



# **BioNEST**

## Bioincubators Nurturing Entrepreneurship for Scaling Technologies

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# **BioNEST**

## *Bioincubators*

### *Nurturing Entrepreneurship for Scaling Technologies*

#### **Scaling Bio-incubators in India through BIRAC's BioNEST**

#### **1. Introduction**

Bio-incubation allows harnessing of the entrepreneurial potential of startups by providing access to infrastructure as well as mentoring and networking platforms that the start-ups could use during their fledgling days.

The Startup India Action Plan announced by Hon'ble Prime Minister on 16th Jan 2016 targets scaling up of biotech startup ecosystem, to have at least 2000 startups by 2020 which would necessitate creation of new bio-incubation space that are world class and that can provide cutting edge access to the best bio-incubation environs for propelling innovative ideas towards product commercialization.

#### **2. BIRAC's BioNEST Programme**

BIRAC's focus has been creation of a biotechnology startup environment in the country. It has taken a couple of strategic implementation programmes that span from providing funding to early stage ideas through grants, creation of bio-incubators at strategic locations (through BioNEST) and extending mentorship and networking opportunities to startups.

Through BioNEST, BIRAC has supported 31 bio-incubators that are at various stages of operationalization with the cumulative area of 3,37,000 sq. ft. The 31 bio-incubators are placed either within academic/research clusters or stand-alone incubators either privately funded or funded by State Governments.

The growing biotech startup ecosystem would require either scaling of existing bio-incubation space in current biotech hubs or creation of new bio-incubation space at nascent hubs that have the potential to become bigger biotech hubs in the next decade. Further, the creation of new bio- incubation space should be cognizant about the differential needs of varied nature of biotech startups- especially those that are medtech (including medical electronics hardware), biopharma, agri-biotech and biomaterials.

### 3. BIRAC’s Strategy for Developing and Strengthening/rejuvenating Bio- incubators through BioNEST:



**Table 1: The strategy for scaling Bio-incubation in India**

BIRAC intends to scale the given no. of Bio-incubators from 31 to 50 by 2020. The different categories include (Table 2), up- scaling existing BIRAC supported incubators, creating new bio-incubators through its existing BioNEST program, and partnering with State Governments for creation of new bio-incubators and finally strengthening of existing Technology Business Incubators.

Interested & eligible applicants can apply under BioNEST in the suitable categories mentioned below. Detailed guidelines and eligibility criteria are mentioned under each category.

**Table 2.**

S.No	Category
1.	Supporting New BioNEST at Academic/Research Institutes/Research Hospitals/organizations fostering Innovation and entrepreneurship
2.	Establishing new BioNEST with various State Government Biotech Council or S & T Council
3.	Strengthening existing incubators attached to Academic institutes/research institutes, Stand alone incubators/Research Hospitals to establish BioNEST
4.	Support for Scaling-up of already funded BioNEST

**Note:**

- a. Already funded BIRAC BioNEST can only apply under Category 4, subject to condition that they have completed or about to complete Phase 1. Also the facility should have been made operational during the project duration or after completion of Phase 1.
- b. Private Academic/ Research Institutes/ Research Hospitals/Incubators have to contribute 20% towards the total capex.
- c. Funding will commensurate to the need and scope of the project.
- d. BIRAC may take a small equity in the start-ups incubated in the facility. The modalities and the quantum of equity may be worked out with the applicant.

**General Criteria for assessment**

- ◆ Focus is on translational activities where innovations can be converted to product or technology. Institutes/organizations that can facilitate this mandate should only apply.
- ◆ Under the various categories BioNEST will be funded at strategic locations which have the potential to be future biotech hubs and proposed facility can accelerate the process by catalyzing the entrepreneurial ecosystem.
- ◆ The existing capabilities of Host Institute (HI) for promoting startups and innovations including the teams within the HI will be assessed.
- ◆ Preparedness of Host Institute in supporting Bio-technology based entrepreneurship. This will include support extended from host institutes in terms of infrastructural facilities, dedicated space for bio-incubation, support for instruments from existing facilities, support for technical and business

mentoring from within the Institute or from dedicated external sources.

