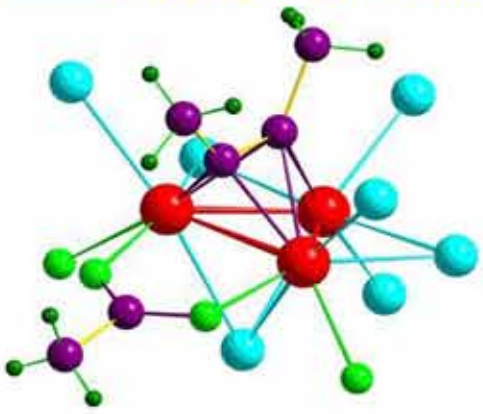
ATHARVA LIFESCIENCES CONSULTING PVT. LTD.

FUNDING YOUR SCIENCE IDEA

2nd EDITION



THE COMPLETE AND UP-TO-DATE GUIDE TO GOVERNMENT GRANTS, LOANS, PARKS, INCUBATION CENTRES AND FUNDED R&D OPPORTUNITIES



OVER ₹500 MILLION WORTH FUNDING INSIDE!

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Executive Summary

Searches out other sources of funding and opportunity for the firms and scientists- including technology business incubation centres or TBI, science and technology entrepreneurship parks commonly known as STEP, and international opportunities for funding and collaboration.

There are various agencies available for funding and assistance in India for both new and established firms.

The Government of India along with the Department of Biotechnology (DBT) and Department of Science and Technology (DST) is probably the most significant Lifesciences industry partner for promotion of the sector. It has number of schemes and its corpus runs into hundreds of crores. However it is not a typical funding agency as compared to private equity firms which look for earnings which are multiple times their investment. So in some ways it is better than a typical PE/VC. However being a public sector organization, means it has to manage many more checks and balances as compared to a typical private sector organization. It is also somewhat restrictive in its imagination towards investment and generally encourages more set sector technologies for investment. The report lays out the various schemes available in the sector.

Another source of support for the Lifesciences are the various biotech parks being set up around the country. These parks aim to be a one stop-shop for any Lifesciences techno-entrepreneur to set up and run his nascent or developed firm. Launched with much fanfare and seen by many governments as the ease way to seem progressive in the media-the performance of these have been a mixed bag. Some of them are saddled with similar power and water issues as are the main industrial areas. Reach inside to help to decide.

The report also searches out other sources of funding and opportunity for the firms and scientists- including technology business incubation centres or TBI, science and technology entrepreneurship parks commonly known as STEP, and international opportunities for funding and collaboration.

Department of Plant Molecular Biology

Department of Plant Molecular Biology, University of Delhi South Campus

Prof. Indranil Dasgupta

Prof. Indrani Dasgupta shares his experience with FIST. When asked how did he decide to avail the fund provided by DST-FIST and also why FIST, Dr.DasGupta said, “The process of availing funds by the FIST scheme was already known to us, as a Department. The current award is the Stage-II, after the Stage-I FIST, which we received between 2006-11. The reason why we applied to FIST is that there is a possibility of getting substantial funding for infrastructure, as a University Department, which is otherwise difficult to get”.

About experience all throughout the funding process and with FIST, he replied, “The method is rapid and very well-managed. The suitability of the project and the capability of the Faculty members to undertake the project were assessed by several committees at various levels”.

Prof. Indranil Dasgupta
Head

When asked apart from funds, what other kind of support did you get from FIST, “FIST gives funds for infrastructure. We did not get any other kind of support”.

For suggestions or remarks regarding finding the right source of funds for the company, “It is difficult to suggest anything unless the background and field of the project is known”.

2.5

Lucknow Biotech Park

2.5 Lucknow Biotech Park

Lucknow, the proud capital of Uttar Pradesh is well known for its traditions and culture. It is also an elite center of Science & Technology with several National and Regional institutions par excellence. This aspect of the city was recognized and the city was declared as "Biotechnology city" on January 3rd 2002 during 89th Annual Session of the Indian Science Congress held at Lucknow. With the aim of promoting biotechnology and utilizing the existing strength of scientific resource in the State, the Biotech Park has been set up on eight acres of land in the vicinity of the State Remote Sensing Application Centre and ISRO Telemetry, Tracking and Command Network (ISTRAC) at Jankipuram, Kursi Road, Lucknow.

The park also extends expertise from scientists of Local CSIR institutions apart from other institutions, universities and par excellence centers of learning in the town and not far away the famous Indian Institute of Technology at Kanpur. The Park is a model of active collaboration between industries, research institutions and academia. Biotech Park has motivated local scientists and entrepreneurs to venture into Biotechnology and has paved new path of success for developing an approach to meet the complex challenges of reducing unemployment, establishing new Bioagri-industries for urban and rural development. The focus of the park is on challenges and opportunities surrounding the current biotechnology issues related to technology development which would ultimately result in the development of the state and generate rural employment and social upliftment. The Biotech Park is fully functional with nearly 50,000 square ft. area utilized for Bio- business, Incubation Facility apart from bio R&D units by the entrepreneurs for setting up their production facilities.

