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Dated Shillong, the 12th October, 2026

NOTIFICATION

Sub: Invitation of suggestions/inputs/recommendations from the general public on the Draft Meghalaya Biotechnology Policy.

The Government of Meghalaya is formulating the Meghalaya Biotechnology Policy to promote research, innovation, entrepreneurship, investment and sustainable use of the State's rich bio-resources, and to create livelihood and employment opportunities.

The Draft Meghalaya Biotechnology Policy has been prepared and approved by the Planning, Investment Promotion & Sustainable Development Department. In order to make the Policy participatory and inclusive, the Draft is now being placed in the public domain for comments.

The Draft Policy Is available on the website of the Bio-Resources Development Centre, Shillong: www.megbrdc.nic.in

All stakeholders are invited to send their suggestions, inputs and recommendations on the Draft Policy. These include citizens, farmers, entrepreneurs, industry, start-ups, researchers, academic and research institutions, community organisations, Self-Help Groups, and other interested persons or bodies.

Suggestions may be submitted in writing, clearly mentioning the relevant Chapter/Section/Clause of the Draft Policy, in any of the following ways:

1. By email to: brdcshillong@gmail.com
2. By post/in person to: The Director, Bio-Resources Development Centre, Upper Shillong, Meghalaya – 793009

The last date for receipt of suggestions is 27th October, 2026]. Suggestions received after this date may not be considered.

Please mention "Suggestions on Draft Meghalaya Biotechnology Policy" in the subject line of the email or on the envelope, along with the name, address, contact details and organisation (if any) of the sender.

All suggestions received will be examined before the Policy is finalised.

Mitali Chandra, IAS

Director

**Bio-Resources Development Centre,
Shillong**

MEMO.No. PLN/BRDC/06397/2025/NF/ -A

Dated Shillong, the 12th October, 2026

Copy to:

1. The Commissioner & Secretary, Planning, Investment Promotion & Sustainable Development Department, for information.
2. The Information & Public Relations Department, for wide publicity in leading local newspapers.
3. LDA, BRDC for uploading on the website.
4. Office copy.

Mitali Chandra, IAS



MEGHALAYA BIOTECHNOLOGY P O L I C Y



**Submitted by:
Bio-Resources Development Centre**

**Planning Investment Promotion & Sustainable Development Department
Government of Meghalaya**

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1. PREAMBLE

Biotechnology is recognized as a key driver of economic growth, innovation, and sustainable development with applications across agriculture, healthcare, industry, and environmental management. It plays a critical role in addressing challenges related to food security, public health, resource efficiency, and climate change, while contributing to the growth of a bio-based economy.

India has identified biotechnology as a priority sector and has undertaken several initiatives to promote research, innovation, and commercialization. National frameworks such as the BioE3 initiative emphasize the role of biotechnology in fostering economic development, environmental sustainability, and employment generation.

The State of Meghalaya, with its rich biodiversity, diverse agro-climatic conditions, and strong traditional knowledge systems, offers significant potential for biotechnology-led development. The State's biological resources provide opportunities for value addition, sustainable utilization, and development of bio-based products and technologies.

However, the biotechnology sector in Meghalaya remains at an emerging stage, with limited industrial presence and inadequate infrastructure for large-scale application and commercialization. There is a need to create a structured and enabling framework to harness the State's potential and promote coordinated development of the sector.

Accordingly, the Government of Meghalaya hereby introduces the Meghalaya Biotechnology Policy 2025–2030 to promote research, innovation, entrepreneurship, and biomanufacturing, while ensuring sustainable utilization of bio-resources and facilitating investment, employment generation, and inclusive growth in the State.

1.1 Biotechnology Industry Overview in Meghalaya

Biotechnology has emerged as a rapidly growing sector with significant potential for driving economic development and innovation. In India, the sector has expanded across diverse domains including biopharmaceuticals, agricultural biotechnology, industrial biotechnology, and bio-services, supported by strong policy initiatives, research institutions, and an evolving start-up ecosystem.

In the context of Meghalaya, the biotechnology sector is at a developing stage but holds considerable promise due to the State's inherent strengths. Meghalaya is endowed with rich

biodiversity, including a wide range of medicinal and aromatic plants, microbial resources, and endemic species, which provide a strong foundation for biotechnology-based research and value addition. The State's diverse agro-climatic conditions further support the cultivation and utilization of a variety of biological resources.

The agricultural practices in Meghalaya, which are largely organic and low-input in nature, present significant opportunities for the application of biofertilizers, biopesticides, and other sustainable agricultural technologies. In addition, the traditional knowledge systems associated with the use of biological resources offer scope for scientific validation and development of value-added products such as nutraceuticals and herbal formulations.

The State also has potential for the development of industrial biotechnology, particularly in areas such as enzyme production, fermentation-based products, and bio-based materials, leveraging locally available resources. Environmental biotechnology offers opportunities for addressing challenges related to waste management, pollution control, and resource recovery through bio-based solutions.

Despite these advantages, the biotechnology sector in Meghalaya faces several challenges, including limited industrial infrastructure, weak industry-academia linkages, and inadequate access to finance and advanced technologies. There is also a need for strengthening institutional capacity and creating a conducive environment for investment and entrepreneurship.

The Policy seeks to address these challenges by promoting infrastructure development, facilitating industry participation, strengthening research and innovation systems, and enabling the commercialization of biotechnology products and processes, thereby unlocking the full potential of the sector in Meghalaya.

1.2 Creating Synergy

Biotechnology is a cross-cutting sector that requires strong convergence across policies, institutions, and stakeholders to achieve meaningful outcomes. The Government of Meghalaya recognizes the need to create effective synergy between national initiatives, State priorities, and institutional mechanisms to enable the holistic development of the biotechnology sector.

The Policy is aligned with national frameworks and programmes aimed at promoting biotechnology as a driver of economic growth, environmental sustainability, and employment generation. It seeks to leverage support available under national initiatives such as the BioE3

framework and other programmes of the Government of India by facilitating access to funding, infrastructure, and technical expertise. Such alignment will enable the State to benefit from existing national resources while addressing region-specific priorities.

At the State level, the Policy aims to integrate biotechnology interventions with ongoing development programmes in sectors such as agriculture, health, rural development, and environment. This convergence is intended to enhance the effectiveness of existing schemes by incorporating biotechnology-based solutions for improving productivity, sustainability, and value addition.

The Policy also emphasizes the importance of strengthening linkages between academic and research institutions, industry, and local communities. Collaboration among these stakeholders is essential for promoting innovation, facilitating technology transfer, and ensuring that research outcomes are translated into commercially viable products and services. Special focus shall be given to integrating traditional knowledge systems with modern scientific approaches to develop context-specific and sustainable solutions.

Further, the Government shall promote partnerships with national and international organizations, private sector entities, and financial institutions to attract investment, enhance technical capacity, and support the growth of biotechnology enterprises in the State. Through such coordinated efforts, the Policy seeks to create a cohesive and dynamic biotechnology ecosystem that supports innovation, entrepreneurship, and sustainable development in Meghalaya.

1.3 Leveraging Infrastructure

The Government of Meghalaya recognizes that the development of a strong biotechnology ecosystem requires not only the creation of new infrastructure but also the effective utilization and strengthening of existing institutional capacities within the State. Meghalaya already possesses foundational infrastructure in the form of research institutions, laboratories, and field-level implementation systems, which can be leveraged and integrated to support biotechnology-driven development.

The Policy seeks to build upon such existing capacities by strengthening laboratory infrastructures, upgrading analytical and quality control facilities, and expanding pilot-scale and pre-commercial production capabilities. Existing facilities engaged in biotechnology-based research and development shall be further developed to function as integrated hubs for research, training, and technology dissemination. This approach will enable the State to maximize the

utility of its current investments while minimizing duplication of infrastructure.

In addition, the Policy emphasizes the creation of shared infrastructure in the form of Common Instrumentation Facilities, incubation centres, and bioinnovation hubs to support start-ups, entrepreneurs, and research institutions. These facilities shall provide access to advanced equipment, technical expertise, and testing services, thereby reducing entry barriers and facilitating the transition from laboratory research to commercialization.

The Government shall also promote the establishment of a Biotechnology Park; biotech clusters and biomanufacturing facilities at district level in a phased manner, ensuring that such developments are aligned with the State's resource base and sectoral priorities. Special emphasis shall be placed on integrating infrastructure across departments and institutions to enable coordinated functioning and efficient resource utilization. The Biotechnology Development Cell and the BioE3 cell will act as central hubs to monitor and oversee the biotech clusters and biomanufacturing hubs.

Through the strategic strengthening and integration of existing infrastructure, along with targeted investments in new facilities, the Policy seeks to establish a robust and enabling ecosystem for biotechnology research, innovation, industrial development, and the commercialization of biotechnological products derived from Meghalaya's rich bioresources

1.4 Biotechnological Opportunities for Meghalaya

Within the global and national biotechnology landscape, Meghalaya is uniquely positioned to leverage its rich biodiversity, agro-climatic diversity, and strong traditional knowledge base for biotechnology-led development. The State holds significant potential in bio-agriculture through climate-resilient crops, biofertilizers, and biopesticides, as well as in bio-industrial applications using endemic biological resources for high-value products such as natural extracts, enzymes, and bio-based materials. Sustainable bioprospecting and valorisation of indigenous knowledge will ensure ecological conservation while generating livelihood opportunities.

1.5 Status of biotechnology in Meghalaya:

The State of Meghalaya has made significant progress in strengthening and utilizing its infrastructure to promote biotechnology-led development. The Government has taken a strategic approach to harness the State's unique biological and natural resources by aligning its infrastructure initiatives with national biotechnology missions and creating an enabling

environment for innovation, research, and entrepreneurship. These efforts aim to position Meghalaya as an emerging hub of biotechnology excellence in the Northeastern region of India.

