservation through its Biodiversity Awards for Journalists, and we are aiming to encourage responsible conservation and environmental reporting.

Through these integrated efforts—spanning physical spaces, People's platforms, and community exhibitions—KSBB is building a culture of biodiversity awareness that is inclusive, experiential, and rooted in Kerala's ecological and cultural identity.





Section III: 2024-2025 Annual Report

1. Introduction
2. Project Highlights (The three themes).
3. Impact Metrics & Thematic Dashboards
4. Programme Area 01: Biodiversity Conservation
5. Programme Area 02: Biodiversity Use, Access and Benefits
6. Programme Area 03: Biodiversity Communication, Education and Public Awareness

1. Programmatic Summary

Introduction

The 2024–25 reflects a pivotal year for KSBB, in terms of its high visibility in the areas of ecological leadership, policy innovation, and community-driven conservation. See the impact metrics and the thematic dashboards of the year (Tables 1 to 5) The activities and results of the year reflect a rights-based, scientifically grounded, and community-empowered approach to biodiversity governance, positioning Kerala as a national exemplar in ecological resilience and inclusive innovation. The quantified outcomes include protection of 84 red-listed plant species, a Spider survey, and 9 biodiversity parks, and 358 BMC meetings.

The programme continued to focus on three strategic areas: Biodiversity Conservation; Biodiversity Use, Access, and Benefit sharing ; and Communication, Education and Public Awareness (CEPA).

The highlights of the year are:

Biodiversity Conservation

- **PBR and LBSAP Expansion:** 40 People's Biodiversity Register (Volume II) and 23 Local Biodiversity Strategy and Action Plans released, supported by district-level BMC trainings.
- **Species and Ecosystem Restoration:** 84 red-listed plant species conserved across 11 *ex-situ* projects; sacred grove campaigns and ghost net removal along the Thiruvananthapuram coast initiated.
- **Heritage Site Declaration:** Two new Biodiversity Heritage Sites under review.
- **Aquatic Conservation:** Inland fish breeding and biodiversity parks established to protect endangered aquatic species and rare native plant diversity.

Biodiversity Use, Access and Benefits

- **Riparian Plant Propagation:** Over 2 lakh saplings produced across five institutional nurseries.
- **Species Recovery and Livelihoods:** Ten endangered fish species prioritised under the Inland Fish Breeding and

Conservation Project, with tribal livelihood integration.

- **Pond Restoration and Policy Action:** Restoration in 13 districts and consultations led to the Kerala Red List Species Recovery Programme.
- **Access and Benefit Sharing (ABS):** Revenue collection initiated via sandalwood auction mechanisms.

Communication, Education and Public Awareness (CEPA)

- **Youth and Community Engagement:** 63,000+ students involved in 2123 biodiversity clubs; fellowships, internships, and thematic campaigns scaled.
- **Flagship Events:** State Biodiversity Awards, Children's Biodiversity Congress, Youth Ideation Challenge, and "KavinuKavalay" sacred grove campaign.
- **Creative Outreach:** EDGE frog calendar and sea turtle conservation centre spotlighted Kerala's unique biodiversity.

Impact Metrics & Thematic Dashboards

Table 1: Biodiversity Conservation

Key Metric	2024–25 Snapshot and the financial support
Sacred Groves Restored	3 groves, 2 projects, ₹5 lakh
Red-listed Species Conservation	84 species, 11 projects, 11 institutes, ₹27 lakh
Biodiversity Parks	9 parks launched
Marine PBRs	0 published, 6 projects, 3 districts, 6 BMCs, ₹6 lakh
Riparian Plant Multiplication	5 institutes, 25 species, 2.5 lakh saplings, ₹48 lakh
Inland Fish Breeding	2 agencies, 10 species, ₹40 lakh
Pond Ecosystem Restoration via BMCs	13 BMCs, 13 districts, ₹14.82 lakh
Agrobiodiversity Documentation	3 institutions, ₹5.85 lakh

Table 2: Biodiversity Use, Access & Benefits

Key Metric	2024–25 Snapshot and the financial support
ABS Agreements	₹0 mobilized, 0 settlements
Eco-enterprise Support	0 enterprises/projects
PBRs Updated	40 updated
PBR Digitisation	ePBRs progressing in 100 BMCs with financial support from NBA
LBSAP Development	6 training courses, 28 BMCs selected, 23 LBSAPs, ₹28 lakh (74 BMCs)
BHS Declaration	2 initiated
Wild Edible Plant Varieties	18 projects, ₹76.83 lakh
Vellayani Lake Restoration	₹50 lakh
Invasive Nymphaea Management	4 projects, ₹26.62 lakh
Ethnobotanical Garden	4 projects, ₹7.25 lakh

Table 3: CEPA (Communication, Education & Public Awareness)

Key Metric	2024–25 Snapshot and the financial support
SBC Engagement	600 institutions, 3000 students
Student Biodiversity Clubs	2123 institutions, 63,690 students
Online Training for Clubs	6 training courses, 800 clubs attended
Wild Edible Leafy Garden Project	21 clubs, ₹2.1 lakh
Financial Support to Clubs	31 clubs, ₹1.6 lakh
Biodiversity Doctoral Fellowships	12 fellows, 12 institutes, ₹24 lakh
Biodiversity Internships	30 interns, 10 institutes, ₹1 lakh
Youth Ideation Challenge	7 awards, ₹1.3 lakh
Biodiversity Conservation Awards	11 awards, ₹6 lakh
Ethnobotanical Garden	4 projects, ₹7.25 lakh

Table 4: BMC Meetings Convened – District-wise Summary (2024–25)

District	Meetings Held
Thiruvananthapuram	37
Kollam	16
Pathanamthitta	23
Alappuzha	70
Kottayam	18
Idukki	43
Ernakulam	19
Thrissur	8
Palakkad	72
Malappuram	37
Kozhikode	98
Wayanad	51
Kannur	69
Kasaragod	56
Total	358

Table 5: Projects Implemented by BMCs – District-wise Summary (2024–25)

District	Total Projects Implemented by BMCs	Financial support
(in Lakh)		
Thiruvananthapuram	2	1
Kollam	2	2.14
Pathanamthitta	2	2.14
Alappuzha	4	4.14
Kottayam	2	4.14
Idukki	2	5.90
Ernakulam	3	5.14
Thrissur	2	9.14
Palakkad	2	2.14
Malappuram	2	2.0
Kozhikode	4	3.0
Wayanad	2	2.5
Kannur	9	3.5
Kasaragod	8	2.0
Total	46 Projects	
	48.88	

(Total Projects include LBSAPs, Ecorestoration Projects and Marine PBRs)



Programme Area 01: Biodiversity Conservation

Overview

The Kunming-Montreal Global Biodiversity Framework (KM-GBF) urges nations to halt biodiversity loss through inclusive, area-based conservation, restoration of degraded ecosystems, and equitable benefit-sharing. India's Biological Diversity Act 2002, (amended in 2023), reinforces decentralised governance with a focus on biodiversity mainstreaming through Biodiversity Management Committees (BMCs), People's Biodiversity Registers (PBRs), and Biodiversity Heritage Sites (BHS). Kerala, with its high endemism and biocultural richness, has positioned itself as a national leader in implementing rights-based, community-led biodiversity governance.

Strategic Interventions and Outcomes of the Year:

- 1. Training to the Biodiversity Management Committees:** Strengthened biodiversity governance by conducting district and block-level BMC trainings across all 14 districts, enabling selected BMCs to prepare PBR Volume II. To date, 40 PBR Volume II documents have been finalised, enhancing ecological baselines and community ownership (Table 5).
- 2. BHS Declaration:** Two potential sites were identified and shortlisted for such declarations during the year.
- 3. BMC Meetings Convened:** A total of 358 local bodies conducted Biodiversity Management Committee (BMC) meetings during the reporting period, reflecting widespread engagement in decentralised biodiversity governance.
- 4. Species Protection Resolution:** Panathady BMC (Kasaragod) passed a resolution under Section 41 of the Biological Diversity Act to restrict commercial harvesting of the endemic bamboo *Pseudoxystenantha ritcheyi* and the endangered fish *Dawkinsia denisonii*, marking a precedent in community-led species protection.
- 5. Biodiversity Park - Mundur Gramapanchayat, Palakkad:** Inaugurated on 10 December 2024 by Hon'ble MLA of Malampuzha Constituency, Sri. A. Prabhakaran, the park features 120 tagged plant species, butterfly and medicinal gardens, QR-coded signage, a reading corner, and composting facilities—serving as a model for public-oriented biodiversity education.
- 6. Biodiversity Park -Ancharakkandy Gramapanchayat, Kannur:** Opened on 30 December 2024 by Hon'ble Minister for Ports, Archaeology and Museums, Sri. Kadannappally Ramachandran, the park aims to enhance public awareness and promote local biodiversity conservation.
- 7. Biodiversity Park -Pinarayi Gramapanchayat, Kannur:** Launched on 25 December 2024 by Hon'ble Minister Sri Kadannappally Ramachandran, this park further expands Kannur's biodiversity outreach infrastructure.
- 8. “Karanavarkkoottam” Traditional Knowledge Program:** In Cheemeni, Kasaragod on October 2024, the respective BMC hosted five traditional knowledge-sharing sessions, engaging 250 elders to enrich PBRs with oral histories and indigenous ecological insights.

9. **Biocultural Education Visit – Vandanam Sacred Grove:** In Alappuzha on 29 March 2025, under the guidance of Dr. Jose Mathew, the SDV UP School Biodiversity Club assessed biodiversity and invasive species threats at Vandanam Sacred Grove—an exemplary model of biocultural education.
10. **Marine Ecosystem Monitoring and Ghost Net Removal:** KSBB partnered with ICAR-CMFRI Vizhinjam Centre to monitor marine ecosystems and remove ghost fishing nets along the Trivandrum city coast. The initiative trained fishers and divers, restored habitats, and developed scalable policy recommendations for coastal resilience.
11. **Local Biodiversity Strategy and Action Plan (LBSAP) Preparation:** Financial assistance and technical training were provided to 12 selected BMCs for preparing Local Biodiversity Strategy and Action Plans. As of now, 23 BMCs have completed and released their LBSAPs, advancing decentralized biodiversity planning (Table 6).
12. **Ecosystem Restoration Projects through BMCs:** Five locally vulnerable ecosystem restoration projects were selected and supported with financial assistance. These initiatives strengthen place-based ecological resilience and community stewardship.
13. **Biodiversity Heritage Site (BHS) Declaration Process:** Initiated the process for declaring Two new Biodiversity Heritage Sites, enhancing protection for ecologically and culturally significant landscapes. (Table 7).
14. **People's Marine Biodiversity Register Initiative:** Under Rule 20(15) of the State Biodiversity Rules, 2008, launched the preparation of Marine Biodiversity Registers in three coastal districts. The initiative documents coastal biodiversity and traditional knowledge through active community participation, as part of the 2024–25 Plan Scheme.
15. **Ex-Situ Conservation of Red-Listed Plant Species:** Initiated the establishment of bioconservatories and nurseries for 84 priority and red-listed plant species in collaboration with R&D institutes across Kerala (Table8).
16. **Spider Survey – Ranipuram, Kasaragod:** Held in Ranipuram, Kasaragod from 11–12 January 2025, a survey by the Panathady BMC and partner institutions, documented 110 spider species across 24 families. The findings contribute to PBR updates and support the proposal for heritage site designation under the BHS framework (Table 9).



Table.5: PBR Volume II Released (District-wise Summary)

District	BMCs
Thiruvananthapuram	Chemmaruthy, Venganoor, Chirayinkeezhu, Mangalapuram
Kollam	Chithara
Kottayam	Manimala, Veliyanoor
Kozhikkode	Kadalundi, Kayanna, Maruthongara, Thurayur, Kottur, Maniyoore, Balussery, Omassery, Narikkuni, Olavanna, Panangad
Kasargod	Udma
Idukki	Marayoor, Karimannoor
Alappuzha	Thazhakkara, Thakazhy
Ernakulam	Marady
Kannur	Karivellur Peralam, Iritty Municipality, Kathiroom, Kuthupareamba Municipality, Mangattidam, Malappattam, Mokeri, Anjarakandy, Kunnothuparamba, Kuttiattor, Kankol Alappadamba, Valapattanam
Wayanad	Edavaka
Malappuram	Vallikkunnu
Palakkad	Muthuthala
Thrissur	Sreenarayanapuram

Table 6: LBSAPs Prepared and Released (2024–25)

District	GramaPanchayat / Municipality	Status
Alappuzha	Veeyapuram, Thakazhy, Kainakary, Vayalar	LBSAPs prepared and released
Idukki	Arakkulam, Purappuzha, Udumbanur, Velliyamattom	-do-
Kannur	Chembilode, Panniyannur, Malapattam, Eramam-Kuttoor, Karivellur Peralam	-do-

Table7: Proposed Biodiversity Heritage Sites (BHS) – 2024–25

District	BMC / Local Body	Proposed BHS Site
Kozhikode	Chengottukavu GramaPanchayat	Poyilkavu
	Moodadi GramaPanchayat	Sree Muchukunnu Kottayil Kavu

Table 8: Ex-Situ Conservation Projects of RET and Red-Listed Species (2024–25)

