

**Department of Biotechnology
National Biotechnology Parks Scheme**

National Biotechnology Parks Scheme

The Department of Biotechnology promotes innovative research & development activities in biotech sector and also helps to translate research into products and services. The Biotechnology Parks, offer facilities to Scientists, and Small and Medium sized Enterprises (SMEs) for technology incubation, technology demonstration and pilot plant studies for accelerated commercial development of innovative leads. The Department in partnership with State Governments/ State Government Organisations/Central Government Organisations has established Biotechnology Parks and incubators in different parts of the country to facilitate biotech product development, entrepreneurship, research and innovation. The Department has so far supported 7 biotechnology parks at various States. These are i) Biotech Park, Lucknow, Uttar Pradesh, ii) Biotechnology Incubation Centre, Hyderabad, Telangana, iii) Tidco Centre For Life Sciences (TICEL) Biotech Park, Chennai, Tamil Nadu iv) The Golden Jubilee Biotech Park For Women, Chennai, Tamil Nadu v) Biotech Park Technology Incubation Centre, Guwahati, Assam vi) Biotechnology Incubation Centre, Cochin, Kerala & vii) Biotechnology Park, Bangalore, Karnataka.

These parks are successfully accelerating the commercialization of new technologies, nurturing and maintaining emerging ventures and assisting new enterprises to forge appropriate linkages with other stakeholder of biotechnology sector including academia and Government. Based on the experience gained with aforementioned Biotech Parks/Incubators, the Department has come up with 'National Biotechnology Parks Scheme' in which it is proposed to create an ecosystem to absorb the start-ups graduated from the incubators and give them a platform for further scaling up their R&D activities. In absence of such a system, the start-ups graduated from the incubators will mostly be dependent on technology out licensing for further development. The State Government along with private partners are encouraged to submit the proposal to the Department based on these guidelines for establishing biotechnology parks in the States.

1. Introduction

Biotechnology is being recognized as a rapidly emerging technology having huge impact across food, health and environment. The emergence of this technology will have a transforming impact across agriculture, health, industrial processing and environmental sustainability. The Indian Biotechnology sector is gaining global visibility and is being tracked for investment opportunities.

Biotechnology is one of fastest growing sectors in India and is the twelfth largest biotech market in the world. It holds 2% share of the global market and also ranks 3rd in Asia-pacific region after Japan and China. Key drivers for growth of the Indian biotech industry are increasing investments, outsourcing activities, exports, and increased Governments focus on developing and promoting the sectoral growth. Availability of large talent pool along with low cost manufacturing capability adds to the attractiveness of India as potential biotechnology market.

India's biotech sector has attracted significant attention especially after the launch of 'Make in India' initiative by Government of India in September 2014. The initiative aims to fortify the country's manufacturing ecosystem by providing GoI supported platform to the industry.

Government of India has undertaken several initiatives to boost the biotechnology industry in the country. These initiatives aim to create a robust and holistic ecosystem by setting up of dedicated research laboratories, centers of academic excellence in biosciences, institutional strengthening, capacity building and establishment of an industry oriented Public Sector– BIRAC to bolster industry growth.

Biotechnology sector as such cuts across agriculture, horticulture, animal husbandry, fishery, forestry, medicine and health care etc. requiring frequent interface across sector components as well external components such as environment, energy and so on. As the sector is investment intensive requiring significant R&D support and highly skilled manpower, creating a full-fledged ecosystem of stakeholders in the vicinity of each other is the most plausible way ahead.

A Key component of the ecosystem is the creation of Technology Parks which in the developed countries are known to be successful vehicles for innovation and commercialization of technology and also an inducer for R&D investment. Considering this the Department of Biotechnology (DBT) had supported Biotechnological Parks across different locations in the country in partnership with State Government. In addition through BIRAC, a large number Bio-incubators have also been set up.

2. Key drivers for formulation of scheme for biotechnology parks

The biotechnology sector in India is taking shape through isolated and sporadic initiatives, which are taking place across academia and industry. There is a need to integrate and align the efforts of all the stakeholders in order to achieve efficiency. For example, reduced turnaround time to start operation (Ease of doing business), accelerated commercial development (reduced time to market) and faster progression towards creation of innovations/intellectual property/products, can increase efficiency to a great extent.

The current programme aims to support Biotech Parks in collaboration with the State Government and Industries. It has been observed that the States where BT parks /Incubators were established either by the State Government with the support of DBT or by Private Sector; could be able to create a vibrant Biotechnology sector and experience higher economic growth. Still biotech parks are not

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available in several states and it is presumed that the setup of Biotech Park in these states will help in the development of Biotechnology Sector which in turn will impart in the economy of the State. Biotechnology parks can serve as effective enablers to create an ecosystem that can improve the economy by attracting investments, creating jobs and creating IPs (Intellectual Property) through innovation.