- ◆ Approach and Methodology to be adopted, innovative content and pipeline of potential incubatees. This will include Assessment of the project reaching projected milestones, Governance Model, sustainability/revenue model, Focus area of the proposed bio-incubation center if any. Other aspects that add value to the incubation through specialized services and support programs.
- ◆ The strength of the 'Mentoring support' at the Host Institute, i.e. the ability to provide training and information needed to facilitate enterprise development and help startups develop sound, viable projects that can attain both social impact and commercial performance.
- ◆ The strengths of Business development support at the Incubator i.e. technical assistance that is required to help prospective entrepreneurs or an enterprise to achieve their specific goals. This can include a variety of forms of operational support, such as investment readiness support and technical assistance like Business validation, Peer learning, on ground support and alliances to help the entrepreneur address the challenges of commercializing a business model.
- ◆ Other assessment criteria relevant to specific category are as follows:

## **1. Supporting New BioNEST at Academic/Research Institutes/ Research Hospitals/ organizations fostering Innovation and entrepreneurship**

Through its current BioNEST programme, BIRAC receives continuous interest from Universities/ Research Institutes/ Research Hospitals for starting Incubation activities to support Startups.

The concerned interest in this category will be from entities which do not have a formal Incubation center but support Entrepreneurial activities and have some form of loosely woven or informal incubation activity. Such proposals will be assessed and screened based on existing guidelines for BioNEST that takes into account their merit and overall role in supporting innovation and techno entrepreneurship.

### **Eligibility**

- BioNEST could be hosted by an existing academic/research organization, Research Hospital which does not have a formal Incubation center but support Entrepreneurial activities.
- The Host Institute (HI) should have adequate expertise and infrastructure to support incubation activity.
- Incubators supported directly under BioNEST may be managed by host institutes or may be in PPP Mode.

### **Specific conditions for support**

- The funding will be in the form of grant-in-aid/ Capital Investment. The

percentage and manner of funding under BioNEST can vary according to location; technology thrust area, infrastructure creation and the proposed operational model and depending on the reasoned recommendation of the Technical/ Expert Committee.

- Duration of support for bio-incubation will be for 3 years, upto a maximum duration of 5 years depending upon the need and recommendation of the expert panel.
- It is expected that a minimum of 5000 sq.ft. space has to be dedicated for bio-incubation, to facilitate incubation of startups.
- In lieu of support, BIRAC may take a small equity in the start-ups incubated in the facility. The modalities and the quantum of equity may be worked out with the applicant.

## **2. Establishing new BioNEST with various State Government Biotech Councils or S & T Councils**

Respective States are now having their own Biotech councils or S&T Councils spearheading Biotechnology in their respective states, through funding and other measures. Biotech Councils interested in creating BioNEST facility in their states can apply under this category. The States having strong academic and industrial clusters will be given preference. The place suggested by the Biotech councils or S&T Councils under the program should have a strong entrepreneurial culture or should have a strong potential for becoming a Biotech hub.

BioNEST under this category could be in existing institutions which may be Central/State Universities, Research & development Medical Institutes, Stand alone Bio-incubator/Parks, management institutes, and other organizations focused on bio-incubation.

- Funding support of 50% shall be provided by BIRAC for establishment of new incubators and 50% finance will be provided by the respective State Government Council. The incubator may be managed and operated by the private sector.
- BIRAC funding will cater to refurbishing/ renovation, Capex and operational cost.
- Feasibility report will have to be prepared by the applicant that will focus on the following points:
  - Objectives and mission of the bio-incubator
  - Legal Status of the Bio-incubator
  - Governance model/operational model
  - Involvement of Stakeholder from surrounding academic and Industrial ecosystem
  - Focus on “cluster-based” technology incubation in support with

surrounding industrial ecosystem. This will bring synergies between Academia- industry interactions.