Sl. No.	Project Title	Selected Plant Species
1	Conservation of RET Tropical Trees – Kollam District, Western Ghats	<i>Garcinia travancorica</i> , <i>Garcinia imberti</i> , <i>Pterocarpus santalinus</i> , <i>Symplocosso ligandra</i> , <i>Janakia aryalpatra</i>
2	Conservation of Threatened Plants of Kerala	<i>Vatica chinensis</i> , <i>Hopea ponga</i> , <i>Hopea racophloea</i> , <i>Dipterocarpus bourdillonii</i> , <i>Hydnocarpus pendandra</i> , <i>Memecylon parensae</i> , <i>Syzygiumc aryophyllatum</i> , <i>Palaquiu mellipticum</i> , <i>Curcuma vamana</i> , <i>Curcuma coriacea</i>
3	Conservation of Syzygium and Associated RET Species	<i>Syzygium travancoricum</i> , <i>Syzygium palghatense</i> , <i>Haplothismi aexannulata</i> , <i>Strobilanthes ciliatus</i> , <i>Syzygium chavaran</i>
4	Propagation Strategies for RET Plants – Palakkad	<i>Syzygiumc aryophyllatum</i> , <i>Vateria indica</i> , <i>Dysoxylu mmalabaricum</i> , <i>Vanilla planifolia</i> , <i>Strobilanthes ciliatus</i> , <i>Cleistanthu scollinus</i> , <i>Swietenia macrophylla</i> , <i>Pterocarpus santalinus</i> , <i>Humboldtia bourdillonii</i> , <i>Dipterocarpu sbourdillonii</i> , <i>Janakia aryalpatra</i>
5	Field Gene Bank for Endangered Piper Species & Red-Listed Flora	<i>Piper barberi</i> , <i>Piper hapnium</i> , <i>Cayratia pedata</i> , <i>Hopea ponga</i> , <i>Strobilanthes ciliatus</i> , <i>Garcinia imberti</i> , <i>Agasthiy amalaipauciflorum</i>
6	In Vitro & Ex Vitro Conservatory of RET Species	<i>Buchanania barberi</i> , <i>Calophyllum apetalum</i> , <i>Gymnacranthera canarica</i> , <i>Hopea ponga</i> , <i>Hydnocarpus pentandra</i> , <i>Myristica malabarica</i> , <i>Syzygium caryophyllatum</i> , <i>Syzygium makul</i> , <i>Syzygium stocksii</i> , <i>Vateria indica</i> , <i>Paphiopedilum dryuri</i> , <i>Vanda thwaitesii</i>
7	Palakkad's Floral Guardians – Bharathapuzha Basin	<i>Hydnocarpus pentandra</i> , <i>Humboldtia bourdillonii</i> , <i>Garcinia imberti</i> , <i>Garcinia wightii</i> , <i>Myristica malabarica</i> , <i>Gymnacranthera canarica</i>
8	Conservatories of Red-Listed Species	<i>Buchanania barberi</i> , <i>Madhuca diplostemon</i> , <i>Salaciao blonga</i> , <i>Bentinckia condapanna</i> , <i>Memecylon subramanii</i> , <i>Garcinia imberti</i> , <i>Janakia aryalpatra</i>
9	Conservatories of Red-Listed Plant Species	<i>Decalepis hamiltonii</i> , <i>Garcini aindica</i> , <i>Hopea ponga</i> , <i>Hopea racophloea</i> , <i>Syzygium stocksii</i> , <i>Vateria indica</i> , <i>Vanilla planifolia</i> , <i>Cayratia pedata</i> , <i>Vanda wightii</i> , <i>Cinnamomum travancoricum</i> , <i>Syzygium palghatense</i>

Table 9: Spider Species Documented at Ranipuram (Kasargod) – Family-wise Summary

Family	Species Documented
Salticidae	<i>Myrmarachne</i> sp.; <i>Carrhotus</i> sp.; <i>Portia</i> sp.; <i>Epeus</i> sp.; <i>Stenaelurillus alba</i> ; <i>Curubis</i> sp.; <i>Onomastus</i> sp.; <i>Hindumanes karnatakaensis</i> ; <i>Tamigalesus</i> sp.; <i>Thyene</i> cf. <i>calabi</i> ; <i>Kelewakaju</i> sp.; <i>Ghatippus paschima</i> ; <i>Colyttus</i> sp.; <i>Indopadilla insularis</i>
Thomisidae	<i>Thomisus</i> sp.; <i>Tmarus</i> sp.; <i>Synaema</i> sp.; <i>Alcimochthes</i> sp.; <i>Borboropactus</i> sp.; <i>Lycopus</i> sp.
Philodromidae	<i>Tibellus</i> sp.
Clubionidae	<i>Clubiona</i> sp.
Eutichuridae	<i>Cheiracanthium</i> sp.; <i>Calamopus</i> sp.
Uloboridae	<i>Uloborus</i> sp.; <i>Uloborus bispiralis</i> ; <i>Philoponella</i> sp.
Oxyopidae	<i>Oxyopes</i> sp.
Therididae	<i>Argyroides miniaceus</i> ; <i>Argyroides</i> sp.; <i>Theridion</i> sp.; <i>Meotipa</i> sp.; <i>Phycosoma</i> sp.; <i>Rhomphaea</i> sp.; <i>Chrysso</i> sp.; <i>Chrysso viridiventr</i> ; <i>Chikunia nigra</i> ; <i>Tomoxena</i> sp.; <i>Parasteatoda</i> sp.; <i>Phoroncidia testudo</i> ; <i>Janula</i> sp.; <i>Anelosimus</i> sp.; <i>Nihonhimea mundula</i> ; <i>Episinus</i> sp.; <i>Theridion zonulatum</i> ; <i>Nesticodes rufipes</i> ; <i>Cephalobares</i> sp.; <i>Steatoda</i> sp.; <i>Campanicola</i> sp.
Theraphosidae	<i>Thrigmopoeus</i> sp.
Sparassidae	<i>Heteropoda</i> sp.; <i>Olios</i> sp.; <i>Thelcticopis</i> sp.
Corinnidae	<i>Castianeira</i> sp.; <i>Medmassa</i> sp.
Liocranidae	<i>Oedignatha</i> sp.
Ctenidae	<i>Bowie</i> sp.
Pisauridae	<i>Hygropoda</i> sp.; <i>Dendrolycosa</i> sp.; <i>Dolomedes</i> sp.; <i>Perenethis</i> sp.
Pholcidae	<i>Pholcus</i> sp.
Tetragnathidae	<i>Leucauge decorata</i> ; <i>Tetragnatha</i> sp.; <i>Leucauge fastigata</i> ; <i>Tylorida ventralis</i> ; <i>Mesida</i> sp.; <i>Orsinome</i> sp.
Lycosidae	<i>Pardosa</i> sp.; <i>Hippasa</i> sp.; <i>Trochosa</i> sp.; <i>Wadicosa</i> sp.
Hersiliidae	<i>Hersilia</i> sp.
Linyphiidae	<i>Linyphia</i> sp.; <i>Neriene</i> sp.; <i>Prosoponoides</i> sp.
Araneidae	<i>Argiope pulchella</i> ; <i>Argiope</i> sp.; <i>Nephila pilipes</i> ; <i>Anepsion</i> sp.; <i>Cyclosa</i> sp.; <i>Cyclosa bifida</i> ; <i>Cyrtophora cicatrosa</i> ; <i>Cyrtophora unicolor</i> ; <i>Cyrtophora moluccensis</i> ; <i>Eriovixia porcula</i> ; <i>Eriovixia sakiedaorum</i> ; <i>Eriovixia laglaizei</i> ; <i>Bijoaraneus mitificus</i> ; <i>Gasteracantha geminata</i> ; <i>Neoscona</i> sp. (×3); <i>Neoscona</i> cf. <i>molemensis</i> ; <i>Herennia</i> sp.; <i>Poltys</i> sp.; <i>Ariamnes</i> sp.; <i>Acusilas</i> sp.; <i>Larinia</i> sp.; <i>Mangora</i> sp.; <i>Milonia</i> sp.
Zodariidae	<i>Mallinella</i> sp.
Psechridae	<i>Psechrus torvus</i>
Ischnothelidae	<i>Indothele</i> sp.
Trachelidae	<i>Utivarachna</i> sp.



Programme Area II: Biodiversity Use, Access and Benefit Sharing

During 2024–25, KSBB advanced key ecosystem restoration efforts across Kerala, with a strong emphasis on community collaboration and ecological resilience. A flagship initiative on riparian plant propagation was launched through five partner institutions, each tasked with developing propagation methods for over 25 native riparian species.

Collectively, these institutions are producing between 50,000 and 75,000 saplings each, in collaboration with at least two Biodiversity Management Committees (BMCs) per site. The program was publicly launched on 5th June 2025 (World Environment Day) with a statewide planting drive involving 1 lakh saplings and active BMC participation.

Strategic Interventions and Outcomes of the Year:

- 1. Inland Fish Breeding and Conservation Project 2025:** Launched on 5th February 2025, this flagship initiative targets ten rare, endemic, and threatened inland fish species through captive breeding, habitat restoration, and community-based conservation. Supported by domain experts, it promotes ecological resilience and sustainable livelihoods, aligning with GBF targets on aquatic biodiversity and tribal livelihood support.
- 2. Pond restoration activities were initiated across 13 districts,** promoting ecological health, water security, and sustainable use through decentralised stewardship. These efforts complement KSBB's broader strategy to restore degraded aquatic ecosystems and enhance biodiversity corridors. The pond conservation initiative was rolled out emphasising ecological restoration through de-silting, cleaning, and participatory management. Supported by BMCs, Local Self Governments (LSGs), and MGNREGA, the program promotes sustainable pond use, fish culture, and medicinal plant cultivation—enhancing both biodiversity and local livelihoods.
- 3. A state-level policy consultation on threatened species led to key decisions,** including the revision of species lists, standardisation of threat assessment protocols, integration of findings into People's Biodiversity Registers (PBRs), and the formal launch of the Kerala Red Species Recovery Programme—a targeted initiative to protect and rehabilitate priority flora and fauna across the state. The consultation brought together 90 participants, including biodiversity experts, scientists, and government officials.
- 4. Access and Benefit Sharing (ABS) Implementation.** Initial steps were taken to operationalise ABS mechanisms by collecting 5% of proceeds from sandalwood auctions conducted by the Forest Department, marking a significant move toward equitable benefit-sharing in biodiversity governance.
- 5. Development of Propagation Methods on Selected Riparian Plants:** Project on developing propagation methods for riparian plants was implemented by five institutions across Kerala, each tasked with producing 50,000–75,000 saplings of 25+ riparian species and collaborating with at least two BMCs for conservation (Table 10.1 to 10.4).



Table 10: Institutions Supporting Ex-Situ Conservation and Restoration

Table 10.1: M.S. Swaminathan Research Foundation – CAbC, Wayanad

Species	No. of Plants Raised
<i>Baccaurea courtallensis</i>	63
<i>Butea monosperma</i>	45
<i>Calophyllum inophyllum</i>	28
<i>Caryota urens</i>	116
<i>Crataeva magna</i>	958
<i>Dimocarpus longan</i>	1621
<i>Ficus racemosa</i>	18
<i>Garcinia gummi-gutta</i>	404
<i>Holigar naarnottiana</i>	1300
<i>Homonoia riparia</i>	4
<i>Neolamarckia cadamba</i>	12
<i>Perseam acrantha</i>	895
<i>Pongamiap innata</i>	1105
<i>Pterocarpus marsupium</i>	53
<i>Vateria indica</i>	175
<i>Wrightia tinctoria</i>	1030
Total	7827

Table 10.2: KSCSTE–Malabar Botanical Garden & Institute for Plant Sciences, Kozhikode

Species	No. of Plants Raised
<i>Oroxylum indicum</i>	350
<i>Garcinia gummi-gutta</i>	150
<i>Pterocarpus marsupium</i>	10
<i>Bridelia retusa</i>	10
<i>Caryota urens</i>	200
<i>Pongamia pinnata</i>	25
<i>Lagerstroemia speciosa</i>	380
<i>Adenanthera pavonina</i>	1000
<i>Mimusops elengi</i>	75
<i>Syzygium cumini</i>	15
<i>Calophyllum inophyllum</i>	50
<i>Perseam acrantha</i>	300
Total	2565

Table 10.3: Department of Botany, Kerala University – Karyavattom Campus

Species	No. of Plants Raised
<i>Calophyllum calaba</i>	3
<i>Albizia spp.</i>	41
<i>Gymnema sylvestre</i>	15
<i>Cinnamom umverum</i>	4
<i>Alstonia scholaris</i>	31
<i>Bombax ceiba</i>	21
<i>Terminalia chebula</i>	7
<i>Memecylonum bellatum</i>	4
<i>Hydnocarpus pentandrus</i>	5
<i>Terminalia paniculata</i>	12
<i>Perseam acrantha</i>	3
<i>Cerbera odollam</i>	14
<i>Ficus religiosa</i>	4
<i>Ailanthus triphysa</i>	3
<i>Stereosperm umcolais</i>	3
<i>Albizia odoratissima</i>	12
<i>Calophyllum inophyllum</i>	4
<i>Simarouba glauca</i>	2
<i>Terminalia bellirica</i>	2
Total	190

Table 10.4: MES Asmabi College, Thrissur

Species	No. of Plants Raised
<i>Adenanthera pavonina</i>	1250
<i>Aporosa cardiosperma</i>	500
<i>Baccaurea courtallensis</i>	350
<i>Barringtonia acutangula</i>	170
<i>Calophyllum inophyllum</i>	3500
<i>Caryota urens</i>	1250
<i>Diospyros crumenata</i>	510
<i>Garcinia gummi-gutta</i>	300
<i>Hopea parviflora</i>	4400
<i>Humboldtia vahliana</i>	90
<i>Hydnocarpus spentandrus</i>	4000
<i>Ochlandra criptoria</i>	75
<i>Pongamia pinnata</i>	25
<i>Prioria pinnata</i>	37
<i>Syzygium occidentale</i>	60
<i>Vateria indica</i>	450
<i>Aglaia edulis</i>	10
<i>Bambusa bambos</i>	2500
<i>Hopea ponga</i>	350
<i>Memecylon umbellatum</i>	3
<i>Monoon fragrans</i>	330
<i>Olea dioica</i>	40
<i>Terminalia bellirica</i>	1200
<i>Thespesia populnea</i>	250
<i>Hibiscus tiliaceus</i>	200
<i>Syzygium cuminii</i>	1100
Total	22950



Programme Area III: Communication Education and Public Awareness (CEPA)

During 2024–25, the Kerala State Biodiversity Board (KSBB) significantly strengthened its communication, education, and public awareness (CEPA) mandate through fellowships, internships, campaigns, and thematic outreach. Six doctoral fellows and 30 interns were supported under its academic engagement programs. Flagship events such as World Environment Day, Wetlands Day, and the Children’s Biodiversity Congress mobilised thousands across Kerala, fostering ecological literacy and public participation.

Campaigns like KavinuKavalay (sacred grove restoration), ECASA (Every Child A Scientist and Artist), and the Youth Ideation Challenge catalysed school and youth involvement in biodiversity action. State-level workshops and webinars addressed emerging themes, including biological invasions, Sustainable Development Goals (SDGs), and gender equity in biodiversity governance.