Based on the learnings and experience of the Biotechnology park/Incubator program, current National Biotech Park Scheme is devised and it will help Government achieve its vision and desired future state, as this scheme will be acting as a bridge between the current and the future state. It will facilitate creation of robust specialized infrastructure, conducive environment and sustainable advantages for both Industry and the Government to foster innovative research & development and product development.

This would be implemented by Central & State Government in partnership with industry.

3. Title of Scheme under this Policy

This scheme shall be known as ‘**National Biotechnology Parks Scheme**’

4. Scheme Objectives

- i. To develop high quality basic infrastructure and high end central equipment facilities with the required support services for undertaking Research & Development, product development, piloting and validation by SMEs and Biotech Industries.
- ii. To boost the biotechnology sector across the country by incentivizing States for setting up biotechnology parks.
- iii. Strengthening the existing infrastructure facilities in order to make Indian Biotech industry a global leader.
- iv. To foster innovation and entrepreneurship
- v. To facilitate establishment of a congenial ecosystem for the growth of biotechnology industry
- vi. To enhance competitiveness of biotechnology industry by providing easy access to robust infrastructure and enabling environment

5. Operative Period

This scheme titled ‘**National Biotech Parks Scheme**’ shall come into effect from the date of issue and shall remain applicable up to the end of fourteen finance commission i. e. 31st March, 2020.

6. Eligibility Criteria

The applicant would be Society/institutions/ legal entity incorporated by the State Government in partnership with established research institutions and / or a private player with clearly defined roles and responsibilities and they need to prioritize which part of the value chain (R&D, Analytical Services, Piloting, Validation) is critical to achieve the desired goal. Based on prioritized area for the Park, eligibility criteria can be defined:

- Greenfield Parks as well as up-gradation of existing Parks shall be eligible to seek assistance as Grant-in – aid through the existing scheme; it is proposed to continue this scheme up to 31st March, 2020 with details as proposed in the scheme document.

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- Grants can be provided to Society/institutions/ legal entity incorporated by the State Government in partnership with established research institutions and / or a private player with clearly defined roles and responsibilities. The scheme could be implemented in PPP (Public-Private Partnership) format with clear delineation of work. In some cases, a Special Purpose Vehicle (SPV) can also be constituted.

7.0 Assistance for the Biotech Parks and Incubators of start-ups

The mechanism for support for Existing, and Greenfield Biotech Parks development will be based on following:

7.1 Support to Existing Parks (Set up under DBT or external support)

Under this category, DBT can consider support to existing parks for further development for which support would be provided based on criteria agreed, instead of giving core operational grant for the same. The Grant would be given as a percentage of operational cost. This would be calculated based on number of prospective industries in the park and size of the park. Operational grant would be provided to an extent of 50% of the rental charges / or INR 75/sq-ft, whichever is lower (for a maximum of 250 sq-ft per incubate). This would be as a reimbursement on actual to the Park. DBT would nominate an expert to be on the Board of each of these parks. Assistance to the existing parks for further development can be considered based on the following parameters:

- Number of jobs created (highly skilled, skilled and unskilled jobs).
- Number of patents filed.
- Number of products developed.
- Number and Value of Investment attracted in stipulated timeframe.
- Nature of requirement
- Mechanism of Governance
- Business model
- Earlier releases made
- Self sufficiency
- Reduction of the rental charges with proposed support

BT Parks supported by the Department should be encouraged to avail grant-in-aid from the other schemes implemented by Central Government provided there should not be any duplication and this should create synergy with the same structure and complements the activities.

7.2 Support of New Greenfield Biotech Park Projects

DBT would consider supporting the setting up of Biotechnology Parks for providing the facilities and space to companies for establishment of Research, Pilot and Validation Facilities in a Public Private Partnership (PPP) mode. This would be in the form of a grant up to Rs 30 crores per Park or 75% of the cost of project (excluding cost of land and building) whichever is less and the remaining cost including civil construction should be arranged by the State Government and its Private Partners as per mutually agreed terms and conditions between them. The State Government should however,

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mandatory make available the required land which should be as a clear title in the name of the State Government promoted Special Purpose Vehicle (SPV) (not for profit society) and the SPV should be a separate legal entity responsible for managing the Park. The Park is expected to have at least 40,000 square feet of built up area guaranteed by SPV when fully operational. The eligibility is as described in Para 6.0. Applicant needs to submit assurance letters from persons willing to set up units in the park.