The State has established the **Bio-Resources Development Centre (BRDC)** that focuses on the exploration, conservation, and sustainable utilization of Meghalaya's rich biodiversity, particularly its medicinal plants and endemic species. It has emerged as a key institution driving advanced research, technology development, and innovation in biotechnology. By fostering partnerships with national organizations and research bodies, this institution have contributed significantly to capacity building and the development of biotechnology-based enterprises in the State

Meghalaya has established agricultural biotechnology infrastructure that integrates research with extension services to ensure that innovations reach farmers across the state's diverse agro-climatic zones. The State Biological Control Laboratory produces and distributes bio-control agents that support integrated pest management and reduce reliance on chemical pesticides. Integrated Nutrient Management facilities promote the use of biofertilizers and organic inputs to enhance soil fertility and crop productivity. Organic agriculture and floriculture units apply biotechnology-driven methods such as tissue culture and improved propagation techniques to diversify crops and improve quality. Agriculture research stations and laboratories provide facilities for crop improvement programs, biotechnology trials, and farmer-oriented demonstrations that validate new technologies. Together, these infrastructures enable the cultivation of bio-fortified and climate-resilient crops, strengthen sustainable farming practices, enhance food security, and reduce the environmental footprint of agriculture in Meghalaya.

The Mushroom Development Centre at Upper Shillong, Meghalaya, is a government-run agricultural training and production institute under the Department of Agriculture, Government of Meghalaya was established in 1982 as the Regional Centre for Training and Production of Mushroom for the North Eastern Region, the Centre plays an important role in promoting mushroom cultivation and rural entrepreneurship in Meghalaya. It provides training to farmers and entrepreneurs on mushroom cultivation techniques, spawn production, compost preparation, processing, and marketing. The Centre mainly focuses on oyster, button, and shiitake mushrooms, helping improve income opportunities for local communities.

At present, the Centre is fully operational and functioning actively with strong government support. In 2024, it has been upgraded with a modern Shiitake Mushroom

Production and Training Centre, reflecting its growing importance in the state's agricultural development. The centre continues to conduct farmer outreach programmes and supply quality mushroom spawn and technical guidance across Meghalaya.

This initiative can be further upgraded to support research-based activities focused on indigenous mushroom species of the state, particularly for the development and production of quality spawn for indigenous mushrooms with significant nutritional and medicinal properties. Such an initiative would not only promote scientific research and value addition of indigenous bioresources but also create sustainable livelihood opportunities. Furthermore, it would provide valuable employment and entrepreneurial prospects for Postgraduate and PhD graduates from the state, especially in the field of Biotechnology and allied sectors.

1.6 Alignment with National and Global Initiatives

The Biotechnology Policy of Meghalaya will be aligned with national strategies such as the **National Biotechnology Development Strategy**, and will complement the objectives of the **BioE3 Policy**, which envisions accelerating India's biomanufacturing sector while ensuring environmental sustainability and employment creation. At the global level, the policy will also draw upon the principles of the **United Nations Sustainable Development Goals (SDGs)** to ensure that biotechnology contributes to inclusive economic growth, social well-being, and ecological conservation.

This alignment will enable Meghalaya to access technical expertise, funding, and partnerships through national and international collaborations, strengthening the State's capacity to participate in the global biotechnology landscape.

2. FOSTERING AN ECOSYSTEM

The Government of Meghalaya recognizes that the growth of the biotechnology sector requires the creation of a cohesive and enabling ecosystem that supports research, innovation, entrepreneurship, and industrial development. Such an ecosystem must integrate institutional capacity, infrastructure, human resources, and policy support to facilitate the seamless translation of scientific knowledge into practical applications and commercially viable products.

The Policy aims to foster a biotechnology ecosystem that is inclusive, sustainable, and innovation-driven, leveraging the State's unique strengths in biodiversity and traditional knowledge. It seeks to promote collaboration among research institutions, industry, government agencies, and local communities to ensure that biotechnology interventions are context-specific, scalable, and beneficial to society. Special emphasis shall be placed on strengthening linkages between laboratory research and field-level applications, thereby enhancing the impact of biotechnology on agriculture, healthcare, environmental management, and livelihood generation.

2.1 Vision

To establish Meghalaya as a leading biotechnology hub in Northeast India by developing a sustainable, innovation-driven, and inclusive bioeconomy that leverages the State's rich biodiversity, traditional knowledge systems, and scientific capabilities for economic growth and societal benefit.

2.2 Mission

The mission of this policy is to position biotechnology as a key driver of sustainable development in Meghalaya by strengthening research and innovation ecosystems, promoting industrial growth and biomanufacturing capabilities, and fostering entrepreneurship across sectors. It aims to accelerate the development and commercialization of biotechnology-based products and processes, ensure the sustainable utilization of bio-resources, and enhance livelihoods and employment opportunities, particularly in rural and resource-dependent communities.

2.3 Objectives

The objectives of the Meghalaya Biotechnology Policy are as follows:

- a. To promote a sustainable bioeconomy through the conservation, sustainable utilization, and value addition of bio-resources, leveraging biotechnology to enhance productivity, resilience, and rural livelihoods.
- b. To strengthen the State's biotechnology innovation ecosystem by advancing research and development, supporting translational research, and enabling effective technology transfer, validation, and deployment across priority sectors including agriculture, horticulture, and environmental management.
- c. To foster entrepreneurship, capacity building, and commercialization of biotechnology by creating an enabling policy and regulatory framework, encouraging start-ups and bio-based enterprises, and integrating traditional knowledge systems with modern biotechnology.

2.4 Targets

- i. To facilitate technical expertise collaborating with national/international Institutions & funding opportunities in biotech sector for Meghalaya.
- ii. To establish a dedicated Meghalaya Biotechnology Technical Park as a Hub for 100 biofoundaries & biomanufacturing units
- iii. To create a cutting- edge research & innovation facilities within the Biotechnology park for use by entrepreneurs and other interested Institutes, in diverse biotech areas including development of drugs. Healthcare formulations based on Meghalaya's rich traditional medicine system.
- iv. To create employment opportunities among the local youth in biotech sector through intensive trainings and capacity building; establish bio foundries and biomanufacturing hubs.

3. STRATEGY

3.1 Developing State's Strategic Competencies

Meghalaya is strategically enhancing its biotechnology ecosystem by leveraging its unique biological wealth and aligning its infrastructure with national missions. The State has established a specialized Bio-Resource Centre, the Bio-Resources Development Centre (BRDC) to drive advanced research, technology development, and the sustainable utilization of endemic species and medicinal plants. To further catalyze industrial growth, the State will develop a flagship Meghalaya Biotechnology Park with a network of biotechnology clusters and innovation hubs across all districts. These facilities will provide plug-and-play laboratories, bioprocessing units, and common instrumentation to support academia and industry.

In alignment with the national BioE3 Policy, Meghalaya will establish dedicated biofoundries and biomanufacturing hubs to support technology scale-up. The State has also pioneered specialized agricultural biotechnology infrastructure, including the State Biological Control Laboratory to promote climate-resilient farming and organic excellence. To fuel entrepreneurship, the Meghalaya Biotechnology Innovation Fund and Biotechnology Venture Fund will be instituted to provide seed funding and capital support for start-ups and high-value bio-based products.

The State shall leverage these strengths through a robust incentive framework under the Meghalaya Industrial Investment Promotion Policy (MIIPP) 2024, offering capital investment subsidies, power tariff concessions, and interest subvention. Furthermore, the Invest Meghalaya Authority provides a single-window platform to streamline regulatory processes and facilitate investor handholding. Strategic interventions will prioritize projects of state relevance, including those in bio-agriculture, healthcare biotechnology, and circular bioeconomy, to establish Meghalaya as a regional leader in sustainable biotechnology innovation.

The following are key strategies that will fuel the development of biotechnology sector in the state.

3.2 Conducive Business Environment

Build an enabling framework for Bio-Agri and Bio-Industries: The State government will make earnest efforts to meet the requirements of entrepreneurs for setting up biotech units/ biomanufacturing and biofoundries across the state. Efforts would be made as per provision of the

Meghalaya Industrial and Investment Promotion Policy, 2024 and the Government of India's **Uttar Poorva Transformative Industrialization Scheme, 2024** and other related schemes of the state government and Central government and also in coordination with the Department of Biotechnology, Government of India. It will facilitate strengthening partnerships among universities, research institutions, industries, and community organizations. Promote technology transfer and commercialization of local research. Encourage collaborative R&D projects addressing regional challenges.

3.3 Collaborative Research Programmes: Meghalaya's rich biodiversity and natural resources provide immense opportunities for collaborative research among universities, colleges, and research institutions in the field of biotechnology. Research can focus on medicinal and aromatic plants, mushroom biotechnology, bamboo technology, functional foods from local crops, biofertilisers, product development from indigenous horticultural crops, microbial and environmental biotechnology, food processing, nutraceuticals, and conservation of biodiversity. Institutions can also work on sustainable aquaculture, sericulture, animal biotechnology, climate-resilient agriculture, and eco-friendly technologies using local bioresources. Such collaborative research will promote innovation, technology development, entrepreneurship, and industrial growth while ensuring sustainable utilisation and conservation of Meghalaya's biological resources.

3.4 Facilitating Public-Private Partnerships (PPP)

The Policy will promote Public-Private Partnerships to enhance collaboration among government departments, research organizations, academic institutions, and private enterprises. This will strengthen technology transfer, commercialization, and capacity-building efforts.

Public-Private Partnerships (PPPs), as envisaged under Meghalaya Public Private Partnership Policy (PPP) 2021, will be promoted for co-investment in common infrastructure, shared biomanufacturing facilities, and large-scale industrial projects. Such partnerships will enable risk-sharing, improve capital mobilization, and accelerate the development of strategic biomanufacturing assets within the State.