KSBB also conducted targeted capacity-building programs for Biodiversity Management Committees (BMCs) and district coordinators, enhancing local implementation capabilities. Public-facing initiatives such as the Sea Turtle Conservation Centre, the EDGE Frog Species Calendar, and the Biodiversity Awards spotlighted Kerala’s conservation leadership and community-driven stewardship

Strategic Interventions and Outcomes of the Year:

- 1. State Workshop on Bioinvasion Framework (22 May 2024) :** A state-level workshop titled “*Bioinvasion Regulatory Framework – In Line with KMGBF Target 6*” was convened with 80 participants. The session resulted in the collaborative drafting of key indicators, policy measures, and implementation strategies across three ecosystem sectors agriculture (including managed systems), forest , and marine and freshwater ecosystems.
- 2. ‘KavinuKavalay’ Sacred Grove Campaign :** Jointly organised with NBA, the Kavinu Kavalayi campaign was implemented across all 14 districts, engaging BMCs and biodiversity clubs in sacred grove inventory, invasive species management, and plastic waste removal—reviving cultural landscapes through community stewardship.
- 3. National Biodiversity Day – Visakhapatnam (22–23 May 2024) :** A Kerala delegation participated in the national-level celebrations, showcasing GI-tagged rice varieties, seaweed-based products, and other biodiversity-linked innovations, highlighting the state’s leadership in sustainable bioresource development.
- 4. World Environment Day (5 June 2024)** was marked through a state seminar and district-level workshops on land restoration and drought resilience. The day also saw tree planting drives and the launch of the Orumikkam Aruvikkayi stream conservation campaign across Kerala.
- 5. International Yoga Day (21 June 2024)** was observed at the biodiversity museum under the theme “*Yoga for*

Sustainable Life,” with active participation from schools, staff, and biodiversity clubs—linking wellness with ecological awareness.



6. **Earth Day Celebrations – Thiruvananthapuram (22 April 2024):** Perungadavila and Pothencode BMCs led Earth Day events featuring student competitions, sapling planting, and awareness sessions, reinforcing grassroots engagement in environmental action.
7. **State-Level LBSAP Training and Recognition :** On 24 July 2024, a training session on Local Biodiversity Strategy and Action Plans (LBSAP) was held in Thiruvananthapuram, led by Environment Secretary, Dr. Rathan U Kelkar IAS. A follow-up seminar on 11 December 2024, inaugurated by Hon’ble Minister for Local Self Governments, Rural Development and Excise, Parliamentary Affairs, Sri M. B. Rajesh, recognised Kerala as the first Indian state to formalize LBSAPs, with over 100 BMC, TSG, and virtual cadre participants trained.
8. **District Coordinators’ Capacity Building (25 July 2024) :** A training program was conducted at Vallakadav Museum, focusing on Access and Benefit Sharing (ABS) principles, with experiential learning through museum visits and interactive sessions.
9. **Sea Turtle Conservation Center – Veliyankode BMC:** Designated as a Sea Turtle Conservation Facilitation Center

following the successful release of over 6,000 Olive Ridley hatchlings, reinforcing community-led marine conservation in Malappuram.

10. **Biodiversity Club Events – September 2024 :** Clubs in Valanchery, Matikai, and Chelannur organised biodiversity seminars, herbal garden installations, and quiz competitions, fostering ecological literacy among students.

11. **Moth Week – Mokeri BMC Hosted “A Night with Moths”** at a local school, documenting approximately 20 moth species and educating participants on nocturnal pollinators and their ecological roles.



12. **Ozone Day Webinar and Quiz (16 September 2024):** Celebrated with an expert-led webinar and an online quiz, drawing nearly 3,900 participants and raising awareness on ozone protection and climate resilience.
13. **M.S. Swaminathan Memorial Webinar:** A thematic webinar was held in memory of Prof. M.S. Swaminathan, spotlighting the BioE3–BioC4 synergy and its alignment with Sustainable Development Goals (SDGs).
14. **Community Recognition – Whale Rescue by Fishermen:** Chemmencherry BMC honoured local fishermen for rescuing a stranded whale, exemplifying grassroots marine conservation and ethical stewardship.



15. Biodiversity Conservation Awards 2022 and Strategic Vision On 11 December 2024, the Hon'ble Chief Minister of Kerala presented awards across 12 categories, recognising 22 individuals and organisations for exemplary biodiversity efforts. The event also reaffirmed the importance of LBSAPs and set a strategic goal for Kerala to become India's leading biodiversity-friendly state by 2030 (Table 11).



16. Biodiversity Doctoral Fellowships: Supported six doctoral fellows in 2024–25, focusing on conservation, sustainable use, and benefit sharing of Kerala's biological resources (Table 12).

17. Biodiversity Internship Scheme: Offered internships to 32 postgraduate students to build knowledge, research skills, and hands-on experience in biodiversity, with certification upon successful report submission (Table 13, 14.1 to 14.3).

18. World Fisheries Day (21 November 2024): In collaboration with Valiyathura Fisheries School, we commemorated

World Fisheries Day through expert talks, student art contests, and hands-on sessions on sustainable fishing practices and scuba diving—promoting marine stewardship among youth.



19. Children's Day Biodiversity Camp (14 November 2024): Hosted an interactive biodiversity camp on Children's Day to foster early engagement with ecological themes. Activities included nature-based games, storytelling, and participatory learning modules tailored for school-age participants.

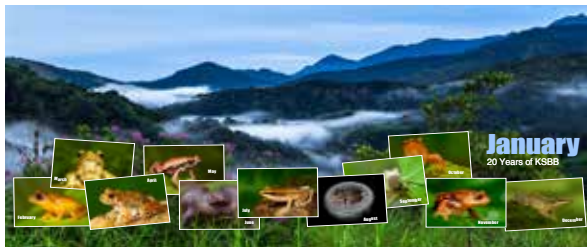


20. 16th Children's Biodiversity Congress (CBC 2024): Held on 7 December 2024, CBC 2024 brought together over 3,500 district-level participants and showcased 27 state-level biodiversity projects. Awards were distributed on 11 December, recognizing innovation and ecological insight among young contributors.

21. EDGE Frog Species Calendar – KSBB@20 : As part of its 20th anniversary, KSBB released a desktop calendar featuring 11 Evolutionarily

Distinct and Globally Endangered (EDGE) frog species endemic to Kerala. Each species is linked to QR-coded conservation activities, including:

- *Raorchestes akroparallagi* (Ponmudi hills, 2009)
- *Minervarya manoharani* (Agasthyamala foothills, 2017)
- *Hylarana (Indosylvirana) magna* (Shendurney WLS, 2014)
- *Mysticellus franki* (Suganthagiri hills, 2019)
- *Nasikabatrachus sahyadrensis* (Kattappana, 2003)
- *Hylarana (Indosylvirana) urbis* (Kadavanthra, 2014)
- *Nyctibatrachus minimus* (Kurichiyarmala, 2007)
- *Raorchestes ponmudi* (Ponmudi hills, 2005)
- *Micrixalus nelliampathi* (Nelliampathy hills, 2014)
- *Raorchestes resplendens* (Anamudi summit, 2010)
- *Hylarana (Indosylvirana) sreeni* (Siruvani forest, 2014)



FROGS of KERALA
Calling for conservation

All Photos
Prof. S. D. Biju

560 million years ago, early amphibian ancestors moved from water to land and evolved into frogs. Today, there are nearly 7,770 species of frogs globally, with India home to about 420 species. Kerala boasts approximately 164 species, which is 39% of India's frog species, making it the state with the highest amphibian diversity. Impressively, 40% of these species are found nowhere else in the world. However, many of these unique species face significant extinction threats, underscoring the urgent need for conservation efforts. Join the Kerala State Biodiversity Board's mission to protect these remarkable creatures and ensure their survival for future generations.

22. New KSBB Board came in place:

A newly constituted Board—including Chairperson, ex officio members, and domain experts—assumed office to guide KSBB's strategic direction and strengthen its biodiversity governance mandate.

23. ECASA Program for Children:

Launched the “Every Child A Scientist and Artist” (ECASA) initiative for

children aged 10–16, blending scientific inquiry and artistic expression through biodiversity-themed workshops and field activities.



24. National Consultation on KSBSAP

Alignment (28 February 2025):

Convened a national-level consultation in Thiruvananthapuram to align the Kerala State Biodiversity Strategy and Action Plan (KSBSAP) with the Kunming-Montreal Global Biodiversity Framework (KM-GBF) and India's NBSAP. The event engaged 152 experts across sectors.

25. “She-Bio” Women’s Day Event

(10 March 2025): In partnership with Kerala University, hosted “She-Bio”—a Women's Day initiative celebrating the role of women in biodiversity conservation and ecosystem restoration, in line with KM-GBF gender equity targets.



26. Custodian Farmers’ Consultation

(24 March 2025): In collaboration with CUSAT and partner institutions,

organized a consultation on mainstreaming agrobiodiversity for climate resilience, engaging custodian farmers and researchers in dialogue on sustainable practices.



11.12.2024 in Thiruvananthapuram (Table 14.1,14.2,14.3).



27. 'Jaivajalakam' Online Series (Jan–Mar 2025): Launched the 'Jaivajalakam' monthly online talk series for educators and students, featuring expert-led sessions on biodiversity challenges, nature photography, and youth-led conservation efforts.

28. World Wetlands Day 2025 was observed on 5th February 2025 by highlighting the importance of wetland conservation and sustainable use.

29. Youth Ideation Challenge 2023–24 – Winners Announced: Organised the Youth Ideation Challenge 2023–24 to engage students, start-ups, and the public in creating innovative solutions for conserving agrobiodiversity, forest, and aquatic biodiversity, with winners awarded and recognised at a ceremony on

30. Legal Matters Handled by the Board

(2024–25): During the reporting year, the Kerala State Biodiversity Board (KSBB) undertook legal actions in compliance with directives issued by the Hon'ble High Court of Kerala. In response to W.P. (C) No. 16212 of 2024, filed by Sri Gangadharan and others concerning unauthorized sand mining in Elamadu Village, Kollam, KSBB issued the necessary orders as directed by the Court. Additionally, the Board submitted statements of facts in two other cases:

- W.P. (C) No. 15562 of 2024, filed by Sri Mahesh B, relating to the Kerala State Television Film Awards 2022, and
- W.P. (C) No. 35786 of 2024, filed by Sri M.C. Jamaludheen, regarding illegal excavation of laterite in Vazhakkad Village, Malappuram.

Table 11: Biodiversity Conservation Award Details
The award winners and Category

Sl. No.	Name of the Award	Name of institution / Awardees	Prize
1	Best Biodiversity Management Committee (BMC) First Prize	Sree Narayanapuram Grama Panchayath BMC, Thrissur	100000 and Appreciation Letter
2	Best Biodiversity Management Committee (BMC) Second Prize	Kadalundi Grama Panchayath BMC, Kozhikode	50000 and Appreciation Letter
3	Best Biodiversity Conservation School First Prize	GLPS Madavoor, Thiruvananthapuram	25000 and Appreciation Letter
4	Best Biodiversity Conservation College First Prize	College of Applied Sciences, Idukki	25000 and Appreciation Letter
5	Certificate of appreciation	TK MadhavaMemorial College, Alappuzha	Appreciation Letter
6	Biodiversity Conservation Institute (Government, Co-operative Sector, Public Sector)	University of Kerala, Thiruvananthapuram	12500 and Appreciation Letter
7		Kannur University, Kannur	12500 and Appreciation Letter
8	Biodiversity Conservation Institute (Private Sector)	Tata Consultancy Services, Thiruvananthapuram	25000 and Appreciation Letter
9	Best Sacred Grove Conservation	M/s PonnakkudamKavu, Ernakulam	50000 and Appreciation Letter
10	HarithaVyakthi	Shri. H. Abdul Lathief, Alappuzha	50000 and Appreciation Letter
11	HarithaVyakthi (Certificate of appreciation)	Dr. P. Dileep, Kozhikode	Appreciation Letter
12	Best Custodian Farmer (Plants) - Male	Shri. Sathyanarayana Beleri, Kasaragod	25000 and Appreciation Letter
13		Shri. Shimjith N., Kannur	25000 and Appreciation Letter
14	Best Custodian Farmer (Plants) – Male(Certificate of appreciation)	Shri. Reji Joseph, Pathanamthitta	Appreciation Letter
15	Best Custodian Farmer (Plants) - Female	Smt. Parappi A., Thiruvananthapuram	25000 and Appreciation Letter
16		Smt. K. Jayasree, Wayanad	25000 and Appreciation Letter
17	Best Custodian Farmer (Plants) – Female(Certificate of appreciation)	Smt. SaliniRemesan, Wayanad	Appreciation Letter
18	Best Custodian Farmer (Animal)	Shri. Ajayakumar V.R., Pathanamthitta	25000 and Appreciation Letter
19		Shri. Jijeesh KV., Kannur	25000 and Appreciation Letter
20	Best Journalist (Print)	Smt. NavamiSudheesh, Kollam	25000 and Appreciation Letter
21	Best Journalist (Media)	Shri. K. Madhu, Kozhikode	25000 and Appreciation Letter

Table 12: List of Doctoral Fellows

College	Name of Candidate	Topics
Botanical Survey of India, Southern Regional Centre, TNAU Campus, Coimbatore	AmruthaSundaram	Taxonomic Studies of the genus <i>Heptapleurum</i> Gaertn (Araliaceae) in India with an emphasis on assessment of population and conservation status of endemic taxa in Kerala
Department of Forest Botany, KFRI	AmminiC. J	Taxonomy and distribution of freshwater algae in Eravikulam National Park,Southern-Western Ghats
Department of Wildlife Biology, KFRI	SreejithSivaraman	Community structure and habitat use of Rodents in a tropical forest of the Southern Western Ghats
Department of Zoology University Mananthavady Campus, Kannur	Stefina C.C	Mapping distribution and abundance of selected tick species, and potential tick-human contact areas in Wayanad
Department of Zoology Maharaja's College, Ernakulam	Sreebin P	Study on Biology, Genetics and Ecology of Freshwater Anguillid Eels (Family-Anguillidae) in the Periyar river system, Kerala
Department of Marine Biology, Microbiology and Biochemistry CUSAT	Vishnu Prasad N	Resilience and adaptability of coral patches along the Kerala coast and their conservation strategies in the present climate conditions

Table 13: List of Interns:

Name of College	Name of candidate	Topics
All Saints College TVM	AmrithaS. R	Study of the IUCN status of Marine and coastal flora and fauna of Kollam District and its traditional and commercial values.
	Greeshma.V	
	Mithra murali	
	Sethulekshmi S	
	Revathy B	
	Bincy Maria Raj	
	Ruksana N	
	Gouri	
Rajiv Gandhi School of Intellectual Property Law. IIT Kharagpur, West Bengal	Achyuth B Nandan	Traditional Knowledge (TK) Documentation and Defensive Protection: Pros and Cons of Digital Documentation.
TERI, School of Advanced Studies, New Delhi	Roshan Christopher	Assessment of floral data and carbon sequestration potential in selected sacred groves of Paravurmunicipality,Kollam District,Kerala.