8. Scope and Coverage of Support

Assistance under the scheme shall be admissible for following:

8.1 Space and Common Facilities

(i) Incubators

- Built in Laboratory space models
- Land models for building Laboratory space also be given on a rental lease model to SME's and industries

(ii) Common Facilities under the scheme will consist of creation of tangible "assets". Some of the indicative activities under the Common facilities are:

- Training Centre
- R&D Centres
- Effluent Treatment Plant
- Common Logistics Centre
- Common Testing Facilities
- Centralized Equipment

The above list of common facilities is illustrative and each Park could have its own specific requirements based on the nature of units being setup and the products proposed to be manufactured.

8.2 Technology Management / Technology Transfer

Support may be considered for facilitating Technology Management – Technology Transfer activities.

8.3 Support may also be provided for following:

- i. Manpower (Temporary project positions)
- ii. Pre-operational & Operational activities

9.0 Criteria of Selection

A Steering Committee would be constituted by DBT. The Steering Committee (SC) shall approve the project components and funding thereof depending upon the merits of the proposal based on defined criteria. The project selection criteria will be:

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- Size of the Park- acreage of labs/office premises developed, Green belt developed and common facilities within stipulated timeframe
- Readily available land
- Pipeline of investments with key investments identified
- Committed employment
- Environment and regulatory clearances
- Mechanism of Governance
- Business model
- Contribution of State Government
- A Detailed Project Report (DPR) has to be prepared by the State.
- The DPR should have details of all the business processes of the Biotech Park units viz. research labs, pilot scale facilities, product development facility, technology, marketing, quality control, testing, purchase, outsourcing, etc. to identify impediments and bottlenecks; and to draw action plan for enhancing competitiveness.
- DPR should focus on enhanced competitiveness, technology improvement, adoption of best manufacturing practices, marketing of products, employment generation etc.
- DPR should identify direct linkages between bottlenecks and proposed remedial measures.
- DPR should clearly show the linkage among the participating institutions, mechanism of Governance and financial analysis. The State Government and Private partner are required to give concrete commitment for partnership and sustainability of parks.

States shall bear the cost of providing the land for the Park. Parks should be operationalized with at least 40% occupancy within 2 years from the date of sanction of assistance under this scheme. Escalation in the cost of project over and above the sanctioned amount, due to any reason, will be borne by the State.

10.0 Support under the Scheme

10.1 Financial Assistance

The recommended proposal will be supported and financial support in terms of Grant-in-Aid will be provided to the State Government/agency for implementation of proposal:

10.1.1 Maximum limit for the grant in aid under this category would be Rs 30 crores per Parks or 75% of the cost of project (excluding cost of land) whichever is less by the Central Government and the remaining cost including cost related to Civil Construction should be arranged by the State Government and its Private partners.

10.1.2 The Department may consider a contribution up to 90%, if the Biotech Park is proposed in difficult or backward regions.

10.1.3 The cost of project shall include cost of building, administrative cost, machinery & equipment, miscellaneous fixed assets and other support infrastructure such as water supply, electricity and margin money for working capital.

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- 10.1.4 Cost of land shall be borne by the State and it will not be part of the State contribution of Project Cost.
- 10.1.5 Contribution by the State should be made upfront. 1st year grant from DBT will be released based on DPR and recommendations of Scheme Steering Committee.
- 10.1.6 The scheme also provides funds on account of recurring expenses and operational expenditure for 3 to 5 years initially.
- 10.1.7 The applicants are required to submit a concrete plan for self sustainability beyond the support period.

10.2 Terms and conditions for Financial Assistance

- 10.2.1 A Tripartite Agreement will be executed between DBT, State Government and External (Pvt.) Agency prior to release of Grant. No Grant will be released before the execution of the same. In the absence of valid agreement project will discontinue.
- 10.2.2 Time shall be the essence of the project and all parties will be responsible for timely completion of the project and delay if any should be reported to DBT with proper justification.
- 10.2.3 DBT will release the grant commensurate with the progress of the project.
- 10.2.4 Time period of financial assistance will be provided for 3-5 years on milestone basis. The grant released by DBT should be kept in savings Bank A/c the details of which will be provided by the parties at the time of submission of DPR. No amount will be kept in current A/c.
- 10.2.5 The interest earned should be reported to the Department of Biotechnology. The agency will be required to submit the bank statement financial yearwise for verifying the interest earned.
- 10.2.6 All the approvals including the State Cabinet approval will be responsibility of the State Governments.
- 10.2.7 Competency of technical human resource required to run the project should be identified beforehand and their details may be incorporated in the DPR.
- 10.2.8 Composition of a high level Programme Management Committee, Technical Advisory and Research Group, Monitoring /Expert Committee should be explicitly given in the scheme. The Members & Chairperson need to be appointed as & when the DPR is in-principally approved. The durations & number of times for which they will meet need to be decided beforehand. Their comments should be taken care at every stage including at the time of release of grant.
- 10.2.9 If external agency is required to be registered it should be done beforehand and the details of registration may be provided in the DPR.