3.5 Development of Infrastructure for promotion of biotechnology (Biotechnology Parks , Biotech Clusters and Biotech Hubs)

The Government of Meghalaya shall establish the Meghalaya Biotechnology Park as an integrated biotechnology ecosystem to promote biotechnology-led industrial growth, innovation, research, commercialization, and sustainable biomanufacturing through plug-and-play wet laboratories, pilot-scale bioprocessing and fermentation units, Common

Instrumentation Facilities, GLP and GMP-compliant shared infrastructure, incubation and acceleration centres, shared biomanufacturing units, and bio-safety compliant waste management systems supported by green and energy-efficient infrastructure. The Park may be developed through a Public-Private Partnership model, a Special Purpose Vehicle, or other suitable mechanisms, with priority accorded to bio-resource-based biotechnology, circular bioeconomy models, and sustainable industrial development aligned with the ecological strengths of the State. The Government shall also promote biotechnology clusters, innovation hubs, biofoundries, and biomanufacturing hubs across districts in alignment with the BioE3 Policy to support advanced research, pilot-scale production, technology transfer, entrepreneurship, industrial scale-up, and collaboration among academia, industry, research institutions, and government agencies.

3.6 Human Resource Development:

Recognizing the growing demand for skilled biotechnology professionals, the State shall strengthen skill development and human resource infrastructure through collaboration with training centres, laboratories, academic institutions, and national skill development initiatives, while introducing State-specific programmes to build a technically proficient workforce capable of supporting advanced biotechnology research and industrial applications. Special emphasis shall be placed on equipping youth, local entrepreneurs, and rural communities with technical, managerial, and enterprise development skills necessary for participation in biotechnology-driven industries, thereby supporting employment generation, inclusive regional development, and streamlined industrial growth across Meghalaya. To achieve this, the State will set up a **Centre for Research Applications and Training on Biotechnology and Bioinformatics**. A cadre of resource persons will be created to reach various stakeholders and provide information based on credible scientific data

3.7 BioE3 Cell:

To operationalize the vision of the BioE3 Policy and enhance the State's biomanufacturing capacity, the Government of Meghalaya has established a dedicated BioE3 Cell under the Bio-Resources Development Centre. This Cell will function as the central institutional mechanism for planning, coordinating, and facilitating biomanufacturing activities while ensuring that biotechnology-led development remains aligned with Meghalaya's economic, environmental, and social priorities. The BioE3 Cell will focus on three key areas:

1. **Bioeconomy Growth:** The Cell will play a leading role in advancing the bioeconomy in Meghalaya by facilitating the growth of bio-based industries and technologies.
2. **Environmental Sustainability:** The Cell will promote eco-friendly biomanufacturing practices that minimize waste, reduce emissions, and foster circular economy principles, contributing to environmental protection.
3. **Entrepreneurship and Innovation:** The BioE3 Cell will support local entrepreneurs and innovators by providing access to resources, financial aid through various funding by the State & Central Government, expertise and mentorship, helping to build a thriving biomanufacturing sector.

The BioE3 Cell aims to create a vibrant ecosystem that will stimulate economic growth, foster green technologies, and promote environmental stewardship, positioning Meghalaya as a pioneer in sustainable biomanufacturing in key areas for setting up biomanufacturing and biofoundaries units will be on prioritized sectors of the state . A Technology Transfer and commercialization unit will be set up which will act as a Single point of Contact (SPOC) where services will be provided to all the investors of biotech units. It will support the scientific validation and protection of indigenous intellectual property and assist innovators in patenting and marketing their products. A nodal officer will be appointed for SPOC services that will be responsible for backward linkages for the biotech entrepreneurs.

3.8 **Biotechnology Development Cell:** The State will constitute a Biotechnology Development Cell under the Meghalaya State Biotechnology Council (MSBTC) for providing technical guidance and support. The BT Development Cell will operate with the following mandate:

- Promote, support and facilitate the overall development of biotechnology in the state
- Facilitate the infrastructure development, research, innovation and human resource development
- Facilitate regional, national and international networking for promotion of biotechnology.
- Facilitate the development of data banks and Biotech clusters/ Biotech Hubs
- Facilitate the creation of scientific awareness, socio-ethical acceptance, adoption and application of biotechnology. Oversee the implementation of the policy and also help remove bottlenecks.
- Facilitate the setting up of Biotechnology park and Biotech Clusters/ Hubs
- Set up a Centre for Research Applications and Training on Biotechnology and Bioinformatics to cater to skill development in the biotechnology sector

The cell would be strengthened significantly in terms of infrastructure and manpower. The role of the cell will primarily be that of a facilitator, creating a supportive environment that encourages biotechnology research, innovation, and enterprise. An empowered '**Biotechnology Single Window Facilitation System**' will be set up and operationalized to ensure time-bound approvals, streamlined regulatory processes, and defined timelines for clearances for establishing New Units in the State. This system will provide an online application and tracking mechanism supported by investor assistance and grievance redressal.

4. THRUST AREAS FOR BIOTECHNOLOGY POLICY.

4.1 Agriculture and Food Security

4.1.1 Agriculture Biotechnology: Key activities in this sector will emphasize biotechnology interventions for improving agricultural productivity, climate resilience, organic farming, and sustainable agro-based livelihoods. Priority shall be given to disease-resistant, high-yielding, biofortified, and climate-adaptive crop varieties suited to Meghalaya's agro-climatic conditions. Advanced biotechnology applications such as genome editing, molecular diagnostics, marker-assisted selection, plant tissue culture, nanotechnology-based fertilizers, indigenous microbial technologies, and biofertilizers shall be strengthened.

Biotechnology applications shall be encouraged for horticultural and cash crops including pineapple, Lakadong turmeric, ginger, black pepper, banana, tapioca, Khasi mandarin, and mushroom cultivation (commercial production and promotion of indigenous edible mushroom species), with emphasis on sustainable value addition and eco-friendly agro-based products. The policy shall support tissue culture laboratories, seed saving unit centers, climate-resilient crop research facilities, bio-input production units, mushroom spawn production units, and indigenous mushroom research initiatives. Precision farming, hydroponics, biopesticides, soil-health improvement, erosion control, and controlled-environment mushroom farming shall be promoted, integrating traditional knowledge with modern science. The policy shall also encourage functional foods, including mushroom-based nutraceuticals, to enhance food security, rural livelihoods, and ecological sustainability in Meghalaya.

4.1.2 Microbial Technology: Research and industrial applications of microbial resources for agriculture, environment, healthcare, and bio-based industries will be encouraged. Indigenous microbial diversity, particularly locally adapted strains which often demonstrate superior performance under Meghalaya's agro-climatic conditions, shall be prioritized for exploration and utilization in the production of biofertilizers, biopesticides, enzymes, fermented products, and waste management technologies. Establishment of microbial resource centers, fermentation technologies, and startup enterprises engaged in microbial biotechnology shall be promoted. Research collaborations with national and international institutions shall also be encouraged for developing sustainable microbial solutions for industrial and environmental applications.

4.1.3 Animal Biotechnology: The Policy shall encourage biotechnology applications for improving livestock productivity, animal health, and sustainable livestock management systems. Focus shall be placed on genetic improvement of indigenous breeds of cattle, pigs, poultry, goats, and fish through modern breeding technologies, artificial insemination, embryo transfer, and molecular diagnostics. Veterinary biotechnology laboratories shall be strengthened for disease surveillance, vaccine development, and rapid diagnostic services. Biotechnology interventions in fisheries and aquaculture shall also be promoted to enhance nutritional security, rural incomes, and livelihood opportunities in the State.

4.2 Healthcare and Traditional Knowledge

4.2.1 Pharmaceutical Biotechnology: The Government shall promote pharmaceutical biotechnology for the development of biopharmaceuticals, vaccines, diagnostics, nutraceuticals, and fermentation-based healthcare products. The policy shall support research, innovation, and commercialization through biotechnology parks, incubation centers, and collaborative research partnerships with academic institutions, research organizations, and private industries. Special emphasis shall be given to biotechnology startups, translational research, and the establishment of quality-compliant manufacturing facilities to encourage investment and employment generation in the biotechnology and healthcare sectors.

4.2.2 Traditional Medicine: The State recognizes the importance of indigenous knowledge systems and traditional medicinal practices of local communities. Efforts shall be undertaken to document, validate, preserve, and promote traditional medicinal knowledge through scientific research, biotechnology applications, and community participation. Through this policy the government shall encourage the scientific validation of traditional remedies using modern tools such as molecular biology, recombinant DNA technology, genome research, phytopharmaceutical development, and advanced diagnostic platforms, while ensuring that indigenous healing traditions remain protected and respected. Medicinal plant cultivation, herbal gardens, ethnobotanical studies, metabolite isolation and standardization from medicinal plants, quality planting material development, and value-added herbal and phytopharmaceutical product development shall be prioritized. Special emphasis shall be placed on identifying and scientifically standardizing bioactive compounds from indigenous medicinal plants, drawing upon successful models of plant-based therapeutics. Mechanisms for intellectual property protection, equitable benefit sharing, regulatory quality frameworks, and standardization of traditional medicines shall be encouraged in collaboration with research institutions, traditional healers, biotechnology centers, and AYUSH systems to create an

integrated and evidence-based healthcare ecosystem in Meghalaya.

4.3 Industrial Biotechnology

4.3.1 Food Processing Biotechnology: Biotechnology-enabled food processing and value addition to enhance food security, reduce post-harvest losses, and increase farmer incomes will be emphasized. Biotechnology applications in food preservation, fermentation technologies, nutraceuticals, functional foods, and quality assurance systems shall be encouraged. Special focus shall be given to value-added processing of local fruits, spices, medicinal plants, and organic agricultural produce. Food testing laboratories, cold-chain infrastructure, and entrepreneurship development programs shall be strengthened to support agro-based industries and rural enterprises.

4.3.2 Sericulture Biotechnology: The State shall promote biotechnology interventions for the modernization and sustainable growth of the sericulture sector, particularly eri and muga silk production. Research and development activities shall focus on disease-resistant silkworm breeds, molecular breeding, tissue culture of host plants, and improved rearing technologies. Farmers training programs shall be established to improve silk productivity, quality, and livelihood opportunities for sericulture farmers and traditional weaving communities in the Biotechnology clusters/ Biotech hubs.