Additional nearly three acres of land has been leased out to Biotech Companies as build -to-suit space. The Biotech Park's incubator II building on 20,000 square-ft has become functional and space has been leased out to setup R&D laboratories. Besides 10 wet lab suites, the incubator II has multipurpose meeting rooms/conference hall to accommodate 300-325 persons, offices and other related facilities.

Biotech Park has the Quality Management System Certificate from Norsk Akkreditering of Norway. NS-EN ISO 9001:2008/ISO 9001:2008 for running Biotechnology Park with Analytical Quality Control & Molecular Biology Laboratories, Aqueous & Solvent Extraction Units, Biofertilizers, Tissue Culture and Bioinformatics Facilities. The Tissue Culture facility of the Biotech Park has been recognized under national certification of Tissue Culture raised plants (TCS- TCP) by the accreditation panel from BCIL.

Eligibility

Biotech Park Lucknow is an incubator plus model. Entrepreneurs or early stage companies with innovative research plan in the areas of health care, energy or industrial applications will be preferred. Established companies engaged in emerging area of R&D are also eligible for taking up space. Further company should have expertise and sound business plans to qualify for the space in the park. The proposal should have sound research plan leading to commercialization of the products in short time span 2- to 3 years. The proposal should clearly define the aims that whether it is creating a new technology for existing application or is aim to improving upon existing process. It should be supported with the expertise of the proposer and financing mechanisms

Scope and Support

Biotech Park plays an important role in the initial establishment of the startup companies by providing facilities of solvent extraction, aqueous distillation, plant tissue culture and biofertilizers. The Analytical & Quality Assurance Unit of Park helps its companies and local institutions in product development, standardization and quality control. Common effluent treatment plant and Aqueous distillation unit for essential oils. Uninterrupted power and water supply, Conference hall, cafeteria, 24X7 hours security are the other few facilities provided by the park.

The Park also provides: information on business avenues based on the facilities at the incubator centre sourcing of technologies and facilities available with R&D institutions/Universities/medical institutions, access to expertise of accomplished scientists, information about incentives available (like Service tax exemption) under Government biotech policies/ grants, schemes and loans, information about IPR. Space is provided to start – up companies on lease rent basis. Presently, Park itself does not offer any VC/ PE funds. However, it guides the selected companies for applying to VC/ PE funds.

Evaluation

The proposals are considered and approved by the Advisory Committee of the Biotech Park.

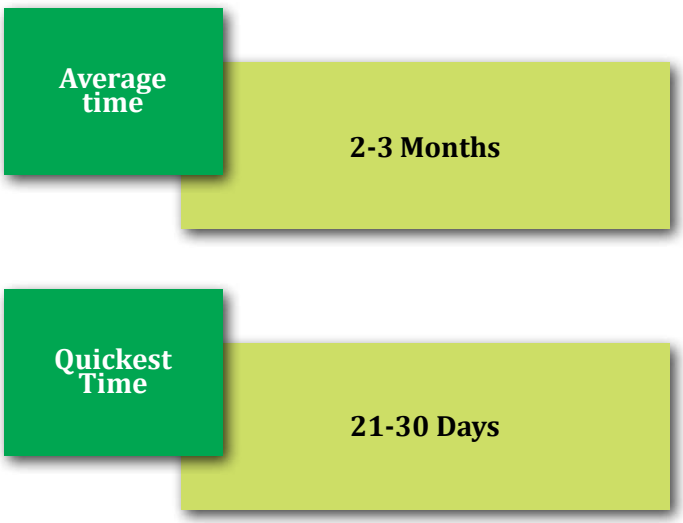

Fig 2.4: Average time & Quickest time for approval from Lucknow Biotech Park

Evolva Biotech

Evolva Biotech

Mr. Shriram Raghavan

Evolva Biotech is the fully owned subsidiary of Swiss multinational biotech companies with a cutting edge technology platform with several novel products in the space of pharma, nutrition and personal care. The technology involves baker's yeast to create new biosynthetic routes for novel ingredients & molecules.

Mr. Shriram Raghavan shares his experience with TICEL Bio Park. When asked How did they decide to take the space and facilities provided by TICEL Bio Park, Chennai and also why TICEL Bio Park, Mr. Shriram Raghavan answered, "We were exploring for a "plug & play" facility and TICEL offered us that space. It has all pre-approvals from the Government – including the clearance from the state pollution control board. The facility is backed up 24 hrs by a diesel power plant and is fully air conditioned 24 X 7. In addition to its ready to use facilities, the key benefit of choosing TICEL is its proximity to city's key facilities such as airport, suburban rail network, and a host of other social amenities. Its location is a key advantage for staff and those who visit us, unlike other cities such as Bangalore or Hyderabad which involve more than 90 minutes of commute to reach those bio parks." His reply regarding the process for getting in TICEL Bio Park, "The process for getting in requires deposit of advance on first come- first serve basis.