- Selection and exit policy for tenants/ startups
  - Building on local and international linkages.
  - Creating special infrastructure and equipment facility as per the needs and requirement of startups and MSMEs
- The State Government will provide the requisite land and building space to host the BioNEST in any of the existing institute that will be identified from the feasibility study. State will also contribute to funds for construction related activities of Bio-incubator.
- A technical and business Advisory core committee will govern the implementation of the project. This Core committee will have people from surrounding academic institutes, industry and people with expertise in running a Bio-incubator.
- The funding will be in the form of grant-in-aid/ Capital Investment. The percentage and manner of funding under the BioNEST can vary according to location; technology thrust area, infrastructure creation and the proposed operational model and depending on the reasoned recommendation of the Technical/ Expert Committee.
- Duration of support for bio-incubation will be for 3 years, upto a maximum duration of 5 years depending upon the need and recommendation of the expert panel.
- It is expected that a minimum of 8000 sq.ft. space have to be dedicated for bio-incubation, to facilitate incubation of startups.
- In lieu of support, BIRAC may take a small equity in the start-ups incubated in the facility. The modalities and the quantum of equity may be worked out with the applicant.

### **3. Strengthening existing incubators attached to Academic institutes/research institutes, Stand alone incubators/Research Hospitals to establish BioNEST**

Under this category existing incubators attached to Academic institutes/research institutes/ Stand alone incubators/ Research Hospitals can apply.

BioNEST program will support the bio-incubation in already existing incubators

- A. Applicant seeking BIRAC support should be operational at the time of application
- B. The incubator, seeking BIRAC support, hosted in Academic/Technical/R&D Institution/ standalone incubator/ research Hospitals [called Host Institute (HI)] and other institutions should have proven track record in promotion of technology based entrepreneurship.
- C. The incubator should have adequate expertise and infrastructure to support Bio

incubation activity.

- D. Incubator, seeking BIRAC support, which have existing support structures for biotech startups will be assessed based on the existing strength of the incubation activities.
- E. Incubator, seeking BIRAC support, which do not support biotech based startups but have the capacity to nurture them because of the host institute's strengths in life science research and that have the potential to create spinoffs in biotech sector, will also be considered.

### **Specific conditions for support**

- The funding will be in the form of grant-in-aid/ Capital investment. The percentage and manner of funding under the BIONEST can vary according to location; technology thrust area, infrastructure creation and the proposed operational model and depending on the reasoned recommendation of the Technical/ Expert Committee
- Duration of support for bio-incubation will be for 3 years, upto a maximum duration of 5 years depending upon the need and recommendation of the expert panel.
- It is expected that a minimum of 5000 sq.ft. space have to be dedicated for bio-incubation, to facilitate incubation of startups.
- In lieu of support, BIRAC may take a small equity in the start-ups incubated in the facility. The modalities and the quantum of equity may be worked out with the applicant.

## **4. Support for Scaling-up of already funded Bioincubators under BioNEST**

- A. Only BIRAC funded BioNEST will be considered for the upscaling
- B. The bio-incubator should be fully functional in order to be considered for scale up by BIRAC. Upscaling of the facility is assessed based on the overall impact created by the bio-incubator in creating an ecosystem for innovation and entrepreneurship in Phase 1. This will include the following points:
  - i. Number of startups incubating in the incubator
  - ii. No of startups exited from the BioNEST Facility in Phase-1
  - iii. Potential pipeline of startups seeking bio-incubation facilities
  - iv. Stages of startups supported by incubator
  - v. Total number of startups supported through its various services - technical, business, legal, IPR, commercialization, mentoring etc. Exact role performed by incubator.
  - vi. Number of Jobs supported by BioNEST facility. This will include the number of jobs support by startups after incubating in the BioNEST facility and jobs supported to manage BioNEST facility
  - vii. Number of other sources of funding managed by incubator for startups. This will include funding from government, international organization,