4.4 Environmental and Sustainability

4.4.1 Environmental Biotechnology: The Government shall encourage biotechnology-based solutions for environmental protection, climate resilience, pollution control, and sustainable resource management. Priority shall be given to bioremediation technologies, wastewater treatment, solid waste management, waste-to-energy systems, and bio-based alternatives to environmentally harmful materials. The policy shall also support research in carbon sequestration, biosensors, microbial waste treatment, and circular bio-economy initiatives to promote ecological sustainability and climate-adaptive development across the State.

4.4.2 Bio-Energy and Biofuel Technology: The Policy shall promote biotechnology-driven bioenergy and renewable energy solutions tailored to the hilly terrain and rural landscape of Meghalaya through decentralized biogas plants, bio-methanation systems, biochar production units, biomass gasification, bamboo-based bioenergy, and waste-to-energy initiatives utilizing agricultural residues, livestock waste, forest biomass, and municipal organic waste. The policy shall encourage community-based and small-scale renewable energy systems for rural

electrification, clean cooking fuel, and sustainable waste management while supporting research, innovation, startups, and public-private partnerships in advanced biofuels, microbial technologies, algal bioenergy, and carbon capture solutions.

4.4.3 Bio-Resources Conservation: The policy shall prioritize the conservation, sustainable utilization, and scientific management of Meghalaya's rich biodiversity and biological resources. The Government shall strengthen biodiversity documentation, gene banks, conservation centers, and community-based conservation initiatives for medicinal plants, endemic species, and indigenous genetic resources. Both *in situ* and *ex situ* conservation approaches shall be promoted while ensuring ecological sustainability and equitable access to biological resources in accordance with national biodiversity regulations.

4.5 Biotechnology Education, bioinformatics and Innovation

4.5.1 R&D and Innovation Support: The policy shall also prioritize research, development, innovation, and entrepreneurship among biotechnology graduates and postgraduates through structured R&D support to strengthen the bio-innovation ecosystem. This shall include fellowships, seed grants, and research funding to encourage innovative, application-oriented projects in key areas such as medical, agricultural, industrial, and environmental biotechnology. Support shall be provided through incubation centres, innovation hubs, and bio-entrepreneurship cells in academic institutions to enable idea development, prototyping, and proof-of-concept studies. Entrepreneurship shall be encouraged through mentorship, skill development, and capacity-building programs to translate research into viable biotech startups. Strong industry-academia linkages shall be promoted to facilitate internships, collaborative research, and commercialization opportunities, along with access to shared advanced research infrastructure. Further, support shall be extended for intellectual property rights protection, patent filing, and technology transfer, complemented by recognition mechanisms and incentives to foster excellence and promote biotechnology-driven economic growth.

5. POLICY IMPLEMENTATION

5.1 Meghalaya State Biotechnology Council (MSBTC): The Government of Meghalaya shall establish the **Meghalaya State Biotechnology Council (MSBTC)** as the apex institutional body responsible for the effective implementation, coordination, and oversight of the Meghalaya State Biotechnology Policy. The Council shall:

- ✓ Formulate strategic frameworks and ensure alignment of State biotechnology initiatives with relevant national programmes and policies.
- ✓ Evaluate and scrutinize the scientific, technological, industrial, and commercial viability and suitability of projects and proposals proposed for implementation in Meghalaya.
- ✓ Receive financial allocations (**Biotechnology Development Fund**) under the State Budget to support its mandates, programmes, and operational activities.
- ✓ Function as the nodal authority for the implementation and monitoring of all provisions under the Meghalaya State Biotechnology Policy. It shall oversee regulatory applications, biosafety compliance, and ethical research practices.
- ✓ Serve as the final authority on all matters relating to the interpretation, clarification, and application of the provisions of this Policy.

5.2 Biotechnology Development Board: A Biotechnology Development Board shall be constituted under the chairmanship of the Chief Secretary and the Principal Secretary/ Commissioner & Secretary, Planning Investment Promotion & Sustainable Development Department, Government of Meghalaya will be the Member-Secretary and shall be the CEO of the MSBTC. Other members of the Board shall be as follows:

- a) Secretary, Agriculture & Farmers' Welfare Department
- b) Secretary, Department of Commerce & Industries, Government of Meghalaya
- c) Secretary, Department of Law, Government of Meghalaya
- d) Secretary, Finance Department, Government of Meghalaya
- e) Secretary, Education Department, Government of Meghalaya
- f) Secretary Revenue Department, Government of Meghalaya
- g) Secretary, Health & Family Welfare Department, Government of Meghalaya

5.3 Executive Committee: The MSBTC shall be supported by the Executive Committee to review and monitor the execution of the policy objectives. The executive committee shall have the power to recommend disbursement of various incentives under this policy to the apex committee.

- | | |
|--|----------------|
| 1. Commissioner & Secretary, Planning Investment Promotion & Sustainable Development Department & CEO, MSBTC | -Chairperson |
| 2. Director, Agriculture & Farmers' Welfare Department, GOM. | -Member |
| 3. Secretary, Finance Dept., GOM | - Member |
| 4. Secretary, Education Dept., GOM | - Member |
| 5. Director, Power Department, GOM | - Member |
| 6. Director, Revenue Department, GOM | - Member |
| 7. Director, Commerce & Industries Department, GOM | - Member |
| 8. Project Director, Science & Technology Cell, PIP& SD Department, GOM | - Member Secy. |

5.4 BIOSAFETY & ETHICS COMMITTEE

The Biosafety and Ethics committee will oversee biosafety, biosecurity, environmental, social, and ethical aspects of biotechnology research, development, testing, production, and commercialization in the State, and to ensure compliance with applicable national and state laws, guidelines, and standards.

- | | |
|--|-----------------------|
| 1. Commissioner & Secretary,
Health & Family Welfare, Government of Meghalaya | -Chairman |
| 2. Director of Health Services (Research), Health & Family Welfare,
Government of Meghalaya | -Member |
| 3. Director, Indian Institute of Management, Shillong | -Member |
| 4. Director, Directorate of Research, Training & Technology Induction,
Shillong | -Member |
| 5. Director, Department of Commerce & Industries, Government of
Meghalaya | -Member |
| 6. Director, National Institute of Technology, Shillong | -Member |
| 7. Representative from Department of Law, Govt. of Meghalaya | -Member |
| 8. Director, Bio-Resources Development Centre | -Member-
Secretary |

5.5 REGULATORY COMMITTEES

The regulatory committees for the Bio E3Cell and Biotechnology Development Cell shall be empowered to review, approve, monitor, inspect, advise upon, or regulate biotechnology and biomanufacturing related activities in accordance with applicable laws, regulations, guidelines, and standards.

5.5.1 Bio-E3 Cell

5.5.1.1 Advisory Board: Provides strategic oversight, policy advocacy, and risk management.

5.5.1.2 BioE3 Steering Committee: Provides strategic oversight for biomanufacturing initiatives and ensures alignment with national directions.

BioE3 Steering Committee & Governance Experts

- ✓ Chairperson (Advisory Board).
- ✓ Nodal Officer (Project Director S&T Cell).
- ✓ Representative from Central Agencies (DBT, BIRAC, DST).
- ✓ Central and State Government Representatives.
- ✓ Academic and Research Experts.
- ✓ Legal and Financial Experts.

5.5.1.3 District-Level Biotechnology Committees (DLBCs): Facilitate grassroots implementation and community engagement to be headed by Deputy Commissioners.

5.5.2 Biotechnology Development Cell

5.5.2.1 Advisory Committee

The Advisory Committee shall provide guidance, monitoring, and support for biotechnology-related activities within the institution, organization, or government body. It shall advise on biotechnology policies, research priorities, and development strategies, while ensuring alignment of biotechnology programmes with national and international standards. The Committee shall encourage innovative research projects, review research proposals and development initiatives, suggest funding priorities, and assess their technical feasibility. It shall also advise on biosafety, ethical practices, and compliance with biotechnology regulations, and recommend training programmes, workshops, seminars, and skill-development activities for students and researchers. In addition, the Committee shall promote collaboration among universities, research institutes, industries, and government agencies, while encouraging technology transfer and the commercialization of biotechnology products.

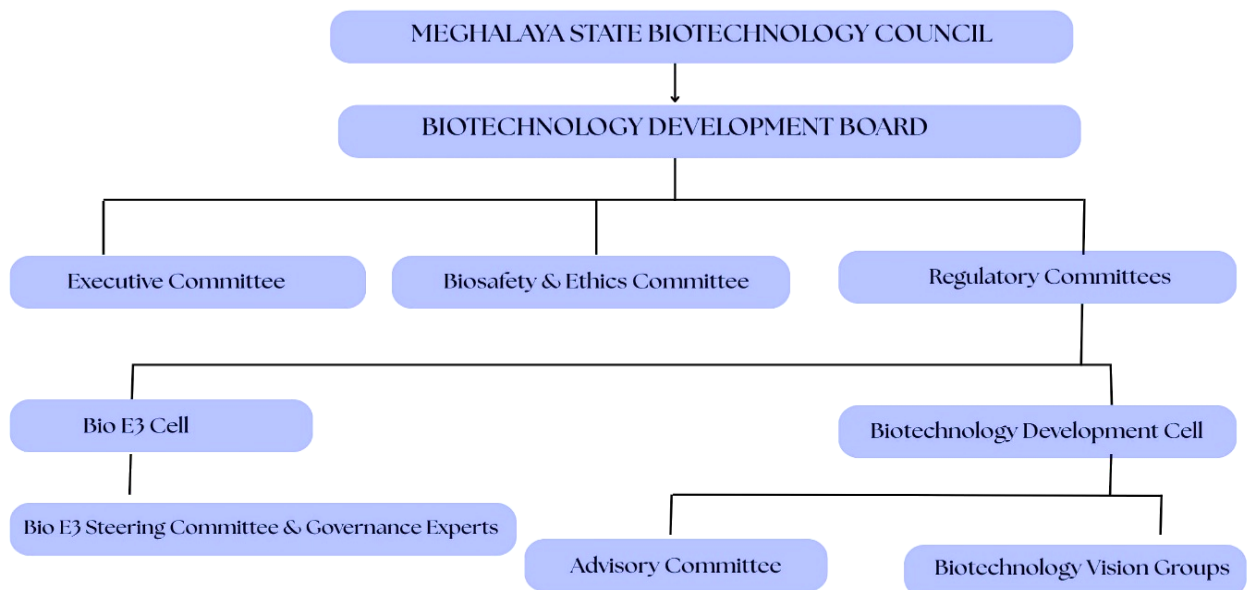
The members of the Advisory Committee shall be subject matter experts drawn from Research and Academic Institutions of the state and Central Institutions such as DBT, DST.