CMS College, Kottayam	Radhika B	A Review of traditional Knowledge and digital library.
	AnaghaK. B	
	Lipitha Paul	
	Aiswarya Babu	
SreeNarayana College, Nattika, Trissur	Krishnendhu B.S	Evaluation Of the Current Status, Socio-Ecological Dimension and Conservation Strategies of Moothedath Kalari Sacred Grove
	Krishnanjali B.S	Comparative Studies on Current Status, Socio-Ecological Dimension and Conservation Strategies of Naduvathanaand Moothedath Sacred Groves.
University College, Palayam	Aiswarya Lekshmi G	Examination of PBR Volume II and study of IUCN Status and quantification of domestic,urban and wild flora and fauna of Thiruvananthapuram Corporation.
	Nandhana Santhosh	
	Anu P.S	
	Athira Unni M	
	Ajmi Haris	
	Anciya Ali	Analysis and updating of the people's biodiversity register (PBR) of Pampakuda Gramapanchayat, Ernakulam District.
	ArshidaMol	
	Jyothika K J	
	Shifna Fathima S	
Assumption College, Changanacherry	ArathyLal	Biodiversity Conservation through BMCs: A General study with illustrative insights from Neendoor panchayat
	Anusree Abhilash	
	Devi Krishna G	
	Megha Joseph	
	VanikrishnaK. S	
	Adithya Thulasi	
	Lakshmi nandana	

Table 14.1: Theme- Aquatic Biodiversity

Sl. No.	Name	Affiliation	Topic	Rank
1	Vishnu K.P Megha N Rajesh Jaiji Joy	School of Industrial Fisheries, CUSAT, Ernakulam (Dt)	Modified stake nets designed for bycatch and waste reduction	I
2	Abishek A.S. Aysha TM Harikrishna P.H Milan Manoj	Amritha Vishwa Vidhyapeetham, Kollam (Dt)	Autonomous Underwater Vehicles: Innovations in Marine Environmental Conservation and Energy Synthesis	II
3	Ayna Lalu	School of Industrial Fisheries, CUSAT, Ernakulam (Dt)	AI implemented autonomous underwater machines to manage marine debris	III

Table 14.2: Theme- Forest Biodiversity

Sl. No.	Name	Affiliation	Topic	Rank
1	ChadaNarasimha Reddy, C GuruAswini Dath, Mr.Gagan Dwaz	AmrithaVishwa Vidhyapeetham, Kollam (Dt)	Wildlife-Rail Guard - A Lifesaver for Wildlife and a Boost to High-Speed Rail Efficiency in India	I
2	Angela Elizabeth John Renuka Rajan	CMS College, Kottayam	Human Wildlife Dispute: Discussion About the Effects and Ways to Reduce Them	II

Table 14.3: Theme- Agrobiodiversity

Sl. No.	Name of the Candidate	Affiliation	Rank
1	Regina Hershey N. Simi Joseph P & AswiniVenugopal	Cochin University of Science & Technology Bharata Mata College, Thrikkakara	I
2	Aashima Rahim, Ashir K,Sreeraj P., Mohammed Nabin, Joel Michael	College of Agriculture, Vellayani	II



Section IV:

1. Reflections & Way Forward

I. What We've Learned: Reflections from 20 Years of Practice

Over the past two decades, KSBB has evolved from a statutory institution for regulating access to biodiversity into a catalyst for participatory, knowledge-driven, and inclusive biodiversity governance in the state. Through its journey across landscapes, institutions, and communities, the Board has come to recognise that conserving biodiversity is not only about protecting species and habitats, but about enabling people to live in harmony with nature, which means to be balanced in conservation and people's needs.

The following ten key learnings capture the collective wisdom that has emerged from this experience and now guide KSBB's strategic vision for the future.

1. From Protection to Participation: Inclusive Stewardship for Resilient Conservation

Over the last two decades, KSBB has moved away from a conventional "lock-and-key" conservation approach toward a participatory and people-led model by mainstreaming biodiversity principles and practices in development. It has become clear that sustainable biodiversity conservation is only possible when local communities are engaged as active custodians and derive tangible economic, social and cultural benefits livelihood security, health improvements, and income. Sacred grove conservation, Local Biodiversity Heritage Sites, and community-led marine and turtle protection initiatives of the KSBB over the years have demonstrated that inclusive stewardship builds long-term ecological resilience.

2. Mainstreaming Biodiversity in Local Governance: Decentralising Power for Grassroots Planning

KSBB's most significant institutional transformation has been the integration of biodiversity into Kerala's decentralised governance framework. The formation of BMCs in all 1,200 local bodies, the universal preparation of PBRs, and the piloting of LBSAPs have created a powerful model for bottom-up biodiversity planning. Biodiversity is no longer seen as a forest department mandate alone, but as a cross-sectoral responsibility of panchayats, schools, cooperatives, and civil society for local sustainable and equitable development.

3. Linking Conservation with Livelihoods and Economy From Landscapes to Livelihood Security

The Board's work has emphasised that biodiversity can be a driver of green livelihoods and economic empowerment. Initiatives like stingless beekeeping for tribal farmers, sustainable mushroom cultivation, mangrove-based employment models, and inland fish stock enhancement show how ecosystem services can be regenerated while enhancing income security. ABS mechanisms though still evolving in the state will have direct economic returns to local communities who are the stewards of local biodiversity. This shift from conservation to sustainable use is central to KSBB's paradigm of landscape-to-livelihood integration.

4. Biodiversity as a Foundation for Climate and Disaster Resilience: Embedding Biodiversity in DRR and Adaptation

Kerala's vulnerability to floods, landslides, droughts, pests and diseases of crops and breeds and zoonotic outbreaks has underscored the need to embed biodiversity into climate adaptation and disaster risk reduction (DRR) strategies. KSBB's initiatives like riparian vegetation restoration, agrobiodiversity conservation, ghost net removal, wetland protection, and marine biodiversity registers demonstrate how ecosystem-based approaches can restore degraded habitats and enhance resilience. Integrating biodiversity into DRR and climate planning is now recognised as essential for safeguarding lives, livelihoods, and landscapes.

5. Integration with Food, Health, and Nutrition Security: Reviving Traditions for Nutrition Security

KSBB's learning highlights that biodiversity must be positioned within the larger climate–food–health–nutrition nexus. Projects supporting agrobiodiversity conservation, revival of traditional food systems, and use of wild edibles and medicinal plants illustrate the role of biodiversity in ensuring dietary diversity, disease prevention, and cultural continuity. KSBB's focused efforts on recognizing and rewarding Genome Saviours of the state and biocultural mapping efforts point to the untapped potential of Kerala's local food systems in addressing SDG goals related to zero hunger and good health.

6. Harnessing Traditional Knowledge and Bio-Innovation: Traditional Wisdom as an Engine for Discovery

Kerala's biocultural heritage, including traditional medicine, agriculture, and ecological knowledge, is an asset for sustainable development. KSBB has launched dedicated platforms like the Kerala Traditional Knowledge Digital Library and supported the documentation of ethnobotanical wisdom through PBRs and exhibitions. These efforts not only prevent biopiracy but also open avenues for bio-innovation, responsible research, and knowledge-based entrepreneurship rooted in indigenous wisdom.

7. From Awareness to Action: Youth Engagement Beyond Awareness

Two decades of our engagement with students and youth have shown that biodiversity education must go beyond awareness to action. The Student's Biodiversity Congress, school biodiversity clubs, and the new "Every Child a Scientist and Artist" program have transformed thousands of young learners into biodiversity stewards. KSBB's fellowship and internship programs are nurturing a generation of ecologically literate citizens, researchers, and policy influencers capable of carrying forward Kerala's biodiversity mission.

8. She-Bio and Inclusive Governance: Gender Equity in Biodiversity Custodianship

We have recognised that women, particularly in rural and tribal communities, are key custodians of biodiversity. The She-Bio initiative and involvement of women's groups in herbal nurseries, wild food collection, and conservation-linked enterprises reflect the importance of adopting a gender-responsive approach. Ensuring equity and representation in biodiversity governance is now integral to the Board's programming ethos.

9. Science, Tech, and Policy Convergence: Building Credible Knowledge Infrastructure

One of the clearest learnings is that future biodiversity action must be data-driven, inclusive, and intergenerational. Platforms like the Kerala Biodiversity Information Repository (KBIR), Kerala TKDL, gender-responsive initiatives like She-Bio, and youth-oriented programs such as Every Child a Scientist and Artist will have to be worked upon with dedicated resource support. By investing in these enablers, Kerala can turn its ecological vulnerabilities into opportunities for green leadership.

10. From Silos to Synergy: Integrated, Multi-Sectoral Biodiversity Futures

An all sector learning is the need to overcome fragmentation between sectors, scales, and stakeholders. Biodiversity cannot be managed in silos. It must be integrated into education, agriculture, health, tourism, industry, and urban development. Equally, financing biodiversity requires tapping into multiple sources ABS, CSR, public funds, and international grants. The move from conservation as a stand-alone goal to a strategic enabler of resilient development marks the essence of KSBB's third-decade vision.

II. Way Forward: Towards a Biodiverse-friendly Kerala

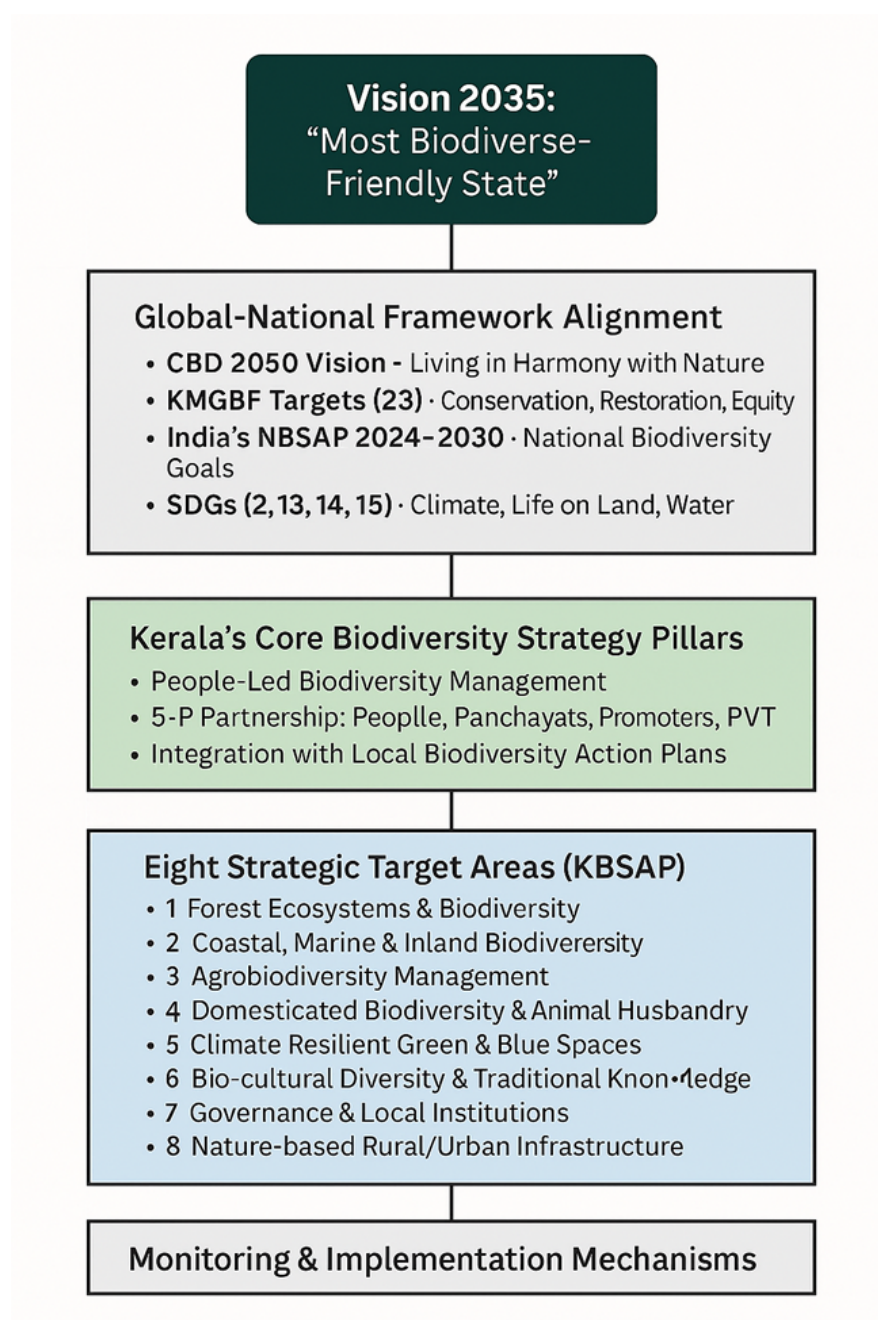
Building on two decades of pioneering work in biodiversity documentation, decentralised governance, and community stewardship, Kerala now sets its sights on a transformative future to become the “Most Biodiverse-Friendly State in India” by 2035. The updated Kerala State Biodiversity Strategy and Action Plan (K-SBSAP) 2025–2035 reflects this ambition as a natural evolution of long-standing institutional, ecological, and social investments.