- Venture Capitalists and also by the incubator investment made in the startup
- viii. Number and kind of workshops, seminar, training and mentoring sessions conducted
  - ix. Technologies/products/POCs developed by startups while incubating in BioNEST facility during Phase 1
- C. The proposed Phase 2 proposals should be based on the deficit funding model showing revenue projections for next five years based on current operational expenses incurred in running the BIRAC supported space in Phase 2. Shortfall in the deficit budget will be considered for support by BIRAC as operational cost.
  - D. Support for up scaling of the project will be considered for 3 years, to a maximum of 5 years, subject to the condition that the facility will try to attain complete sustainability in the 3rd/ 5th year.
  - E. Phase 2 proposals should focus on the next level of development that is required to be a part of incubator and that will serve startups in higher level of research and development in product. This may include creating specialized units required for technology development.
  - F. Next level of services and specific unit required for helping startups to take a leap in their technology/ research. Nature and extent of services needs to be expanded. In each Phase 2 incubator a small TTO could be supported.
  - G. BIRAC may take equity stake in phase 2 support. This will vary from 1-3 % of the equity stake of the incubator in the incubating companies occupying or using BioNEST Supported facilities.
  - H. Incubator should have at least 5 resident startups in the operational period.
  - I. Demand-supply justification to be provided showcasing actual request from the incubatees interested in incubating.

**Support Details: Following points will be considered for up scaling:**

- Increased incubation space. Refurbishing and renovation cost will be considered for creating lab space, lab module and benches, common equipment facility and specialized units
- Capex Support for generic equipment based on the incubator's needs and Committee's recommendations.
- Will include the operational cost for running the incubators to reach sustainability.

## **Proforma for filling application under different Categories**

### **A. Basic Information:**

**1. Category:**

**2. Title of Proposal:**

**3. Name of Applicant/Implementation Agency/Institution/Organisation:**

**4. Location/ Address:**

**5. Website:**

**6. Applicant Type:**

- Not for profit Section 8 company
- Society
- Trust

**7. Subcategory:**

- Technology Business Incubator (TBI)
- Biotech Park
- Bio-incubator
- Academic Institute (University)
- Research institute
- S & T/ Biotech State Council
- Research Hospital

**8. Is it a new initiative in your university /institution/Incubator/Hospital**

**9. Name of Project Leader: Nodal person who will be handling the project and his /her competence**

**10. Demonstrated experience in incubation in general. Any experience in bio-business startup incubation.**

**11. What is the demand for such facility at your Institution/Organization**

**12. What difference the proposed bio-incubator would make in nurturing and mentoring the Biotech start-ups originating in and around proposed facility.**

## **B. General Information**

- 1. What are the existing facilities and programs to support Biotech entrepreneurship?**
- 2. Is there any existing area dedicated for incubation? How much can be dedicated for BioNEST?**
- 3. What common instrumentation facility exists in the university/ institution/ incubation centre? Will this common instrumentation facility be available to the start-ups in the proposed BioNEST?**
- 4. Total no. of startups/incubatees supported till now?**
- 5. How many new start-ups can be accommodated in the proposed BioNEST?**
- 6. What are the main strengths of the organization/institute that you would leverage for BioNEST in terms of - IPR, Wet labs, Business/tech expertise, legal, industry interaction platforms etc. which will be available to the startups/incubatees? Give details.**
- 7. Provide the dedicated list of mentors that would be available for start-ups/incubatees.**
- 8. Have you received any other grant from Govt. for establishing an incubator? If yes please specify?**