5.5.2.2 Biotechnology Vision Groups

Specialized domains include: Bio-agriculture, Healthcare Biotechnology, Industrial Biotechnology, and Circular Bioeconomy.

Members include relevant technical experts and techno-commercial specialists from non-conflicting organizations.

5.6 Operational Framework.



6. DEFINITIONS

6.1 **“Biotechnology”** shall mean the application of science and technology to living organisms, as well as parts, products, and models thereof, to alter living or non-living materials for the production of knowledge, goods, and services, as defined or modified from time to time by the Department of Biotechnology, Government of India or its authorized agencies.

6.2 **“Biotechnology Product”** shall mean any product, process, or technology developed using biological systems, organisms, or their derivatives for applications in agriculture, healthcare, environment, or industry.

This shall include a wide range of products derived from microbial applications, fermentation processes, molecular biology, genomics, bioinformatics, nutraceuticals, herbal and medicinal plant-based products, enzymatic processes, probiotics, biodegradable materials, biofuels and other emerging biotechnology domains, including those relevant to sustainable agriculture, waste management, and bio-resource valorization.

Any product or technology based on emerging areas or not explicitly covered may be considered eligible based on recommendations of the Technical Advisory Committee constituted by the Government.

6.3 **Biotechnology Unit:** A “Biotechnology Unit” shall mean any enterprise or institution engaged in the production of biotechnology products or provision of biotechnology-based services, including research, development, testing, training, and field-level implementation.

Such units may include start-ups, MSMEs, research institutions, cooperatives, or other legally recognized entities operating within the State of Meghalaya.

6.4 **Expansion and Diversification:** “Expansion” or “Diversification” shall mean additional investment made by an existing biotechnology unit for increasing production capacity, improving service delivery, or introducing new biotechnology products, technologies, or services, including forward or backward linkages, within the State.

6.5 **Existing Biotechnology Unit:** An “Existing Biotechnology Unit” shall mean a biotechnology enterprise or institution that is operational within the State prior to the notification of this Policy and is engaged in biotechnology-related production, services,

or field-level activities.

- 6.6 **Eligible Unit:** An “Eligible Unit” shall mean any biotechnology unit undertaking new investment, or an existing unit undertaking expansion or diversification, in the areas of biotechnology products, services, or infrastructure within the State, and complying with the provisions of this Policy and relevant State policies including MIIPP 2024.
- 6.7 **Bio-Manufacturing unit”** A biomanufacturing unit is a facility or system where biological processes are used to produce products at scale. It is biological production facility that converts raw materials into valuable products using living organisms or their components.
- 6.8 **Biotechnology Park:** A biotechnology park is a specialized area or a planned hub that provides infrastructure and a supportive environment for biotech research, innovation, and industrial development. It will facilitate collaboration between industry, academia, and government; support commercialization of biotech products, encourage innovation and entrepreneurship. “Biotechnology Park” shall mean a designated area developed by the Government or through public-private partnership for promoting biotechnology research, innovation, incubation, and industrial activities, equipped with necessary infrastructure such as laboratories, pilot-scale facilities, common utilities, and support services.

The Biotechnology Park shall function as a hub for start-ups, enterprises, and research institutions engaged in biotechnology and bio-based industries.

- 6.9 **“Biotech clusters”:** A biotech cluster is a concentration of biotechnology-related Institutions in a specific geographic area that interact and collaborate to drive innovation and production.
- 6.10 **“Ecosystem Strengthening Projects”** shall include initiatives aimed at developing enabling infrastructure and institutional capacity for biotechnology in the State, including establishment of common facilities, testing and certification laboratories, incubation centres, training facilities, and pilot-scale production units.

This shall also include the development of a Biotechnology Park, shared infrastructure facilities, and other support systems required to promote research, innovation, and industrial growth in the biotechnology sector.

- 6.11 **“BioE3 Cell”** shall mean a dedicated institutional mechanism established under the Bio-

Resources Development Centre or any other designated agency of the Government of Meghalaya to promote biotechnology-based economic development, environmental sustainability, and employment generation in alignment with national BioE3 objectives.

The BioE3 Cell shall facilitate biomanufacturing, technology transfer, commercialization, and coordination among stakeholders, including government departments, research institutions, and industry.

- 6.12 Eligible Applicant: Eligible Applicant” shall include biotechnology units, start-ups, research institutions, government agencies, cooperatives, public sector undertakings, and special purpose vehicles undertaking projects under this Policy. Institutions shall include universities, colleges, and research organizations recognized by statutory authorities and engaged in biotechnology-related activities.
- 6.13 Plant, Machinery & Equipment: shall mean equipment and systems required for biotechnology production, processing, and service delivery, including laboratory equipment, fermentation units, tissue culture facilities, bio-processing systems, and associated installations. It shall also include equipment for waste management, pollution control, renewable energy use, and other support infrastructure necessary for sustainable biotechnology operations.

7. POLICY IMPLEMENTATION GUIDELINES

The **Planning, Promotion, Investment and Sustainable Development Department** will issue a state-level biomanufacturing roadmap and detailed implementation guidelines. These guidelines will align local priorities with national frameworks to achieve the goals and objectives of this Policy.

7.1 Power to Amend the Policy

Notwithstanding anything contained in the foregoing paragraphs, the Government of Meghalaya holds the right to review, monitor, and amend various aspects of the Policy from time to time to ensure it remains responsive to local needs and national directions.

7.2 Operative Period of Policy

1. This Policy, titled the **Meghalaya Biotechnology 2025**, shall come into force for the period **2025**. It remains aligned with the broader **MIIPP 2024**, which is valid until further revision. Only those units which are approved or registered during the operative period-including new industrial units and existing units undertaking expansion or modernization-shall be eligible for the incentives outlined herein.
2. This policy is issued to facilitate synergy with the National Biotechnology Development Strategy and the BioE3 Policy to ensure sustainable economic growth and environmental responsibility.
3. The Government reserves the right to withhold disbursements and recover assistance with interest if a unit:
 - a. Carries out unauthorized changes in facility use outside of the biotechnology sector.
 - b. Discontinues operations for which the assistance was granted.
 - c. Violates biosafety standards, ethical research conduct, or other notified terms.

8. FISCAL INCENTIVES AND CONCESSIONS

The State shall leverage its biotechnology strengths through a robust incentive framework under the Meghalaya Industrial Investment Promotion Policy (MIIPP) 2024, offering capital investment subsidies, power tariff concessions, and interest subvention. Furthermore, the Invest Meghalaya Authority provides a single-window platform to streamline regulatory processes and facilitate investor handholding. Strategic interventions will prioritize projects of state relevance, including those in bio-agriculture, healthcare biotechnology, and circular bioeconomy, to establish Meghalaya as a regional leader in sustainable biotechnology innovation.

Incentives/subsidies and reimbursement will be granted to the following sectors with identified units under biomanufacturing sector and identified institutions under Biotechnology R&D sector in line with the Meghalaya Industrial and Investment Promotion policy, 2024. Incentives under this Policy may be in addition to those from central Institutions like Department of Biotechnology (DBT), Department of Science & Technology (DST), Biotechnology Industry Research Assistance Council (BIRAC), or other similar Institutions, provided the total incentives do not exceed the actual expenditure limits defined by the State Government.

a. Biotechnology Research & Development

Identified institutions: Biotechnology Park, Biotechnology Clusters and Biotech Hubs

- b. Biomanufacturing & Biofoundries:** Prioritized biomanufacturing units (Biotechnology startups and Biofoundries set up for biomanufacturing in identified thrust areas under MBP, 2025), non-prioritized biomanufacturing units (Biotechnology startups and Biofoundries set up for biomanufacturing in other areas not identified as thrust areas under the MBP, 2025).

8.1 INCENTIVES/SUBSIDIES AND REIMBURSEMENT FOR BIOTECHNOLOGY PARK AND BIOFOUNDRIES.

Large Projects play a pivotal role in the development of the overall biotechnology ecosystem in Meghalaya. Beyond generating significant revenue for the State and creating high-value local employment, these projects are essential for introducing high-end technologies and fostering a culture of innovation. They further stimulate the growth of ancillary industries, creating a multiplier effect on employment, revenue, and the State's overall economic resilience.

The State shall support Biotechnology Units focused on developing innovative products or services based on emerging technologies, substituting imports, and addressing challenging areas of strategic importance. Support is prioritized for projects with a well-established Proof-

of-Principle leading to solutions of state relevance and high commercial potential-rather than basic exploratory research. These projects may be undertaken independently or in collaboration with academic partners.