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- 10.2.10 All the assets including the Equipment and produce acquired by DBT Grant will be the property of DBT and shall not be utilized for the purposes other than those for which the grant has been sanctioned.
- 10.2.11 If the assets purchased come with warranty, no amount will be allocated for AMCs.
- 10.2.12 The parties will report the revenue earned by them on an annually basis supported by the documents.
- 10.2.13 No project will be extended further without valid reasons & without the recommendations of the PMC. The request for extension should be placed 6 months before the expiry of tenure. The PMC if found valid should consider the request swiftly and convey the same to them in a time bound manner.
- 10.2.14 Financial year wise UC/SE and other relevant document should be submitted timely by the agency to DBT.
- 10.2.15 Change of location in mid-way of the project will not be entertained.
- 10.2.16 Schedule of implementation of the project should be prepared in advance and followed strictly.
- 10.2.17 The Parks shall be responsible for the generation of data for assessing the outcomes of support and shall submit such data to the Department of Biotechnology time to time and at least once every year.

11.0 Implementation Framework

Following is the broad implementation framework.

11.1 Scheme Steering Committee (SSC)

DBT will be the coordinating Department for providing overall policy, coordination and implementation support to the Scheme. A steering Committee shall be constituted for approval of DPRs. The composition of the Steering Committee will be as follows:

Chair-A Senior Expert with Industry / Entrepreneurship experience

Member- Expert from financial management

02 Members- Experts from strategic business and general management

02 Members- Experts with Biotechnology Parks/Incubators experience

Representative of DST, NITI Aayog and DIPP

DBT officials

The SSC may co-opt representatives of any industry associations, R&D institutions and other private sector expert organizations as members or special invitees.

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11.2 Project Monitoring Committee (PMC)

PMC will be responsible for monitoring of project implementation. Composition shall be as follows:

Chair- leading personality from the area of Entrepreneurship

Member- Expert from financial management

Member- Experts from Biotechnology Parks/Incubators

DBT Officials

12 Mechanism for release of grant under the scheme

Financial assistance shall be disbursed in a phase-wise manner. Timeline for completion of a Park will be as indicated in the approved DPR.

States shall submit utilization certificates for every tranche of financial assistance by DBT. DBT shall hold the rights to audit the progress and financials of the Parks anytime.

13 Performance Measurement Matrix

Success of Biotechnology Park scheme would depend largely on robust governance mechanisms and needs monitoring and measurement of various parameters, which can clearly identify degree of changes from current to future state.

As outlined in earlier sections, success of the Biotech Park would depend on its ability to satisfy the requirements of different stakeholder groups, such as:

University Perspective:

Biotech Park should act as effective connector in innovation, act as a bridge between science and business, provide local graduate employment and also acts as a cash generator for the university to reinvest in research.

Tenant Perspective:

Biotech Park should be a flexible office space with large choice of value added service. The park should enhance the brand image of business. It should also offer the tenants collaborative opportunities of meeting with potential clients and mentors as well.

Commercial Investor Perspective:

Investment in a biotech park should offer them strong long term returns and the park should attract more international investments.

The matrix of key performance indicators has been divided into four main categories: commercial, stakeholder perspective, brand and reputation and internal business processes which are presented in the following table:

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S. No.	Major Indicator	Performance Indicator	Measures	baseline	Target
1	Commercial	Profitability	Profit before interest and Tax as % of budget		
		% occupancy figure	Sq ft occupied/available		
		External funding raised	Number of applications/received funds		
		Investment returns	Internal Rate of Return		
2	Stakeholder Perspective	Tenants Satisfaction	Lease Renewals & expansions as a % of total expiries		
			Participation in networking event		
			Referral from tenants or tenants association		
			Request from Tenants to expand or to move/ conversions (no per year)		
		Innovation support	Additional business/funding as a result of science park intervention		
		Companies growth	% of tenants companies growing in terms of job & turnover		
		Companies Innovation profile	% of graduates on park		
			No of product and services developed by tenants		
			No of products licensed out		
			No of patent exploited by tenant		
		Quality of tenant	Number of publications issued by tenant		
			% of tenant awarded prizes		
3.	Brand & Reputation	Media coverage	Pieces of coverage received		

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		Accurate communication of science park	% of annual enquiries from appropriate companies		
4.	Internal Business Processes	Employee satisfaction	Staff turnover last three years		
			No of training session average no/employee		