Anchored in the Convention on Biological Diversity's 2050 Vision of Living in Harmony with Nature and guided by the Kunming–Montreal Global Biodiversity Framework (KMGBF) and India's NBSAP 2024–2030, the plan transitions Kerala from a knowledge-rich state to a systemic model of people-led, equity-driven biodiversity governance. It harnesses robust local institutions, traditional ecological knowledge, and cutting-edge digital tools to drive conservation, restoration, and sustainable use across landscapes, cultures, and generations.

The Key pillars are:

- Participatory governance through empowered Biodiversity Management Committees (BMCs) and Local Biodiversity Strategy and Action Plans (LBSAPs)
- Integration of biodiversity into all sectors, from agriculture to infrastructure, with a focus on spatial planning and nature-based solutions
- Gender-responsive implementation via the She-Bio Strategy, placing women at the core of ecosystem stewardship
- 5-P Partnership Model: Mobilising People, Panchayats, Promoters, Private/Public sectors, and Policymakers for systemic change
- Global alignment and collaboration with platforms like CBD, IPBES, IUCN, and UNEP

Vision 2035 is not just a conservation blueprint—it is a social-ecological transformation agenda rooted in inclusivity, resilience, and ecological integrity, positioning Kerala as a national model for biodiversity-responsive development.







Annexures

1. Audit Report
2. Chronology of Key Events (2005–2024)
3. Biodiversity Financing for Vision 2035
4. Resource Mobilisation Strategy 2025–2030
5. Details of the Board Members
6. Details of Technical Support Group Members to the Board
7. Details of Staff

Kerala State Biodiversity Board

(A Government of Kerala Undertaking)

Kowdiar Thiruvananthapuram Kerala

Statement of Affairs as at 31/03/2025

Particulars	Note	As at 31 Mar	
		2025	2024
I Source of Funds		63,71,272	72,03,527
1 Own Funds			
Capital Reserve	1	107	105
Surplus	2	46,74,945	3,79,791
2 Current liabilities		16,96,220	68,23,631
Government Grant balances	3	(63,82,839)	(1,25,909)
Funded Projects	4	55,11,852	48,23,611
Other current liabilities	5	25,67,207	21,25,929
II Application of Funds		63,71,272	72,03,527
1 Long Term Assets		11,91,270	37,105
Fixed Assets		107	105
Tangible Assets	6	107	105
Work in Progress		11,54,163	
Long Term Investments			
Long Terms Loans and Advances		37,000	37,000
Deposits	7	37,000	37,000
2 Current Assets		51,80,002	71,66,422
Prepaid Expenses		0	6,334
Cash and cash equivalents	8	41,73,519	70,51,588
Short-term loans and advances	9	10,06,483	1,08,500

The accompanying Notes form an integral part of these Financial Statements

As per our Report of even date

For and on behalf of the Board



K.M.S. MOHAMMED & CO.
CHARTERED ACCOUNTANTS

P.S. MOHAMMED RAMEES
(Partner)

M. NO. 245768

Finance officer

Administrative officer

Member Secretary

SLJU JACOB
(Additional Secretary to Government)
O/D as Administrative Officer
Kerala State Biodiversity Board
Kowdiar, Thiruvananthapuram

V. Balakrishnan
Member Secretary
Kerala State Biodiversity Board
Kowdiar, Thiruvananthapuram



Kerala State Biodiversity Board

(A Government of Kerala Undertaking)

Kowdiar Thiruvananthapuram Kerala

Income and Expenditure Account for the year ended 31/03/2025

Particulars	Note	for the year ended 31 Mar	
		2025	2024
I Income		1,35,13,615	1,11,36,160
1 Grant from GoK			
GoK 2406-02-110-59-31 (NP) Salary		88,93,667	95,49,241
GoK 2406-02-110-59-36 (NP) Non Salary		8,50,841	8,21,460
2 Other Income	10	37,47,850	7,51,859
3 Nominal value of grant funded assets		-	-
4 Interest Received	11	21,257	13,600
II Expenditure		92,18,460	1,06,46,843
Employee Expenses	12	83,54,103	97,25,393
Repairs and Maintenance, Upkeep	13	34,257	82,297
Utilities	14	2,08,181	2,62,864
Other Expenses	15	6,21,359	5,75,315
Finance Costs	16	560	974
Exceptional Items - Prior period Items (net)	17	-	-
III Surplus/ Deficit		42,95,154	4,89,317
IV Allocation		42,95,154	4,89,317
Transfer to Accumulated surplus/deficit		42,95,154	4,89,317

The accompanying Notes form an integral part of these Financial Statements

As per our Report of even date

For and on behalf of the Board



K.M.S. MOHAMMED & CO.
CHARTERED ACCOUNTANTS

P.S. MOHAMMED RAMEES
(Partner)

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Kowdiar, Thiruvananthapuram

Member Secretary
Dr. V. Balakrishnan
Kerala State Biodiversity Board
Kowdiar, Thiruvananthapuram



Kerala State Biodiversity Board

(A Government of Kerala Undertaking)

Kowdiar, Thiruvananthapuram

Statement of Cash Flows for year ended 31 March 2025

Particulars	for the year ended 31 Mar	
	2025	2024
1 Cash Flow from Operations	-17,23,904	-1,00,47,435
Capital Reserve	2	8
Surplus/ Deficit as per Statement of I&E	42,95,154	4,89,317
Add/ Deduct Non Cash Items	-	-
Movement in Working Capital	-	-
Government Grant	-62,56,930	-1,12,73,556
Funded Projects	6,88,241	2,06,874
Prepaid Expenses	6,334	-6,334
Other current liabilities	4,41,278	4,88,756
Short-term loans and advances	-8,97,983	47,500
2 Cash Flow from Financing Activity	-	-
Share Capital	-	-
Interest paid	-	-
3 Cash Flow from Investing Activity	-11,54,165	-8
Fixed Assets	-	-
Tangible assets	-11,54,165	-8
Work in progress	-	-
4 Round Off	-	-
Net Increase in Cash and Cash Equivalents	-28,78,069	-1,00,47,443
Opening Balance of Cash and Cash Equivalents	70,51,588	1,70,99,031
Closing Balance of Cash and Cash Equivalents	41,73,519	70,51,588

Figures indicate net cash flows (inflow less outflow). Negative figures indicate outflow of cash
The accompanying Notes form an integral part of these Financial Statements

As per our Report of even date

For and on behalf of the Board



K.M.S. MOHAMMED & CO.
CHARTERED ACCOUNTANTS

[Signature]
P.S. MOHAMMED RAMEES
(Partner)

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[Signature]
Finance officer
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[Signature]
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Member Secretary
Kerala State Biodiversity Board
Kowdiar, Thiruvananthapuram

Thiruvananthapuram



Kerala State Biodiversity Board
Kowdiar Thiruvananthapuram Kerala
Annexures to Accounts for the year ended 31/03/2025
Annexure 1 - Grant Accounts

Particulars	As at 01-04-24	Grants	Receipt		Transfer		Payment		As at 31-03-25		
			Oth ers	Reallotted Resumed fund	Trf of balance	Trf (InterHead)	Utilized Revenue	Utilized Assets	unutilized grant refunded	Total	
Total	-1,25,909	7,61,37,000	-	1,48,78,188	9,10,15,188	-1,15,00,000	-6,33,07,040	-38,030	-2,92,39,048	-9,24,15,273	-63,82,839
1	1,39,45,188	5,75,00,000	-	-	5,75,00,000	-	-5,28,92,677	-38,030	-5,22,153	-5,34,52,860	64,92,328
Non-moving prior balances	4,15,495		-	-	-	-		-	-	-	4,15,495
unidentified project balance	2,55,355		-	-	-	-				-	2,55,355
Agrobiodiversity conservation	9,305		-	-	-	-				-	9,305
Coastline conservation	65,600		-	-	-	-				-	65,600
unidentified credits	-										
19-03-15	14,300		-	-	-	-				-	14,300
25-03-15	7,162		-	-	-	-				-	7,162
15-06-15	36,025		-	-	-	-				-	36,025
interest accrued	27,748		-	-	-	-				-	27,748
GoK Plan 2018 - 2019	-14,78,697		-	-	-	-				-	-14,78,697
GoK Plan 2019 - 2020	-13,71,496		-	-	-	-				-	-13,71,496
GoK Plan 2020 - 2021	1,53,39,902		-	-	-	-25,00,000				-	1,28,39,902
GoK Plan 2021-2022	27,14,250		-	-	-	-25,00,000				-	2,14,250
GoK plan 2022-23	25,00,338		-	-	-	-40,00,000				-	338
GoK plan 2023-24	40,09,112.00		-	-	-	-				-9,112	-9,112
1.2 Strengthening of BMCConducting Awareness and Tra											
Biodiversity Awareness Training and Education											-36,98,887
Biodiversity Fellowships-Doctoral Fellowships											-11,30,479
Capacity Building for Impl of The Biological Diversity (Amend) Act 2023											-14,95,898
Development of Propagation Method on Sol Reparian P											-11,167
Ecological Impact and Value Addition Assesume											-46,64,478
Ecological Restoration and Agro Diversity Vellayni											-19,33,000
Empowering Custodian Farmers for Agro Biodiversity											-25,00,000
GOK Plan 24 - 25	3,65,00,000.00				3,65,00,000						-4,000
Kerala State Bio Diversity Conservation Awards											-79,615
Kerala Traditional Knowledge Digital Library											-14,989
Local Agro Biodiversity Heritage Syst for Kera Docu A											-5,91,000
Marine Bio Diver and Associate Know Reg for Costal											-6,00,000
Monito of Marine Ecosstem Identif and Removal of Ghos											-10,00,000
State Bio Diversity Fund 2025											-50,00,000
Plan Infrastructural Fac. & Operational Cost											-68,31,226
Plan Kerala Biodiversity Museum											-20,08,619
Preparation of local Bio Divers Strt Act Plan LISAP											-28,00,000
Restoration of Degraded Ecosystem BMC											-10,00,000
Wild EdibleLeafy Garden in Schools: A Food Security											-2,14,000
Elims 2022 - 23	3,01,032.00				-						-3,01,032
Elims 2023 - 24	-36,01,651				2,10,00,000						-1,73,53,349
Elims resumed by government	-48,83,097										-
2	-1,81,32,367	75,00,000	-	1,48,65,686	2,23,65,686	1,00,00,000	-5,01,010	-	-2,67,85,041	-2,72,86,051	-1,30,52,732
State Biodiversity Fund											
2011 - 2012 to 2013 -2014	3,10,300		-	-	-	-					3,10,300
2014 - 2015	5,01,188		-	-	-	-					5,01,188
2015-2016	5,04,265		-	-	-	-					5,04,265
2016-2017	4,83,558		-	-	-	-					4,83,558
2017-2018	3,61,256		-	-	-	-					3,61,256



Kerala State Biodiversity Board
Kowdiar Thiruvananthapuram Kerala
Annexures to Accounts for the year ended 31/03/2025
Annexure 2 - Funded Projects

	Particulars	As at 01-04-24	Receipt			Transfer			Payment			As at 31-03-25		
			Funds	Interest	Refund	Others	Total	Trf	Trf	Utilised	Assets	Refund	Others	Total
1	Total	48,23,611	27,85,774	22,135	30,658	-	28,38,567	-	-	21,50,326	-	-	-	21,50,326
1	DoECC	27,20,000	-	-	-	-	-	-	-	-	-	-	-	-
	Canal Works 2015 - 2016	25,00,000	-	-	-	-	-	-	-	-	-	-	-	-
	Gramanayam 2013 - 2014	2,20,000	-	-	-	-	-	-	-	-	-	-	-	-
2	UNDP	7,74,251	-	22,135	-	-	22,135	-	-	-	-	-	-	-
	GEF Munnar Landscape Project 2014 - 2015	-71,107	-	-	-	-	-	-	-	-	-	-	-	-
	GEF Munnar Landscape Project 2015 - 2016	2,23,952	-	-	-	-	-	-	-	-	-	-	-	-
	GEF Munnar Landscape Project 2018 - 2019	-4,10,863	-	-	-	-	-	-	-	-	-	-	-	-
	GEF Munnar Landscape Project 2019 - 2020	7,99,920	-	-	-	-	-	-	-	-	-	-	-	-
	Updating State Biodiversity Strategies & Action Plan 2021-2022	-7,256	-	-	-	-	-	-	-	-	-	-	-	-
	Interest Received	2,39,605	-	22,135	-	-	22,135	-	-	21,49,264	-	-	-	21,49,264
3	National Biodiversity Authority (NBA)	12,11,318	25,85,774	-	30,658	-	26,16,432	-	-	-	-	-	-	-
	Peer to Peer Learning (14-15)	-250	-	-	-	-	-	-	-	-	-	-	-	-
	Plan Fund from NBA	14,04,919	-	-	-	-	-	-	-	-	-	-	-	-
	Printing of BMC Reports (14-15)	4,242	-	-	-	-	-	-	-	-	-	-	-	-
	Benefit Sharing Component to Concerned BMC	7,269	-	-	-	-	-	-	-	-	-	-	-	-
	NBA - Capacity Building	1,183	-	-	-	-	-	-	-	-	-	-	-	-
	NBA Fund (COP 11 engagement) 2018-19	-11,49,600	-	-	-	-	-	-	-	-	-	-	-	-
	NBA Fund (COP 11 engagement)-2020-21	57,344	-	-	-	-	-	-	-	-	-	-	-	-
	NBA - EPBR	-	8,00,000	-	-	-	8,00,000	-	-	-	-	-	-	-
	NBA Panacea 2024	75,000	-	-	-	-	-	-	-	75,000	-	-	-	-
	NBA Peer to Peer Learning	4,40,000	-	-	-	-	-	-	-	1,31,152	-	-	-	1,31,152
	NBA Outsourcing/contract Personal of BB 2023-24	2,44,901	-	-	-	-	-	-	-	2,44,901	-	-	-	2,44,901
	NBA -Updation Quality Improvement of PBR	3,335	-	-	-	-	-	-	-	3,335	-	-	-	3,335
	International Biodiversity Day	3,511	-	-	-	-	-	-	-	-	-	-	-	-
	International Day of Biodiversity 2023	-19,898	19,898	-	-	-	19,898	-	-	-	-	-	-	-
	International Day of Biodiversity 2024	-	2,50,000	28,630	-	-	2,78,630	-	-	3,22,820	-	-	-	3,22,820
	International day of Yoga	-	4,363	-	-	-	4,363	-	-	4,363	-	-	-	4,363
	NBA World Environment Day	-	50,000	2,028	-	-	52,028	-	-	49,000	-	-	-	48,000
	Biodiversity Award	-18,000	-	-	-	-	-	-	-	-	-	-	-	-
	State level workshop on biodiversity action plan	-73,894	11,513	-	-	-	11,513	-	-	-	-	-	-	-
	Interest received	2,30,768	-	-	-	-	-	-	-	-	-	-	-	-
	Grand in aid outsourcing /contract personal 2022-	-320	-	-	-	-	-	-	-	-	-	-	-	-
	Grand in aid outsourcing /contract personal 2024-	-	14,50,000	-	-	-	14,50,000	-	-	12,91,869	-	-	-	12,91,869
	Information Day for biological diversity 2022	-	-	-	-	-	-	-	-	-	-	-	-	-
	NBA Travel Expense Recoverable	-	-	-	-	-	-	-	-	-	-	-	-	-
	NBA Project strengthening and capacity programm	808	-	-	-	-	-	-	-	27,824	-	-	-	27,824
4	Coastal Ecosystem Conservation 2011 - 2012	43,215	-	-	-	-	-	-	-	-	-	-	-	-
		43,215	-	-	-	-	-	-	-	-	-	-	-	-
5	Plan Fund EMA	31,907	-	-	-	-	-	-	-	-	-	-	-	-
		31,907	-	-	-	-	-	-	-	-	-	-	-	-