8.1.1 Land Allotment and Lease for Biotechnology Enterprises

- a. To enable the establishment of Biotechnology Parks, Bio-incubators and Bio-foundries in the State, land and sheds for such facilities shall be allotted on lease in Industrial Estates, Industrial Areas, Industrial Parks, the Export Promotion Industrial Park and Industrial Growth Centres developed or assisted by the State Government, in accordance with the *Standard Operating Procedures for Allotment of Land/Shed in the Industrial Parks* notified by the Commerce & Industries Department vide Notification No. IND.33/2020/42 (Gazette of Meghalaya, Part-IIA, 5 May 2022), as amended from time to time, and the Lease Agreement formats at Annexures F and G thereof.
- b. The promoter or implementing agency shall apply to the Director of Commerce & Industries, and the proposal shall be considered by the Land Allotment Committee on the technical recommendation of the Bio-Resources Development Centre. The provisions of the SOP and the Lease Agreement on the term of lease (30 years for land and 7 years for sheds, renewable), security deposit, processing fee, ground and shed rent, commencement of operations, mortgage to financial institutions, cancellation and relinquishment shall apply to such facilities.
- c. Where the area required for a Biotechnology Park exceeds the limits prescribed in the SOP, or where land is to be allotted on special terms, the State Government may allot land by specific direction or Memorandum of Understanding, which shall prevail over the SOP. Considering that these facilities are intended to host startups, researchers and member enterprises, the Government may, with the approval of the Commerce & Industries Department, permit the allottee to sub-lease built space, laboratories, shared equipment and plots to incubatees and tenant units on terms to be notified, notwithstanding the general restriction on sub-letting in the Lease Agreement.
- d. The land so allotted shall be used only for the approved biotechnology purpose, and the allottee shall obtain all statutory clearances, including Consent to Establish and Consent to Operate from the Meghalaya State Pollution Control Board and applicable biosafety approvals.

8.1.2 State Capital Investment Incentives

- i. Biotechnology Park and biofoundries will be provided capital investment support subject to a maximum ceiling of ₹50 crore for establishment and infrastructure development.
- ii. The incentives further include a 30% capital subsidy on expenditure incurred towards procurement and installation of plant and machinery, along with a 30% subsidy on the construction of buildings and development of other essential physical infrastructure and fixed assets required for operationalization of the Biotechnology Park.

8.1.3 State Interest Subvention incentives

- i. Biotechnology Park and biofoundries may avail interest subvention support at the rate of 5% per annum for a period of seven consecutive years on loans obtained for project implementation and R&D activities.
- ii. The incentive shall be applicable on term loans availed from Scheduled Commercial Banks or financial institutions registered under the Reserve Bank of India (RBI).
- iii. In cases where the Biotechnology Park is eligible to claim capital interest subvention benefits under the UNNATI Scheme of the Government of India, the State incentive shall be limited to the differential amount between the benefits provided under the two incentive frameworks.

8.1.4 State goods and service tax reimbursement

- i. Biotech Park and biofoundries may avail 100% reimbursement of the net SGST paid for a maximum period of 15 years from the date of commencement of commercial operations, subject to a ceiling of 150% of the eligible investment made in plant and machinery for the biomanufacturing sector or in buildings and other physical assets for the Biotechnology R&D sector.
- ii. The incentive disbursed in a single financial year shall be restricted to one-tenth of the total eligible incentive amount, subject to full payment of SGST as reflected in the returns filed for the respective financial year.
- iii. In cases where the SGST paid by a new unit exceeds one-tenth of the eligible incentive amount, the remaining balance shall be carried forward to subsequent financial years.
- iv. Further, if a new unit is unable to claim the eligible incentive during the initial three years, the unclaimed amount may be carried forward to subsequent years, provided that the claim period does not exceed the prescribed duration of 15 years and 10 years, respectively, as specified under Clauses 1.2.1 and 1.2.2.

8.1.5 Green Subsidy

- i. Biotechnology Park and biofoundries may avail a subsidy of 50% on the cost incurred for installation of rainwater harvesting systems, subject to a maximum limit of ₹10 lakh.
- ii. Eligible institutions will be provided a reimbursement of 75% of the expenditure incurred towards conducting a water audit, limited to ₹1 lakh, provided that the audit results in at least 25% reduction in water consumption.
- iii. In addition, a subsidy of 50% may be granted for the installation of wastewater recycling facilities, subject to a maximum ceiling of ₹15 lakh. A further subsidy of 50% may also be provided for installation of zero discharge facilities, with a maximum admissible limit of ₹10 lakh.

8.1.6 Subsidy on power

- i. Biotechnology Park and biofoundries may avail a subsidy of 50% on the cost incurred towards procurement and installation of power generating sets, including conventional as well as non-conventional or renewable energy systems for captive use.
- ii. The subsidy shall be subject to a maximum ceiling of ₹50 lakh for conventional power generating sets and ₹1 crore for non-conventional or renewable energy-based power systems.

8.1.7 Employee-related return reimbursement

- i. Biotechnology Park and biofoundries may avail reimbursement support for employees who are domiciles of Meghalaya for a period of three years from the date of commencement of operations, with an additional one-year reimbursement benefit applicable for women employees.
- ii. The reimbursement shall be limited to 12% of the employee's basic salary along with applicable dearness allowance and retaining allowance, or ₹1,800 per month, whichever is lower.

8.1.8 Customized packaged of incentives

- i. Biotechnology Park and biofoundries with a minimum investment of ₹100 crore may be considered eligible for special incentive support.
- ii. Proposals seeking customized incentive packages shall be subject to evaluation and approval by the High-Powered Committee of the Government of Meghalaya (GoM).

8.1.9 Procurement Preferences

- i. All procurement processes related to Biotechnology Park and eligible biofoundries and units shall be carried out in accordance with the provisions and guidelines prescribed under the General Financial Rules (GFR), 2017.

8.1.10 Intellectual Property Rights and Patent Assistance

- i. Biotechnology Park and Biofoundries shall be eligible for reimbursement of 75% of expenses incurred for filing domestic patents, subject to a maximum limit of ₹5 lakh per patent.
- ii. For international patent filing, eligible entities may receive reimbursement of 50% of the expenditure incurred, subject to a ceiling of ₹10 lakh per patent.
- iii. The assistance shall cover expenses related to patent filing fees, attorney charges, documentation charges, technical consultancy, and other statutory expenses associated with patent registration.
- iv. Additional support may be provided for patents related to bioresources, indigenous technologies, sustainable biomanufacturing, climate-resilient technologies, and innovations of strategic importance to the State.
- v. Any access, utilization, research, commercialization, or patenting involving biological resources and associated traditional knowledge shall comply with the provisions of the Biological Diversity Act, 2002, the Rules framed thereunder, and regulations issued by the National Biodiversity Authority and the Meghalaya State Biodiversity Board.
- vi. Benefit sharing arising from commercialization, intellectual property rights, technology transfer, or utilization of biological resources and associated traditional knowledge shall be undertaken in a fair and equitable manner with local communities, knowledge holders, and concerned stakeholders as per applicable laws and guidelines.
- vii. Intellectual Property Rights generated through Government-supported biotechnology projects may be governed through mutually agreed terms between the concerned institutions, funding agencies, innovators, and the Government of Meghalaya subject to prevailing laws and policy provisions.
- viii. The incentive shall be released after successful filing or grant of the patent, subject to submission of valid supporting documents and approval by the competent authority.

8.2 INCENTIVES/SUBSIDIES AND REIMBURSEMENT FOR BIOTECHNOLOGY CLUSTERS/ BIOTECH HUBS

The establishment of Biotechnology Clusters and Biotech Hubs in Meghalaya can be supported through a combination of central government biotechnology schemes, state industrial incentives, startup support mechanisms, and infrastructure development assistance. Given Meghalaya's rich biodiversity, agro-climatic advantages, medicinal plant resources, organic farming potential, and strategic location in Northeast India, biotechnology hubs can serve as centers for bioresource utilization, biopharmaceutical research, agricultural biotechnology, biofertilizers, biopesticides, food processing biotechnology, and bioeconomy development.

8.2.1 State Capital Investment Incentives

a Large Biotechnology Clusters/ Hubs

- i. Large Units may avail capital investment support subject to a maximum ceiling of ₹15 crore. The incentives further include a 30% subsidy on the investment incurred towards procurement and installation of plant and machinery.
- ii. In addition, a 30% subsidy on expenditure incurred for construction of buildings and development of other essential physical infrastructure and fixed assets shall be provided.

b Medium Biotechnology Clusters/ Hubs

- i. Medium Units may avail capital investment support subject to a maximum ceiling of ₹8 crore. The eligible clusters will be provided a 30% subsidy on the cost incurred towards procurement and installation of plant and machinery.
- ii. In addition, a 30% subsidy for construction of buildings and establishment of other required physical infrastructure and fixed assets shall be provided.

8.2.2 State Interest Subvention incentives

- i. Both medium and large Units may avail interest subvention support at the rate of 5% per annum for a period of seven consecutive years on loans obtained for project implementation.
- ii. The incentive shall be applicable on term loans availed from Scheduled Commercial Banks or financial institutions registered under the Reserve Bank of India (RBI).

- iii. In cases where the unit is eligible to claim capital interest subvention benefits under the UNNATI Scheme of the Government of India, the State incentive shall be restricted to the differential amount between the benefits available under the two incentive frameworks.

8.2.3 State goods and service tax reimbursement

- i. Both medium and large units may avail 100% reimbursement of the net SGST paid for a maximum period of 15 years from the date of commencement of commercial operations, subject to a ceiling of 150% of the eligible investment made in plant and machinery for the manufacturing sector or in buildings and other physical assets for the service sector.
- ii. The incentive disbursed in a single financial year shall be restricted to one-tenth of the total eligible incentive amount, subject to full payment of SGST as reflected in the returns filed for the respective financial year.
- iii. In cases where the SGST paid by a new unit exceeds one-tenth of the eligible incentive amount, the remaining balance shall be carried forward to subsequent financial years.
- iv. Further, if a new unit is unable to claim the eligible incentive during the initial three years, the unclaimed amount may be carried forward to subsequent years, provided that the claim period does not exceed 15 years for large units and 10 years for medium units, respectively, as prescribed under the relevant provisions of the Policy.
- v. In cases where SGST reimbursement is availed under the UNNATI Scheme or any other scheme of the Government of India, the unit shall be eligible to claim only the balance net SGST amount applicable under the State incentive framework for both priority and non-priority sectors.