## **C. Project information**

- 1. Summary of the proposed project:**
- 2. Focus area of the proposed BioNEST:**
- 3. Operational Model for the proposed facility:**
  - Operational strategy/ Business strategy to be followed
  - Details of the governance model to be adopted
  - Sustainability model of the proposed project
  - The revenue projections from various streams
- 4. Proposed duration of project:**
- 5. Total project cost:**
  - i. Applicant Contribution in terms of:
    - Financial:
    - Space:
    - Any Other Services:

ii. Proposed BIRAC's Contribution:

**6. Details of proposal:**

**i. Aims & Objectives:**

**ii. Timeline of Activities for Bio-Incubator**

<u>Year</u>	<u>Activities</u>	<u>Deliverables</u>
1st Year		
2nd Year		
3rd Year		

**iii. Refurbishing/renovation and Recurring Cost:** (Certified cost of the refurbishing and renovation has to be provided)

- o Total area dedicated for the facility:
- o Distribution of the space for various activities and area under each
- o Cost per sq.ft.

**Budget break up format:**

**1. BIRAC CONTRIBUTION**

	Year 1 (INR)	Year 2 (INR)	Year 3 (INR)	TOTAL (INR)
<b>A. Non Recurring</b>				
Area of refurbishment				
Renovation and refurbishing of space				
Lab furniture				
Lab equipment				
<b>Total</b>				

<b>B. Recurring Budget</b>				
<b>Year</b>	<b>Year 1 (INR)</b>	<b>Year 2 (INR)</b>	<b>Year 3 (INR)</b>	<b>TOTAL (INR)</b>
Maintenance/Repair of Equipment/ Chemicals				
Manpower				
Administrative-Operational Exp- Electricity, Furniture, Travel, Consumables & Contingency				
Consumables and chemicals				
Training programs/Hackathons				
<b>Total</b>				
<b>Total Budget A+B</b>				

i. Equipment Details supported by invoices of each

Sr.no.	Instrument	Approximate price per unit (INR)	Required units	Total Approximate (INR)
	Analytical Equipment			
1.1				
1.2				
1.3				

ii. Maintenance/Repair of Equipment/Chemicals

<b>Year</b>	<b>Year 1 (INR)</b>	<b>Year 2 (INR)</b>	<b>Year 3 (INR)</b>	<b>Total INR</b>
Maintenance/Repair of Equipment				
Consumables & Chemicals				
<b>Total</b>				

iii. Administrative - Operational Exp- Electricity, Furniture, Travel, Consumables & Contingency

Year	Year 1 (INR)	Year 2 (INR)	Year 3 (INR)	Total (INR)
Electricity, Water, Internet, Telephone, consumables, etc				
Travel				
Workshop				
Contingency				
<b>Total</b>				

iv. Manpower provide the rational

Manpower						
		Monthly				
Manpower	No.	Salary INR/ Employee	Year 1 (INR)	Year 2 (INR)	Year 3 (INR)	Total (INR)
<b>Total (Annually)</b>						

## 2. Applicant Contribution

	Year 1 (INR)	Year 2 (INR)	Year 3 (INR)	TOTAL (INR)
<b>A. Non Recurring</b>				
Area of refurbishment				
Renovation and refurbishing of space				
Lab furniture				
Lab equipment				
<b>Total</b>				

<b>B. Recurring Budget</b>				
<b>Year</b>	<b>Year 1 (INR)</b>	<b>Year 2 (INR)</b>	<b>Year 3 (INR)</b>	<b>TOTAL (INR)</b>
Maintenance/Repair of Equipment/ Chemicals				
Manpower				
Administrative-Operational Exp- Electricity, Furniture, Travel, Consumables & Contingency				
Consumables and chemicals				
Travel				
Training programs/Hackathons				
<b>Total</b>				
<b>Total Budget A+B</b>				

**Note: This is an extensive budget format. As per your requirements you may plan the budget accordingly based on given format. You may include any other activity not mentioned in the format.**

**Please mention Not applicable (NA), wherever required.**

For any further information please contact:

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