Kerala State Biodiversity Board
Kowdiar Thiruvananthapuram Kerala
Annexures to Accounts for the year ended 31/03/2025
Annexure 2 - Funded Projects

	Particulars	As at 01-04-24	Receipt				Transfer		Payment			As at 31-03-25		
			Funds	Interest	Refund	Others	Total	Trf	Trf	Utilised	Assets		Refund	Others
6	MoEF	1	23,631	-	-	-	-	-	-	-	-	-	-	23,631
	WGEEP		23,631											23,631
7	National Medicinal Plants Board (NMPB)	1	1,02,239	-	-	-	-	-	-	1,062	-	-	1,062	1,01,177
	NMPB 2014 - 2015		-9,05,343											-9,05,343
	NMPB 2018 -2019		-1,19,148											-1,19,148
	Resource Augmentation, Sustainable Harvesting and Value addition of medicinal plant resources		11,26,730							1,062			1,062	11,25,668
8	National Centre for Sustainable Coastal Mfr (NCSM)	1	-	-	-	-	-	-	-	-	-	-	-	-
	Preparation of DPR for Conservation of Sacred		-											-
9	PCC 2020-21	1	-82,950	-	-	-	-	-	-	-	-	-	-	-82,950
	Project Coordination Cell		-82,950											-82,950
10	Donation													
	Donation from Nabard	1	2,00,000	-	-	-	2,00,000	-	-	-	-	-	-	2,00,000



Annexure I: Chronology of Key Events (2005–2025)

Foundation Years (2005–2012): Establishing the Biodiversity Architecture

- 2005: Establishment of KSBB
- 2007: Formation of Biodiversity Management Committees (BMCs) across Kerala
- 2008: Notification of the Kerala Biological Diversity Rules
- 2010: Completion of the first wave of People's Biodiversity Registers (PBRs)
- 2010: Kerala Biodiversity Board releases Kerala Organic Farming Policy draft
- 2012: Creation of the Kerala Biodiversity Fund (KBF) framework

Institutional Consolidation and Knowledge Expansion (2013–2018)

- 2014: KSBB participates in CBD COP dialogues
- 2015: Launch of Statewide Biodiversity Awareness Campaigns
- 2016: Initiation of Sacred Groves Restoration & Documentation Programme
- 2017: Biodiversity mainstreaming integrated into the 13th Five-Year Plan
- 2018: Notification of the State Biodiversity Steering Committee (G.O. 60/2018/Envnt)

Strategic Shift and Global Alignment (2019–2022)

- 2019: Model BMC initiative launched—pilot projects in 75 LSGs
- 2020: Kerala Biodiversity Fund operationalised (G.O. Rt.. No. 7/2020/Envnt)
- 2021: Kerala Climate Action Plan updated with biodiversity references
- 2022: Tradable Bio-resources study, estimating ₹3 to 3.5 crores annual potential
- 2022: KSBB-led inventory of RED List species across forested landscapes
-

KBSAP 2025–2035 Formulation and Stakeholder Convergence (2023–2024)

- 2023: Amendment of the Biological Diversity Act, strengthening ABS & TK safeguards
- 2023: Drafting of Local Biodiversity Strategy & Action Plans (LBSAPs) in 100 LSGs
- 2024: Launch of She-Bio Cell and expansion of gender-responsive strategies
- 2024: Integration of biodiversity indicators with the State Planning Board's dashboard
- 2025: Finalisation of KBSAP 2025–2035 aligned with KMGBF and NBSAP 2024–2030



Annexure II: Biodiversity Financing for Vision 2035

Kerala's aspiration to become the “Most Biodiverse-Friendly State in India” by 2035 is grounded in two decades of pioneering efforts—biodiversity documentation, decentralised governance, and community stewardship. As the state transitions into its next phase of systemic, people-led action under the updated Kerala State Biodiversity Strategy and Action Plan (K-SBSAP) 2025–2035, sustained and innovative financing becomes critical.

To enable this transformation, the K-SBSAP proposes a total investment of plus or minus ₹200crore over ten years. This figure corresponds to Kerala's scale of ambition—covering eight strategic target areas, 80 action targets, and embedded linkages to 23 global KMGBF Targets, the CBD Vision 2050, and India's NBSAP 2024–2030.

Strategic Financing Approach will include:

- **Statutory Instruments:** Mobilising resources through the Kerala Biodiversity Fund (KBF), Local Biodiversity Funds (LBFs), and statutory benefit-sharing mechanisms defined under the Biological Diversity (Amendment) Act, 2023
- **Incentive-Based Mechanisms:** Leveraging ABS-linked revenue, CSR/CER contributions, green procurement, Payments for Ecosystem Services (PES), and community eco-certification systems
- **Innovative Financial Streams:** Exploring carbon finance, biodiversity bonds, and strategic partnerships with global platforms like CBD, UNEP, IPBES, and the International Partnership forSatoyama Initiative

This blended model ensures that Kerala's biodiversity efforts are not only ecologically impactful and socially inclusivebut also financially resilient and future-ready.



Annexure III: Resource Mobilisation Strategy 2025–2030

As the KSBB enters its third decade of service, it is poised to embark on a bold and structured transition from a grant-dependent funding model to a mission-aligned, opportunity-driven resource mobilisation strategy. This shift is guided by the establishment of a dedicated Fundraising Committee and a two-year action plan commencing July 2025, aiming to unlock and channel new forms of biodiversity finance at scale.

KSBB's new financial architecture aligns closely with national and international guidance on biodiversity finance, as well as the strategic recommendations detailed in the SBSAP and FNA. Key initiatives include:

1. Institutional Strengthening and Community Outreach

- Scaling up training for BMCs and activating citizen science networks
- Expanding the Jaivajalakam2.0, a next-generation biodiversity literacy movement
- Address knowledge gaps through targeted R&D on Kerala's ecosystems, echoing the attached document's emphasis on ecosystem documentation

2. Flagship Proposals and Programmatic Expansion

- Developing large-scale, fundable proposals focused on inland and marine biodiversity, and Biodiversity Heritage Sites, including sacred groves
- Taking efforts to align proposal pipelines with funders' thematic priorities (e.g., restoration, agroecology, species recovery)

3. Inclusion and Innovation Platforms

- Promoting the She-Bio Cell and convening the 2025 Agro-Biodiversity Policy Dialogue, fostering intersectional collaboration

- Exploring performance-linked fellowships in the biodiversity–food–climate–health nexus, reflecting cross-sectoral synergies highlighted in the document

4. Global Partnerships and Advisory Services

- Formalising partnerships with platforms like IPSI, ICLEI, IUCN, and SDSN
- Offering policy-based consultancies such as the City Biodiversity Index, carbon credit advisory, and ecosystem service mapping

5. Revenue Activation and Private Sector Engagement

- Scaling up ABS agreements, following the successful Kani tribe–TBGRI model
- Establishing and strengthening Local Biodiversity Funds via revised user fees, eco-tourism levies, and royalty income
- Tapping into CSR/CER financing, green bonds, and performance bonds, as outlined in the attached strategy

6. Earmarked Funding and Trust Structures

- Exploring earmarking portions of revenues from sectors like tourism, mining, and hydropower to a dedicated Biodiversity Fund
- Establishing Local Trust Funds for Protected Areas, leveraging entry fees and conservation cess models, inspired by the Sikkim framework

KSBB's evolving approach integrates global good practices such as those identified by OECD, NBA, and BIOFIN with Kerala's unique biocultural and economic contexts. By combining fiscal reforms, institutional development, multi-source financing, and inclusive community engagement, the Board is set to transform biodiversity conservation into a resilient and scalable movement for the decade ahead.

Annexure IV

Details of Board members

SL.No	Name and Designation	Post
1.	Chairman Dr. Rathan U Kelkar, IAS * (In Charge) Dr. N Anil Kumar # *From 23.02.2021 to 22.02.2024, #23.09.2024 to 31.03.2025	
2.	The Executive Vice President Kerala State Council for Science, Technology and Environment, Sasthra Bhavan, Pattom, Thiruvananthapuram	Ex-officio Members
3.	The Principal Secretary to Government, Forest and Wildlife Department, Government Secretariat Thiruvananthapuram	"
4.	Additional Chief Secretary to Government Fisheries Department, Government Secretariat, Thiruvananthapuram	"
5.	The Additional Chief Secretary to Government Environment Department, Government Secretariat Thiruvananthapuram	"
6.	The Agriculture Production Commissioner Government Secretariat, Thiruvananthapuram	"
7.	Dr. K. Satheeshkumar, Principal Scientist & Head (Retd.) Biotechnology, JNTBGRI, Palode	Non-official Members
8.	Sri. K.V. Govindan, Member, D.P.C. Kannur Madhavi Nilayam, Chuzhali P.O., Kannur	"
9.	Dr. T.S. Swapna, Associate Professor Department of Botany, University of Kerala, Karyavattom Campus, Thiruvananthapuram	"
10.	Dr. K.T. Chandramohanan, Department of Botany Govt. Brennan College, Thalassery, Kannur	"
11.	Dr. Pramod G Krishnan IFS Additional Chief Conservator of Forests, Vanalakshmi Forest Headquarters, Vazhuthacaud, Thiruvananthapuram	"
New Board constituted as per Order No.G.O.(Ms).No.3/2024/ENV dt.26.10.2024		
12.	Dr. R.V.Varma, Former Director, Kerala Forest Research Institute(KFRI)	Non-official Members
13.	Prof.(Dr.)S.D.Biju, Professor, Department of Environmental Studies, Delhi University	"
14.	Dr. Santhoshkumar A.V, Professor & Head, Forest Biology and Tree Improvement, College of Forestry, Kerala Agricultural University, Vellanikkara, Thrissur	"
15.	Dr. Minimol J S, Professor & Head(Plant Breeding & Genetics), Cocoa Research Centre, Kerala Agricultural University, Vellanikkara	"
16.	Dr. Pramod G Krishnan, IFS, Additional Principal Chief Conservator of Forests, Kerala Forest Department	"
17.	Dr. V. Balakrishnan	Member Secretary

Details of the Board Meetings conducted during 2024-25

- 62nd Board meeting held on 17.04.2024 , 63rd Board meeting held on 29.08.2024, 64th Board meeting held on 30.11.2024 and 65th Board meeting held on 20.03.2025

Annexure V

Details of Technical Support Group Members to the Board TRIVANDRUM

SLNo.	Name, Designation	Area of Expertise
1	Prof. A. Biju Kumar Head, Dept. of Aquatic Biology and Fisheries University of Kerala	Taxonomy, Aquatic ecology and fisheries
2	Prof. Dr. Shiburaj. S Professor Department of Botany, University of Kerala	Molecular Microbiology
3	Prof. E. Kunhikrishnan Associate Professor (Rtd.), Dept. of Zoology, University College, Thiruvananthapuram	Faunal diversity/Zoology
4	Prof. Sabu Joseph Professor Dept. of Environmental Sciences University of Kerala	Biogeochemistry, Hydrogeochemistry, Environmental Geology
5	Sri.Nizammudin. A Land Use Commissioner Dept. Of Planning & Economic Affairs Govt. of Kerala, Trivandrum	Geology/land use
6	Dr. Sindhu Thulaseedharan HoD, Dept of Law, Kariavattom Campus University of Kerala	Environmental Law
7	Dr. Dinesan Cheruvat IAS Director, LSGD (Rural)	Fisheries, Aquatic, Biology
8	Dr. E.S. Santhoshkumar Technical Officer, JNTBGRI, Palode	Taxonomist -Riverine diversity/ floral diversity
9	Dr. Asha. V.G Assistant Professor, Dept of Zoology, MG College Thiruvananthapuram	Faunal diversity/Zoology
10	Dr. Preetha. T. S Assistant Professor Department of Botany, University of Kerala	Botany/ Conservation Biotechnology

KOLLAM

11	Adv. Jaya Kamalasanan Advocate Kala Bhavan, Mathilil, Perinad P O, Kollam	Environmental Law
12	Dr. Kiranraj M. S Associate Professor Department of Botany, SN College, Kollam	Botany& Grass Systematics
13	Dr. Madhusoodanan Pillai. G Executive Director- Sredha Scientific Charitable Society	Biology, Ecology, Climate change & Microbiology
14	Dr. Mathew K. Joseph Associate Professor & Head (Rtd.) Department of Geology, SN College, Varkala	Geology