8.2.4 Green Subsidy

- i. Both medium and large units may avail a subsidy of 50% on the cost incurred for installation of rainwater harvesting systems, subject to a maximum limit of ₹10 lakh.
- ii. The incentives further provide reimbursement of 75% of the expenditure incurred towards conducting a water audit, limited to ₹1 lakh, provided that the audit results in at least 25% reduction in water consumption.
- iii. In addition, a subsidy of 50% may be granted for installation of wastewater recycling facilities, subject to a maximum ceiling of ₹15 lakh for large units and ₹5 lakh for medium units.

- iv. A further subsidy of 50% may also be provided for installation of zero discharge facilities, with a maximum admissible limit of ₹10 lakh for large units and ₹5 lakh for medium units.

8.2.5 Subsidy on power

- i. Large and Medium Units may avail a subsidy of 50% on the cost incurred towards procurement and installation of power generating sets, including conventional as well as non-conventional or renewable energy systems for captive use.
- ii. The subsidy shall be subject to a maximum ceiling of ₹50 lakh for conventional power generating sets and ₹1 crore for non-conventional or renewable energy-based power systems.

8.2.6 Employee-related return reimbursement

- i. Large and Medium Units may avail reimbursement support for employees who are domiciles of Meghalaya for a period of three years from the date of commencement of operations, with an additional one-year reimbursement benefit applicable for women employees.
- ii. The reimbursement shall be limited to 12% of the employee's basic salary along with applicable dearness allowance and retaining allowance, or ₹1,800 per month, whichever is lower.

8.2.7 Customized packaged of incentives

- i. Large and medium units with a minimum investment of ₹100 crore may be considered for special incentive support.
- ii. Proposals seeking customized packages of incentives shall be subject to evaluation and approval by the High-Powered Committee of the Government of Meghalaya (GoM).

8.2.8 Procurement Preferences

- i. All procurement processes related to Biotechnology Clusters shall be carried out in accordance with the provisions and guidelines prescribed under the General Financial Rules (GFR), 2017.

8.2.9 Intellectual Property Rights and Patent Assistance

- i. Biotechnology Clusters established in Meghalaya shall be eligible for reimbursement of 60% of expenses incurred for domestic patent filing, subject to a maximum limit of ₹7 lakh per patent.

- ii. For international patent filing, eligible Biotechnology Clusters may receive reimbursement of 40% of the expenditure incurred, subject to a ceiling of ₹15 lakh per patent.
- iii. The assistance shall cover expenses related to patent filing fees, legal charges, technical documentation, consultancy services, and statutory registration expenses.
- iv. Any access, utilization, research, commercialization, or patenting involving biological resources and associated traditional knowledge shall comply with the provisions of the Biological Diversity Act, 2002, the Rules framed thereunder, and regulations issued by the National Biodiversity Authority and the Meghalaya State Biodiversity Board.
- v. Benefit sharing arising from commercialization, intellectual property rights, technology transfer, or utilization of biological resources and associated traditional knowledge shall be undertaken in a fair and equitable manner with local communities, knowledge holders, and concerned stakeholders as per applicable laws and guidelines.
- vi. Intellectual Property Rights generated through Government-supported biotechnology projects may be governed through mutually agreed terms between the concerned institutions, funding agencies, innovators, and the Government of Meghalaya subject to prevailing laws and policy provisions.
- vii. The incentive shall be released subject to submission of valid supporting documents and approval by the competent authority.

8.3 INCENTIVES/SUBSIDIES AND REIMBURSEMENT FOR BIOTECHNOLOGY STARTUPS

The role of Medium and Small-scale Biotechnology (BT) units is significant in Meghalaya's biotechnology sector, not only in realizing potential opportunities but also in attracting diverse talent to the State. Owing to the strategic distribution of BT units across the State's varied agro-climatic zones, a slew of incentives is introduced under the Meghalaya Industrial Investment Promotion Policy (MIIPP) 2024 to encourage and strengthen the biotechnology ecosystem. Recognizing the diverse requirements of establishments within the biotechnology sector and their vital contribution toward bioeconomy and socio-economic growth, the State offers a flexible incentive structure.

Eligible BT units have the option to avail themselves of incentives under the overall framework of Capital and Operational categories as outlined in this policy and the MIIPP, 2024.

8.3.1 State Capital Investment Incentives

- a. Both Prioritized (PBU) and non- prioritized Biomanufacturing Units (NPBU) may avail capital investment support subject to a maximum ceiling of ₹10 crore for PBU and ₹8 crore for NPBU.
- b. The incentives further include a 30% subsidy on the investment incurred towards procurement and installation of plant and machinery, along with a 30% subsidy on expenditure incurred for construction of buildings and development of other essential physical infrastructure and fixed assets.

8.3.2 State Interest Subvention incentives

- i. Both PBU and NPBU may avail interest subvention support at the rate of 5% per annum for PBU and 4% per annum for NPBU for a period of seven consecutive years on loans obtained for project implementation.
- ii. The incentive shall be applicable on term loans availed from Scheduled Commercial Banks or financial institutions registered under the Reserve Bank of India (RBI).
- iii. In cases where the unit is eligible to claim capital interest subvention benefits under the UNNATI Scheme of the Government of India, the State incentive shall be restricted to the differential amount between the benefits available under the two incentive frameworks.

8.3.3 State goods and service tax reimbursement

- i. Both PBU and NPBU may avail 100% reimbursement of the net SGST paid for a maximum period of 15 years for PBU and 10 years for NPBU from the date of commencement of commercial operations, subject to a ceiling of 150% of the eligible investment made in plant and machinery for the manufacturing sector or in buildings and other physical assets for the service sector.
- ii. The incentive disbursed in a single financial year shall be restricted to one-tenth of the total eligible incentive amount, subject to full payment of SGST as reflected in the returns filed for the respective financial year.
- iii. In cases where the SGST paid by a new unit exceeds one-tenth of the eligible incentive amount, the remaining balance shall be carried forward to subsequent financial years.

- iv. Further, if a new unit is unable to claim the eligible incentive during the initial three years, the unclaimed amount may be carried forward to subsequent years, provided that the claim period does not exceed the prescribed duration under the relevant provisions of the Policy.
- v. In cases where SGST reimbursement is availed under the UNNATI Scheme or any other scheme of the Government of India, the unit shall be eligible to claim only the balance net SGST amount applicable under the State incentive framework for both prioritized and non-prioritized sectors.

8.3.4 Transportation Subsidy

- i. Both PBU and NPBU may avail transportation subsidy support subject to a maximum limit of ₹15 lakh per annum for PBU and ₹10 lakh per annum for a period of four years for PBU and three years for NPBU.

8.3.5 Green Subsidy

- i. Both Prioritized and non-prioritized biomanufacturing Units may avail a subsidy of 50% on the cost incurred for installation of rainwater harvesting systems, subject to a maximum ceiling of ₹2 lakh.
- ii. The incentives further provide reimbursement of 75% of the expenditure incurred towards conducting a water audit, limited to ₹1 lakh, provided that the audit results in at least 25% reduction in water consumption.

8.3.6 Subsidy on power

- i. Prioritized Biomanufacturing Units may avail a subsidy of 50% on the cost incurred towards procurement and installation of power generating sets, including conventional as well as non-conventional or renewable energy systems for captive use.
- ii. The subsidy shall be subject to a maximum ceiling of ₹10 lakh for conventional power generating sets and ₹25 lakh for non-conventional or renewable energy-based systems.
- iii. In addition, reimbursement of 100% of the expenditure incurred towards drawl of 11 KV and above power lines, including the cost of transformers, may be provided subject to a maximum ceiling of ₹10 lakh.
- iv. No power subsidy incentives shall be applicable for Non-Prioritized Biomanufacturing Units under the Policy.

8.3.6 Employee-related return reimbursement

- i. Both PBU and NPBU may avail reimbursement support for employees who are domiciles of Meghalaya for a period of three years from the date of commencement of operations, with an additional one-year reimbursement benefit applicable for women employees.
- ii. The reimbursement shall be limited to 12% of the employee's basic salary along with applicable dearness allowance and retaining allowance, or ₹1,800 per month, whichever is lower.

8.3.7 Customized packaged of incentives

- i. Both Prioritized and non-prioritized biomanufacturing Units with a minimum investment of ₹100 crore may be considered for special incentive support.
- ii. Proposals seeking customized packages of incentives shall be subject to evaluation and approval by the Executive Committee of the Meghalaya State Biotechnology Council

8.3.8 Procurement Preferences

- i. All procurement processes related to Biotechnology Clusters shall be carried out in accordance with the provisions and guidelines prescribed under the MSME Procurement Preferences Policy, 2020 for micro and small enterprises.

8.3.9 Market Development Support for Biotech Start-ups: This incentive is applicable only to eligible biotechnology startups registered under identified Prioritized thrust areas

- i. Prioritized Biotech Start-ups established in Meghalaya shall be provided financial assistance of up to 75% of the expenditure incurred for participation in national and international exhibitions, trade fairs, buyer-seller meets, technology expos, and business development events, subject to a maximum limit of ₹10 lakh per start-up per year.
- ii. The assistance may cover expenses related to stall rental, product display, branding and publicity materials, transportation of exhibits, registration fees, and travel support for official representatives.
- iii. Biotech Start-ups may also receive support for product certification, quality testing, packaging development, market linkage creation, export facilitation, digital marketing, and commercialization activities.
- iv. Special preference may be accorded to start-ups engaged in bioresource-based products, sustainable biomanufacturing, healthcare biotechnology, organic

agriculture inputs, environmental biotechnology, bamboo biotechnology, and indigenous technology innovations.

- v. The Government may facilitate networking opportunities with investors, industry bodies, venture capital firms, research institutions, and national and international market platforms to strengthen market access for biotechnology products and services developed in Meghalaya.
- vi. The assistance shall be released subject to submission of valid expenditure documents and approval by the competent authority.