15	Sri. Ramanujan Thambi. K. V Dist. Soil Conservation Officer (Rtd.) Chandrikapadmam, Kunnathoor P O, Kollam	Watershed Expert
16	Dr. Sabu. T Technical Officer JNTBGRI, Palode, Thiruvananthapuram	Conservation & Taxonomy
17	Dr. Sulekha. B. T Assistant Professor & Head Research Department of Zoology SN College, Kollam	Zoology/ Toxicology
18	Dr. Ambili. S Assistant Professor Department of Biochemistry, SN College, Kollam	Biochemistry/Environmental Science
19	Dr. Hari. B Associate Professor Department of Zoology, SN College, Kollam	Zoology
20	Dr. Vilash. V Assistant Professor Department of Botany, SN College, Kollam	Botany/ Pharmacology
21	Dr. Bobby. T. Edwin Assistant Professor Department of Botany KM College of Arts and Science, Kollam	Botany
22	Dr. Shaiju. P.N Assistant Professor of Botany Fatima Matha National College, Kollam	Botany, Biodiversity
23	Dr. Shibu P. Varghese Assistant Professor, Department of Botany St. Stephen's College, Pathanapuram	Botany (Mycology)
24	Dr. Sreeja. V Assistant Professor Department of Zoology MMNSS College Kottiyam, Kollam	Aquatic Biology

ALAPPUZHA

25	Dr. Jose Mathew Assistant Prof. in Botany SD College, Alappuzha	Taxonomy, Plant diversity
26	Sri. Sandeep Unnikrishnan Block Project Coordinator in BRC Alappuzha (General Education Dept.)	Environmentalism, Bird watcher, wild life photographer
27	Dr. G. Nagendra Prabhu Assistant Prof. in Zoology SD College, Alappuzha	Zoology, Bio Technology, Invasive species
28	Dr. K.G. Padmakumar Spl. Officer & Director, International Research and Training Centre Below Sea level Farming (IRTCBSF) Kuttanad	Farming and Agriculture

- | | | |
|----|--|--------------------------------------|
| 29 | Dr. Sary. P. S
Senior Research Fellow, Central Marine Fisheries
Research Institute (CMFRI), Ernakulam | Fish Taxonomy and Diversity |
| 30 | Adv. Jibin Thomas
Kariyampuram House, Thekkekkara PO, Kuttanadu | Environmental Law |
| 31 | Dr. Prakash Williams
Asst. Prof. of Biotechnology
Dept. of Botany & Biotechnology | Microbiology Marine Microbes |
| 32 | Dr. Mini. V
Assistant Professor
Onattukara Regional Agricultural Research Station
Kayamkulam | Soil Science |
| 33 | Sri. Asok Kumar
Geologist and Geophysicist in Kerala State Ground Water
Department (Rtd.) | Geophysist (Rtd) |
| 34 | Dr. A.P. Sreekumar
(Rtd. DMO, Indian Systems of Medicine)
Vydyamadom, Chengannur PO, Alappuzha | Ayurveda Medine/
Medicinal plants |

PATHANAMTHITTA

- | | | |
|----|---|---|
| 35 | Dr. Christin Pothan Robert
Senior Scientist and Head, ICAR-Krishi Vigyan
Kendra, CARD, Thelliyoar, Kolabhagam
Pathanamthitta | Plant Pathology |
| 36 | Dr. Thomas. V.P
Assistant Professor & Research Guide, Research and
Postgraduate Department of Botany, Catholicate College
Makkamkunnu, Pathanamthitta | Applied Botany, Systematics,
Ecology |
| 37 | Dr. R. Jithesh Krishnan
Assistant Professor & Research Guide
Department of Botany, NSS College, Pandalam | Fresh water Phytoplankton,
Environmental Biology,
Microbiology, Phytochemistry,
Pharmacology, Taxonomy |
| 38 | Dr. M.G. Sanal Kumar
Associate Professor & Research Guide
Department Zoology, NSS College, Pandalam | Zoology, Biodiversity
Conservation, Soil Biology,
Biomonitoring, Environmental
Science, Microbiology |
| 39 | Dr. Robi. A. J
Assistant Professor & Research Guide
Post Graduate Department of Botany, B.A.M. College
Thiruvalla | Plant Taxonomy |
| 40 | Dr. Anju V Jalaj
Assistant Professor, P.G. & Research Department of
Botany, St. Thomas College Kozhencherry | Plant diversity Studies
(Morphological and
molecular characterization),
Phytochemistry, Cytology |
| 41 | Dr. Abhilash. R
Assistant Professor and Research Guide, Post Graduate
Department Zoology, Christian College, Chengannur
Alappuzha | Environmental Science,
Biodiversity Conservation
(Birds, Butterflies, Fishes) |

- | | | |
|----|---|---|
| 42 | Dr. Raju Thomas. K
Assistant Professor & Research Guide Research and Postgraduate Department of Zoology, Marthoma College, Thiruvalla, Pathanamthitta | Systematics, Fish and Fisheries, Biodiversity |
| 43 | Smt. Athira. S
Resource Person, Haritha Kerala Mission Pathanamthitta | Geology |
| 44 | Adv. Vishak K Johnson
High Court Lawyer
Kakkurumpil House, Velliyar, Ayroor, Ranni | Environmental Law |

KOTTAYAM

- | | | |
|----|--|---|
| 45 | Dr. Jomy Augustine (Rtd.)
Head of the Department, Dept. of Botany
St. Thomas College, Arunapuram, Pala | Floral biodiversity |
| 46 | Dr. N. Unnikrishnan
HOD, Dept. of Biotechnology, CMS College
Kottayam & Secretary, Kottayam Nature Society | Botany, Biotechnology |
| 47 | Dr. Biju George
Assistant Professor, Dept. of Botany, S B College
Changanassery | Botany, Taxonomy |
| 48 | Smt. Sreelatha. M
Project Co-ordinator, Fisheries Department,
Kottayam | Fisheries dept |
| 49 | Adv. Jani Bava
Judicial First Class Magistrate Court, Changanassery | Environmental Law |
| 50 | Dr. Prasanth Narayanan. S
Research Associate, Advanced Centre of Environmental
Studies and Sustainable Development, Kottayam | Earthworm taxonomy,
Ornithology |
| 51 | Dr. Syllas. V. P.
Assistant Professor, School of Environmental sciences
Mahathma Gandhi University, Kottayam | Wetlands ecology, Invasive
plants, Water pollution |
| 52 | Smt. Manju Mary Cherian
Teacher, Mary Matha Public School
Edakkunnam & Member of TIES
Travancore Nature society & Aranyakam nature Society | Identify Birds, Butterfly &
Dragonfly |
| 53 | Smt. Ashalakshmi. C. N.
Assistant Professor, Department of Biotechnology
CMS College, Kottayam | Environmental Science,
Ecology & Molecular Ecology,
Environmental analysis,
Environmental microbiology |
| 54 | Dr. Vijo Thomas Kurien
Assistant Professor, Dept of Zoology,
CMS College, Kottayam | Climate Change, Soil Carbon
dynamics, Coleoptera taxonomy |

IDUKKI

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|----|---|-------------|
| 55 | Dr. M. Murugan
Prof. & Head, Kerala Agriculture University
Cardamom Research Station, Pampadumpara, Idukki | Agriculture |
|----|---|-------------|

- 56 **Dr.Saju Thomas**
Rtd. Professor, Nirmala College,
Muvattupuzha
Zoology -General ecology and
environmental science
- 57 **Prof. Sajan Jose. K**
Rtd. Professor, Dept. of Zoology, St. Joseph's College
Moolamattom, Arakkulam, Idukki
Zoology, Meliponiculture
- 58 **Sri. N. Ravindran**
BMC Convener-Thodupuzha Municipality & Former
DC,KSBB Idukki
Botany/BMC activities
- 59 **Sri. Shijumon lukose**
HSS Teacher & Former Project Fellow, KSBB Idukki
Botany/BMC activities
- 60 **Dr. Sajan Abraham**
Associate Professor & HoD. Newman College
Thodupuzha
Ethnomedicine, Medicinal Plant
and Biodiversity conservation.
Environmentalist
- 61 **Sri. R. Mohan**
President, Munnar Wild Life Society &
BMC member, Munnar Grama Panchayath
Environment & wild life
- 62 **Adv. Renish Mathew**
Advocate, Pandanath (H), Kuninji, Thodupuzha
Environmental Law
- 63 **Sri. Kausthubh. K.N.**
Kizhakkannattu House, Manakkadu P. O, Thodupuzha
Ornithology
- 64 **Sri. A.T. Thomas**
Rtd. Session Forest Officer
Azhukomparambil, Moolamattom
Environment & Wild life

ERNAKULAM

- 65 **Dr. Giby Kuriakose**
Assistant Professor, Dept. of Botany
Sacred Heart College, Thevara, Kochi
Botany, Taxonomy
- 66 **Sri. Ramachandran. P.K**
Former District Coordinator, KSBB
Pranavam House, Vadakode PO, Kochi
Botany Medicinal plants
- 67 **Sri. Vishnupriyan Kartha. K**
Joint Registrar (academic), CUSAT & Founder Secretary
Cochin Natural History Society, Ernakulam
Ornithologist
- 68 **Dr. Anil Kumar. M**
Assistant Professor & HoD, Dept of Botany
Union Christian College
Botanist
- 69 **Sri. Manoj Kumar. I.B**
Co-ordinator of Haritham Vypin Project
Ecologist, Butterfly expert,
Bamboo/mangrove propagation
expert
- 70 **Dr. K. Madhusudhanan**
Assistant Professor, Dept. of Botany,
St.Alberts College
Mushroom Biotechnology,
Mycorrhizal Studies, Plant
Pathology
- 71 **Dr. I. G. Rathish**
Asst. Professor
Inter University Centre for IPR Studies (IUCIPRS)
Cochin University of Science and Technology
Legal (IPR Appellate)

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|----|---|-----------------------------|
| 72 | Dr. Sunish. K.S
Asst. Professor
Zoology Department, Maharajas college, Ernakulum | Zoology (Taxonomy) |
| 73 | Dr. Prakasan. K
Asst. Professor
Zoology Department, Maharajas college, Ernakulum | Parasitology and Entomology |
| 74 | Dr. Stephen Sequeira
Asst. Professor
Botany Department, Maharajas college, Ernakulum | Botany (Lichens) |

THRISSUR

- | | | |
|----|---|-------------------------------|
| 75 | Dr. Swapna Johny
Assistant Professor
Department of Zoology, Little Flower College
Guruvayoor | Aquaculture & Fishery Biology |
| 76 | Dr. M. K. Harinarayanan
Assistant Professor, Dept. of Botany,
Sree Krishna College Guruvayur | Botany/Ethno botany |
| 77 | Dr. A.V. Raghu
Senior Scientist
KSCSTE - Kerala Forest Research, Institute, Peechi
Thrissur | Botany/Medicinal plants |
| 78 | Dr. Jiji Joseph
Professor & Head, Dept. of Plant Breeding
& Genetics, College of Agricultural, Vellanikkara | Plant Breeding, Genetics |
| 79 | Dr. Subin K Jose
Assistant Professor
Dept. of Geology & Environmental Science
Christ College, Irinjalakuda | Environmental Science |
| 80 | Sri. Sachin K Aravind
Assistant Professor, Wildlife Department
College of Forestry, Kerala Agricultural University | Forestry |
| 81 | Dr. M. K. Narayanan
Professor, Dept. of Veterinary Surgery and Radiology
College of Veterinary and Animal Sciences
Mannuthy, Thrissur | Animal sciences |
| 82 | Dr. Jain J Theratil
Asst. Professor, St. Aloysius College, Elthuruth, Thrissur | Forest ecology, Mangrove |
| 83 | Dr. Anto Francis
Asst Professor (Geology)
Govt. Engineering College, Thrissur | Geology |
| 84 | Adv. Sivasankaran. V S
Judicial First Class Court, Chavakkad | Environmental Law |

PALAKKAD

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|----|--|-------------|
| 85 | Dr. P. Pramod
Senior Principal Scientist.
(SACON) Anaikatty, Coimbatore | Ornithology |
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- 86 **Sri. Pankajakshan. P** Geography, Expert in landslides,
Assistant Professor, Earth Science, Govt. College, Chittur Geology technical committee.
- 87 **Dr. Preethi. N** Taxonomist, Zoology
Assistant Professor and HoD,
Zoology, NSS College, Ottappalam
- 88 **Sri. E.K. Yuse** Agriculture
Asst. Director (Rtd), Dept. of Agriculture
Karakurishi
- 89 **Dr. K.K. Seethalakshmi** Bamboo
Chief Scientist (Rtd), Former Coordinator
Bamboo Technical Support Group, KFRI, Karimba
- 90 **Dr. Bijoy. C** Entomology
Asst Professor, Entomologist, Dept. of Zoology
Christ College, Irinjalakuda
- 91 **Adv. Radheesh Gopalan** Environmental Law
Parvathy, Vihar, Nr Civil Station, Palakkad
- 92 **Dr. Suresh. V** Botany (Plant Systematics)
Assistant Professor, Dept. of Botany
Govt. Victoria College
- 93 **Dr. Sojan Jose** Plant systematics, Wetland
Assistant Professor, Dept. of Botany, Govt. College Ecology & Conservation Biology
Chittur
- 94 **Adv. L. Nammashivayam** Ornithologist
Secretary, Kerala Natural History Society, Palakkad

MALAPPURAM

- 95 **Dr. A. K. Pradeep** Botany, Plant taxonomy
Assistant Professor
Dept. of Botany, University of Calicut
- 96 **Dr. Anoop Das. K. S.** Entomology, Biodiversity
Assistant Professor, Dept of Zoology, MES College
Mampad, Mampad P. O. Malappuram
- 97 **Dr. Rajool Shanis** Aquaculture & Fisheries
Asst. Professor and Research Guide
PG Research Dept. of Aquaculture & Fishery Micro
Biology, MES College Ponnani
- 98 **Dr. K. Seethikoya** Ornithology
Retd. Professor, Dept. of Zoology, Mampad College
- 99 **Dr. Musthafa Kunnathody** Agriculture, (Agronomy)
Professor & Head (i/c), Agricultural Research Station
Anakkayam, Malappuram
- 100 **Sri. Abdul Jabbar. P. K** Agricultural Extension
Director, Krishi Vijnana Kendram
Thavanur
- 101 **Dr. Dhanya. R** Ecology and Environmental
Director/Asst Professor, School of Environmental Studies, Sciences
Thunchan Ezhuthachan Malayalam University Tirur

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|-----|--|---|
| 102 | Dr. Gopalakrishnan. K
Associate Prof & HoD (Rtd), Dept. of Applied
Geology, MES College, Ponani | Geology |
| 103 | Adv. Tom K Thomas
Advocate | Environmental Law |
| 104 | Dr. Manju C Nair
Associate Professor, Department of Botany
University of Calicut | Bryophyte Taxonomy,
Ecology, Molecular Biology |