8.3.10 Intellectual Property Rights and Patent Assistance

- i. Eligible Biotech Start-ups shall receive reimbursement of 80% of expenses incurred for domestic patent filing, subject to a maximum limit of ₹3 lakh per patent.
- ii. For international patent filing, Biotech Start-ups may receive reimbursement support up to 50% of the expenditure incurred, subject to a ceiling of ₹7 lakh per patent.
- iii. The assistance shall include support for patent filing fees, attorney charges, technical consultancy, documentation preparation, and other statutory expenses related to intellectual property protection.
- iv. Any access, utilization, research, commercialization, or patenting involving biological resources and associated traditional knowledge shall comply with the provisions of the Biological Diversity Act, 2002, the Rules framed thereunder, and regulations issued by the National Biodiversity Authority and the Meghalaya State Biodiversity Board.
- v. Benefit sharing arising from commercialization, intellectual property rights, technology transfer, or utilization of biological resources and associated traditional knowledge shall be undertaken in a fair and equitable manner with local communities, knowledge holders, and concerned stakeholders as per applicable laws and guidelines.
- vi. Intellectual Property Rights generated through Government-supported biotechnology projects may be governed through mutually agreed terms between the concerned institutions, funding agencies, innovators, and the Government of Meghalaya subject to prevailing laws and policy provisions.

- vii. The incentive shall be released subject to submission of valid supporting documents and approval by the competent authority.

8.4 INCENTIVES FOR BIOTECHNOLOGY EDUCATION, RESEARCH AND DEVELOPMENT AND BIOTECHNOLOGY INNOVATION

8.4.1 Biotechnology Education Support

- i. The Government of Meghalaya may provide financial assistance to universities, colleges, research institutions, and technical institutes for strengthening biotechnology education infrastructure including laboratories, training facilities, smart classrooms, and specialized research equipment.
- ii. Biotechnology students from Meghalaya pursuing higher education, technical training, or specialized skill development programmes in biotechnology and allied life sciences may be eligible for scholarships, stipends, or educational support as notified by the Government from time to time.
- iii. Additional incentives may be provided for institutions establishing industry-linked biotechnology courses, entrepreneurship programmes, incubation support systems, and skill-based certification programmes aligned with the State's bioeconomy priorities.

8.4.2 Biotechnology Research Incentives

- i. Research institutions, universities, start-ups, and biotechnology enterprises undertaking research and development activities in Meghalaya may receive financial assistance of up to 50% of the project cost, subject to a maximum limit of ₹2 crore per project.
- ii. Priority shall be accorded to research projects related to bioresources, sustainable biomanufacturing, climate-resilient agriculture, medicinal plants, bamboo biotechnology, carbon capture technologies, microbial biotechnology, natural products, tissue culture, and environmental biotechnology.
- iii. The Government may support establishment of Centres of Excellence, advanced research laboratories, pilot-scale facilities, and collaborative research platforms to strengthen biotechnology research capacity within the State.

8.4.3 Biotechnology promotion and Innovation Fellowship

- i. The Government of Meghalaya may institute a Biotechnology promotion and Innovation Fellowship for students, researchers, innovators, entrepreneurs, and young scientists working in biotechnology and allied sectors.
- ii. Eligible fellows may receive monthly fellowship support, research grants, mentorship assistance, incubation access, and innovation development support for approved biotechnology projects.
- iii. Special preference may be given to innovations focusing on thrust areas mentioned in this Policy
- iv. Women researchers, tribal innovators, and youth-led biotechnology enterprises may be considered for additional support under special innovation promotion initiatives to be decided by the Government of Meghalaya.

8.4.4 Skill Development and Promotion

- i. The Government of Meghalaya shall promote skill development initiatives in biotechnology and allied sectors to create a skilled workforce aligned with the needs of research institutions, biotechnology industries, start-ups, and bio-based enterprises within the State.
- ii. Financial assistance of up to 75% of the training and programme cost, subject to a maximum limit of ₹50 lakh per programme, may be provided to eligible institutions, universities, incubation centres, biotechnology parks, and recognized training organizations for conducting biotechnology skill development programmes.
- iii. Support may be provided for organizing training programmes, workshops, internships, industrial exposure visits, entrepreneurship development programmes, certification courses, faculty development programmes, and hands-on technical training in specialized biotechnology domains.
- iv. Priority shall be accorded to skill development activities related to tissue culture, bioinformatics, molecular biology, biomanufacturing, fermentation technology, bamboo biotechnology, medicinal plants, biofertilizers, carbon capture technologies, environmental biotechnology, and sustainable bioresource utilization.
- v. The Government may facilitate collaboration between industries, academic institutions, research organizations, and incubation centres for development of

industry-oriented curriculum, technical training modules, and placement-linked skill development initiatives.

- vi. Special incentives and training support may be provided for women, tribal youth, rural entrepreneurs, student innovators, and start-ups engaged in biotechnology and bio-based enterprises.
- vii. Biotechnology awareness and promotion programmes including innovation challenges, biotechnology conclaves, exhibitions, outreach campaigns, and student engagement activities may also be supported to strengthen the biotechnology ecosystem in Meghalaya.
- viii. The assistance shall be released subject to submission of programme reports, utilization certificates, and approval by the competent authority.

9. FUNDING & BUDGET SUPPORT

Funding for biotech facilities and enterprises in India can be availed from several central schemes including State and private sources.

1. **Meghalaya Biotechnology Innovation Fund and Biotechnology Venture Fund:** to provide seed funding and capital support for start-ups and high-value bio-based products. market development support funds for biotech startups, Patent and IPR support funds.
2. **Biotechnology Development Fund:** shall include funds for Biotechnology promotion and Innovation Fellowship, Skill development on biotechnology, Biotechnology research & development funds, Biotechnology education support funds. It shall also include funds for setting up of biotechnology parks, biotech clusters/ biotech Hubs.

For facilities (Biofoundries, Bio-incubators, Biomanufacturing hubs):

- **BioE3 Policy and Bio-RIDE.** The BioE3 Policy was approved in August 2024, and 17 facilities have received funding support for Biofoundries and Biomanufacturing Hubs, with 15 Bio-AI Hubs recommended for support. Bio-RIDE is the DBT scheme that merges DBT's two umbrella schemes, adds a Biomanufacturing and Biofoundry component, and serves as the funding vehicle for BioE3. DBT and BIRAC have issued a joint call for proposals for these facilities (the "BioEnablers" call). Funding extent and the upper cap depend on the implementation plan, and the applicant must make a contribution.
- **BioNEST (BIRAC bio-incubators).** State Government biotech councils or S&T councils that want a BioNEST facility can apply under a dedicated category. The percentage and manner of funding vary by location, technology thrust area and infrastructure creation.

For enterprises and startups:

- **BIRAC ladder.** BIG gives grant-in-aid of up to ₹50 lakh for 18 months, SEED gives first equity of up to ₹30 lakh to post-proof-of-concept startups, and LEAP gives equity of up to ₹1 crore to late-stage startups. Other BIRAC schemes include BIPP, SBIRI and PACE.

North-East specific Schemes:

Other sources:

- **Central schemes:** Startup India Fund of Funds (SIDBI), Technology Development Board loans, the MSME credit guarantee schemes, and, for bioresource and food-processing units, agriculture infrastructure and food-processing schemes.
- **North-East regional funds:** Ministry of DoNER schemes (such as NESIDS) and North Eastern Council funding for infrastructure.
- **Other sources:** CSR funds, venture capital and angel investors, DFIs and multilateral lenders, and philanthropic funders.
- **State support:** capital subsidy, land concessions and rent rebates, and viability gap funding, which your Policy can provide for and which also helps leverage central matching funds.

Funding opportunities from the Department of Science and Technology, Govt of India:

DST's schemes are mostly sector-agnostic, so a biotech facility or enterprise would typically apply under the general scheme.

For infrastructure and facilities

- **NIDHI-TBI (Technology Business Incubators).** NSTEDB supports incubators set up by academic, technical or R&D institutions, or others with a proven track record in technology entrepreneurship. Grants run up to ₹15 crore for public institutions, with a different cap for others. The proposal must come from a host institution, so a state agency such as BDC would need to partner with a university or R&D institute, or qualify as an institution with a track record. The wider NIDHI family also includes PRAYAS (idea-to-prototype pre-incubation), Seed Support System, Entrepreneur-in-Residence and Accelerator programmes.
- **SATHI (Sophisticated Analytical & Technical Help Institutes).** This scheme supports shared, professionally managed S&T facilities open to academia, startups, manufacturers, industries and R&D labs. It is the closest DST fit for a shared bio-foundry or common analytical facility.
- **FIST, PURSE and SUPREME.** FIST funds S&T infrastructure in universities and higher educational institutions, and PURSE strengthens research capacity in selected universities. SUPREME supports repair, upgrade and retrofitting of DST-supported

analytical instrumentation facilities. These suit existing university labs rather than a new park.

- **State S&T Programme.** DST supports State S&T Councils, with 31 councils (28 states and 3 UTs) funded as of its 2022-23 report. This is the natural route for state-level S&T capacity.

For enterprises

- **Technology Development Board (TDB).** TDB provides loans, equity or grants for commercialising indigenous technology or adapting imported technology. Its soft loans carry 5% simple interest. Older official statements cap loans at 50% of project cost and equity at 25%, so check current guidelines. It has also invested through a biotech venture fund (APIDC VCF). Its stated exclusions include funding for the mere creation of technical infrastructure, so it suits product or process commercialisation rather than building a park.
- **RDI Scheme (₹1 lakh crore).** DST is the nodal department, with ANRF as the overseeing body. It finances up to 50% of project cost for TRL 4+ projects, through loans and, for startups, sometimes equity, via second-level fund managers. This is the same scheme as in my previous answer.
- **Research grants (ANRF/SERB).** ANRF now houses DST's research-funding functions, including advanced research grants. These fund R&D projects rather than facilities.

10. POLICY PERIOD

This Policy shall come into force with effect from _____ and shall remain in force for a period of five years up to _____ or till the declaration of a new or revised Policy, whichever is earlier. Only those BT units or BT Parks which commence production/operations either during the operative period, or having applied for assistance under this Policy during the operative period, within one year from coming to an end of this Policy, shall be eligible for incentives.