KOZHIKODE

- | | | |
|-----|---|--|
| 105 | Dr. Kishore Kumar. K
HoD, Department of Botany, Farook College
Kozhikode | Forest Botanist, Specialised in
Angiosperm Taxonomy, Ecology,
Ethnobotany, and Biodiversity |
| 106 | Dr. Rajesh K.P
Professor, Dept. of Botany
Zamorins Guruvayoorappan College, Calicut | Botanist, Specialised in
Pteridophytes, Bryophytes, and
Flowering plants |
| 107 | Sri. K. Abdul Riyas
Asst. Professor, Dept. of Zoology
Govt. Arts and Science college, Meenchanda, Kozhikode | Zoologist, Specialized in Wildlife
and Conservation Biology |
| 108 | Dr. Jobiraj. T
Asst. Professor, Department of Zoology
Govt. College, Kodanchery | Entomologist, Specialized
in Taxonomy of Bees and
Environmental Biology |
| 109 | Dr. Vinod. K
Principal Scientist, ICAR-CMFRI,
Kozhikode | Marine Biodiversity Expert,
Specialised in Marine
Biodiversity and Ecosystem
functioning |
| 110 | Dr. P.K. Asokan
Principal Scientist (i/c)
Calicut Research Centre | Marine Sciences - Mariculture
and Marine Ecology |
| 111 | Dr. Abdul Hameed. E
Scientist (Rtd.)
CWRDM, Kozhikode | Hydrologist - Specialised in
Ground Water Engineering/
Hydrology |
| 112 | Dr. C.P. Priju
Scientist, Hydrology and Climatology Research Group
CWRDM, Kozhikode | Geologist- Specialised in
Ground water Geology- Ground
water Prospecting, Ground
water Resources Evaluation and
Management |
| 113 | Dr. N.S. Pradeep
Senior Scientist, Malabar Botanical Garden and
Institute of Plant Sciences (MBGIPS)
Guruvayurappan College | Biotechnology and
Biodiversity |
| 114 | Dr. P.K. Venugopal
Pranavu, Payyoli, Kozhikode | Medicinal plants Expert |

WAYANAD

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| 115 | Sri. Sivan. V.V
Senior Scientist, M S Swaminathan Research Foundation
Community Agrobiodiversity Centre (MSSRF) | Plant taxonomy |
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|-----|--|---|
| 116 | Dr. P.K. Prasad
Head, Department of Zoology, Kannur University
Manathavadi Campus | Biodiversity and ecological
parasitology |
| 117 | Sri. Vishnudas. C. K
Hume Center for Ecology and Wildlife Biology
Subash nagar, Kalpetta, Wayanad | Ornithologist, climate change
studies. |
| 118 | Sri. E.G. Joseph
Joint Director (Rtd), ST development, Dept.of Kerala | Tribal community social activist |
| 119 | Adv. Joseph Zacharia
Advocate
Greece tower, Opp Dist.court, Kalpetta | Environmental Law |
| 120 | Dr. Raji. R
Assistant Professor
Dept. of Botany, St. Mary's College, Sulthan Bathery | Traditional knowledge |
| 121 | Dr. George Chandy
Director, Centre for Wild Life Studies, KVASU,
Pookode Wayanad. | Veterinary surgeon |
| 122 | Sri. Manikandan. R
Assistant Director of Agriculture,
Panamaram | Agriculture development. |
| 123 | Sri. Rajesh Krishnan
NGO, Vayalorath house, Trisilerry,
Manathavadi | Traditional farmer, Traditional
seed farmers NGO |
| 124 | Dr. Dhaneesh Bhaskar
Regional Vice Chair for Asia at IUCN SSC Grasshopper
Specialist Group | Ecology |

KANNUR

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|-----|--|--|
| 125 | Dr. Ratheesh Narayanan. M. K
Assistant Professor
Dept. of Botany, Payyannur College, Edat
Payyannur, Kannur | Botany (study on RET plant
species of Western Ghats) |
| 126 | Dr. R. Sheik Mohammed Shamsudeen
Associate Professor
Dept. of Zoology, Kannur University, Manathavadi
Campus | Biodiversity assessment,
mapping and conservation,
Insect taxonomy, Molecular
taxonomy, Forest entomology |
| 127 | Dr. P. R. Swaran
Associate Professor, Dept. of Zoology
Payyannur college, Edat, Payyannur, Kannur | Zoology (Entomology) |
| 128 | Dr. Sapna Jacob
Assistant Professor, Dept. of Zoology, Payyannur College
Edat (PO), Payyannur, Kannur | Zoology, Parasitology |
| 129 | Dr. Pramod. C
Assistant Professor
Dept. of Botany, Calicut University | Botany
(Angiosperm Taxonomy &
Floristics) |
| 130 | Smt. Manjula. K. T
Assistant Professor
Dept. of Zoology, Govt. Brennen College,
Thalassery, Dharmadam | Zoology |

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|-----|---|---|
| 131 | Dr. Sreeja. P
Assistant Professor
Dept. of Botany, Sir Syed College, Taliparamba
Karimbam, Kannur | Ecology , Mangroves,
Biodiversity studies |
| 132 | Dr. Siby Philip
Assistant Professor, Department of Zoology
Nirmalagiri College, Kuthuparamba | Comparative genomics,
Conservation biology,
Taxonomy, Evolutionary biology,
Biogeography |
| 133 | Dr. T. K. Prasad
Associate Professor and Head, Dept of Geography
Kannur University, Kannur | Applied Geomorphology for
Disaster management |
| 134 | Adv. Vinod Kumar Chambalon
Advocate, District Court Complex,
Thalassery | Environmental Law |

KASARGOD

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| 135 | Prof. V. Gopinathan
Deputy Director of Collegiate Education (Rtd.) | Geology |
| 136 | Dr. Subramanya Prasad. K
Assistant Professor, Dept. of Botany, Nehru Arts and
Science College, Kanhangad | Botany |
| 137 | Sri. Sudheer Kumar. P.V
Teacher
Puthiyangadi Jamath Higher Secondary School | Marine conservation,
Natural Science |
| 138 | Dr. Ramachandran Kotharambath
Assistant Professor
Dept. of Animal Sciences, River side transit campus,
Central University of Kerala, Padannakad, Kanhangad | Taxonomy and Systematics,
Molecular Phylogenetics,
Anthrozoology, Conservation
Biology |
| 139 | Sri. V. V. Raveendran Valiyavalappil
Teacher, Govt. Higher Secondary School, Cheruthazham
Edatummal, Thrikaripur, Kasaragod | Environmentalist,
Environmental Writer,
Coordinator of SEEK |
| 140 | Dr. Muhammed Haneef. K.A
Assistant Professor
Govt. Brennan College, Thalassery, Khaman Villa
Koolikunnu | Odonates, Butterflies |
| 141 | Sri. Abdul Jaleel. K
Assistant Professor
Department of Zoology, Govt. College
Kasaragod | Genetics, Molecular biology,
entomology and Developmental
biology. |
| 142 | Sri. M. Kannan Nair
Senior Superintend (Rtd), Panchayath Department | KILA trainer (25 years of
experience) |
| 143 | Adv. K. Kumaran Nair
Advocate
Garden City complex, Vidyanagar, Kasaragod | Environmental Law |
| 144 | Dr. Baiju. P
Asst. Professor
Dept. of Botany, Govt. College
Vidyanagar, Kasaragod | Environmental Sciences,
Taxonomy |

Annexure VI

Details of Staffs (During the report period)

Executive Staff Details

Staff (On deputation)

Sl. No.	Designation	Sanctioned Strength	No. of staff working
1	Member Secretary	1	1
2	Administrative Officer	1	1
3	Finance Officer	1	1
4	Principal Scientific Officer	2	2
5	Scientific Officer	1	1
6	Technical Assistant	1	1
7	Assistant cum Cashier	1	1
8	Data Entry Operator	1	1
9	Confidential Assistant	1	0
10	Helper	1	1

Sl. No.	Name	Designation
On Deputation		
1	Shri. Nazarudheen. A	Administrative Officer
2	Smt. Simi. A.S	Administrative Officer
3	Smt. Thushara George	Finance Officer
4	Shri.N .Nandakumar	Finance Officer
5	Dr. Vimal Kumar. C.S	Principal Scientific Officer
6	Dr. Jisha. S	Principal Scientific Officer
7	Dr. V. Unnikrishnan	Scientific Officer
8	Smt. Jiju. K.K	Technical Assistant
9	Lekshmi. R.C	Assistant cum Cashier
10	Shri.Adarsh. V.S	Data Entry Operator
11	Ajin. V.S	Helper
12	Prabhakumari. V	Part Time Sweeper
On Contract		
13	Dr. Mahadevan. G	Senior Research Officer
14	Dr.Baijulal. B	Senior Research Officer
15	Dr.Akhila. S. Nair	Senior Research Officer
16	Mitrambika. N.B	Research Officer
17	Dr. Gigi C. Rajan	Research Officer
18	Dr. Sreedharan. K	Research Officer
19	Adarsh. V	Assistant Accounts Clerk
20	Gopika Gopi	Computer Assistant

21	Jithika. M	Research Assistant
22	Aneesha Ani Benedict	Research Assistant
23	Priya S. Nair	Data Entry Operator
24	Arya Anand. A	Data Entry Operator
25	Praveen. K.P	Graphic Designer
26	Sudheeshlal. V	Library Assistant
27	Jijin J. Smith	Inward Clerk
28	Jithin. K.K	Driver cum Peon
29	Alexander. C	Security Staff
30	Retnakaran. B	Security Staff
31	Remya. S	Part Time Sweeper
32	Ajitha. L	Helper
<i>Museum</i>		
33	Vishnu. T	Research Assistant
34	Prinson Francis	Demonstrator
35	Arun Kumar. R.P	Electrician cum 3D Theatre Operator
36	Monisha. T	Helper
37	Jayan. S	Security Staff
38	Sajakumar. S	Security Staff
39	Arun Kumar	Security Staff
<i>District Co ordinators</i>		<i>District</i>
40	Akshaya Anil	Thiruvananthapuram
41	Dr. Sujithkumar. S	Kollam
42	Sruthy Jose	Alappuzha
43	Arun C. Rajan	Pathanamthitta
44	Dr. Thomson Davis	Kottayam
45	Sreeraj. N.K	Ernakulam
46	Aswathy. V.S.	Idukki
47	Febin Francis	Thrissur
48	Sini Mol. V	Palakkad
49	Anilkumar. R	Malappuram
50	Dr. Manju. K.P	Kozhikode
51	Sreeraj. P.R	Wayanad
52	Suhada. A	Kannur
53	Akhila. V.M	Kasargod
<i>Reserch Fellows</i>		
54	Kum. Hanna Thomas	NBA Intern
55	Kum.Maneesha. U.K	NBA Intern

Annexure VII

Glossary of Terms & Acronyms

Acronym	Full Form
ABS	Access and Benefit Sharing
ALDFG	Abandoned, Lost, or Derelict Fishing Gear
BBNJ	Biodiversity Beyond National Jurisdiction
BHS	Biodiversity Heritage Site
BIS	Bureau of Indian Standards
BMC	Biodiversity Management Committee
CBD	Convention on Biological Diversity
CDA	Community Development Agreement
CEPA	Communication, Education, and Public Awareness
CER	Corporate Environmental Responsibility
CMFRI	Central Marine Fisheries Research Institute
CSIR	Council of Scientific & Industrial Research
CSR	Corporate Social Responsibility
DBCC	District Biodiversity Coordination Committee
DRR	Disaster Risk Reduction
EEZ	Exclusive Economic Zone
EIA	Environmental Impact Assessment
GI	Geographical Indication
GO	Government Order
GP	Gram Panchayat
IAS	Invasive Alien Species
ICAR	Indian Council of Agricultural Research
IPBES	Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services
IPM	Integrated Pest Management
IUCN	International Union for Conservation of Nature
JNTBGRI	Jawaharlal Nehru Tropical Botanic Garden and Research Institute
KBF	Kerala Biodiversity Fund
KBIR	Kerala Biodiversity Information Repository
KFRI	Kerala Forest Research Institute
KM-GBF	Kunming-Montreal Global Biodiversity Framework
K-SBSAP	Kerala State Biodiversity Strategy and Action Plan
KSCSTE	Kerala State Council for Science, Technology and Environment
KSBB	Kerala State Biodiversity Board
KUFOS	Kerala University of Fisheries and Ocean Studies
LBF	Local Biodiversity Fund
LBHS	Local Biodiversity Heritage Site
LBSAP	Local Biodiversity Strategy and Action Plan

LSG	Local Self Government
MAT	Mutually Agreed Terms
MBR	Marine Biodiversity Register
MGR	Marine Genetic Resources
MLS	Minimum Legal Size
MoEF&CC	Ministry of Environment, Forest and Climate Change
MPEDA	Marine Products Export Development Authority
NBA	National Biodiversity Authority
NBSAP	National Biodiversity Strategy and Action Plan
NCSCM	National Centre for Sustainable Coastal Management
NGO	Non-Governmental Organization
NIO	National Institute of Oceanography
NMPB	National Medicinal Plants Board
NPOP	National Programme for Organic Production
NWFP	Non-Wood Forest Product
PBR	People's Biodiversity Register
PES	Payments for Ecosystem Services
PGS	Participatory Guarantee System
PIC	Prior Informed Consent
RET	Rare, Endangered, and Threatened
RKI	Rebuild Kerala Initiative
SBC	Students' Biodiversity Congress
SBB	State Biodiversity Board
SBSAP	State Biodiversity Strategy and Action Plan
SCUBA	Self-Contained Underwater Breathing Apparatus
SHE- BIO	She harnesses ecosystems for Biodiversity-inspired outcomes
SDG	Sustainable Development Goal
SHG	Self-Help Group
TK	Traditional Knowledge
TKDL	Traditional Knowledge Digital Library
UNCLOS	United Nations Convention on the Law of the Sea
UNDP	United Nations Development Programme
ZSI	Zoological Survey of India



Contact

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Kailasam, T.C. 24/3219, No. 43, Belhaven Gardens, Kowdiar P.O.,
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Kerala State Biodiversity Board