Dr. P.M. Murali
Managing Director

GVFL Limited

4.2 GVFL Limited

Gujarat Venture Fund (GVFL) is one of the pioneers in venture capital firms in India and amongst the front runner VCs of India. GVFL has made investments in 74 technology start-ups and early stage companies across India and have already divested from 58 investments. GVFL is a seasoned venture capital firm and technology pioneer, respected for its hands-on approach in creating revolutionary technologies and recognizing emerging trends. GVFL empower every portfolio company with the intelligent direction, capital, strategic partnerships and flexibility critical to achieving success at every stage of the investment cycle.

GVFL's exceptional style of investing is based upon operational experience, market awareness, and technology knowledge. These capabilities allow Gujarat Biotech Venture Fund (GBVF) to identify and grow sustainable technology companies that deliver innovative solutions in the areas of biotechnology and life sciences. Over the past 20 years, GVFL Ltd. has raised six venture capital funds. These funds are invested in 74 technology and growth stage companies across the country. The objective of the fund is 'to achieve long term capital gains through investments in businesses which have the potential to become forerunners in large high growth markets.

Mihir Joshi
Managing Director

Maanan Kamdar
Associate (Biotech Project)

Eligibility

The fund invests in start-ups, early stage and existing companies in the areas of biotechnology having potential to become leading player in India.

1.2.1 Agricultural Census

Introduction

This scheme will conduct quinquennial Agricultural Census in the country for collection of data on structure of operational holdings by different size classes and social groups.

Eligibility

100% assistance by Government of India. Assistance is provided to State Governments only.

Scope and Support

Agriculture Census is the largest countrywide statistical operation undertaken by Ministry of Agriculture. Primary and secondary data on structure of Indian agriculture are collected under this operation with the help of machinery of the State Governments. The first Agriculture Census in the country was conducted with reference year 1970-71. So far seven Agriculture Censuses from 1970-71 and six Input Surveys since 1976-77 have been completed. The 8th Agricultural Census 2005-06 and 7th Input Survey 2006-07 are in progress. The Agriculture Census operation is carried out in three phases.

Phase-I: A list of all the holdings with data on area, gender and social group of the holder is prepared with the help of listing schedule L-I.

Phase-II: Detailed data on tenancy, land use, irrigation status, area under different crops (irrigated and un-irrigated) are collected in holding schedule known as Schedule-H.

Phase-III: Which is called as Input Survey, relates to collection of data of input use across various crops, States and size groups of holdings, in addition to data on agriculture credit, implements and machinery, livestock and seeds.

Evaluation

Evaluation is done by the agency called ISRI. The evaluation is still in the process.

Agriculture Census forms part of a broader system of collection of Agricultural Statistics. It is a large-scale statistical operation for the collection and derivation of quantitative information about the structure of agriculture in the country. An agricultural operational holding is the ultimate unit for taking decision for development, of Agriculture at micro level. It is for this reason that an operational holding is taken as the statistical unit of data collection for describing the structure of agriculture. Through Agriculture Census it is endeavored to collect basic data on important aspects of agricultural economy for all the operational holdings in the country. Aggregation of data is done at various levels of administrative units.

Periodic Agriculture Censuses are important as these are the main source of information on basic characteristics of operational holdings such as land use and cropping patterns, irrigation status, tenancy particulars and the terms of leasing. This information is tabulated by different size classes and social groups including Scheduled Castes / Scheduled Tribes which are needed for development planning, socio-economic policy formulation and establishment of national priorities.

Industrial biotechnology

The Industrial biotechnology in Gujarat is represented by Major companies like Maps (India) Ltd., Anil Biochem, Americos, Aum Biochemicals, Meteoric Lifesciences, Microgenix Pvt. Ltd., Yeast Alco Enzymes Ltd. etc. The Major industrial Bioetchnology Products of these companies, are, Sodium Gluconate, Calcium Gluconate, α-amylase, Amylo glucosidase, Protease, Xylanase, Cellulase.

The strong convergence of traditional Pharma, chemical, textile and agriculture industries towards Biotechnology, is leading to gradual expansion of Biotechnology sector in Gujarat, both in terms of number of companies and investment.

Key Facts about Gujarat Pharmaceutical and Biotechnology

- Contributes 35% to the overall Indian Pharma output.
- Home to 40% Contract Research Organizations (CRO) in the country.
- 22% of India's Pharma exports.
- Employs around 63 000 people in the state.
- Known as the hub of Indian pharmaceutical industry with over 5,400 manufacturing licenses.
- The landscape of Gujarat Biotech industry, consist of more than 50 Biotechnology companies and 66 support organizations.
- The present annual turnover in biotechnology in Gujarat has been around USD 150 - 175 million (Rs 700 crore).

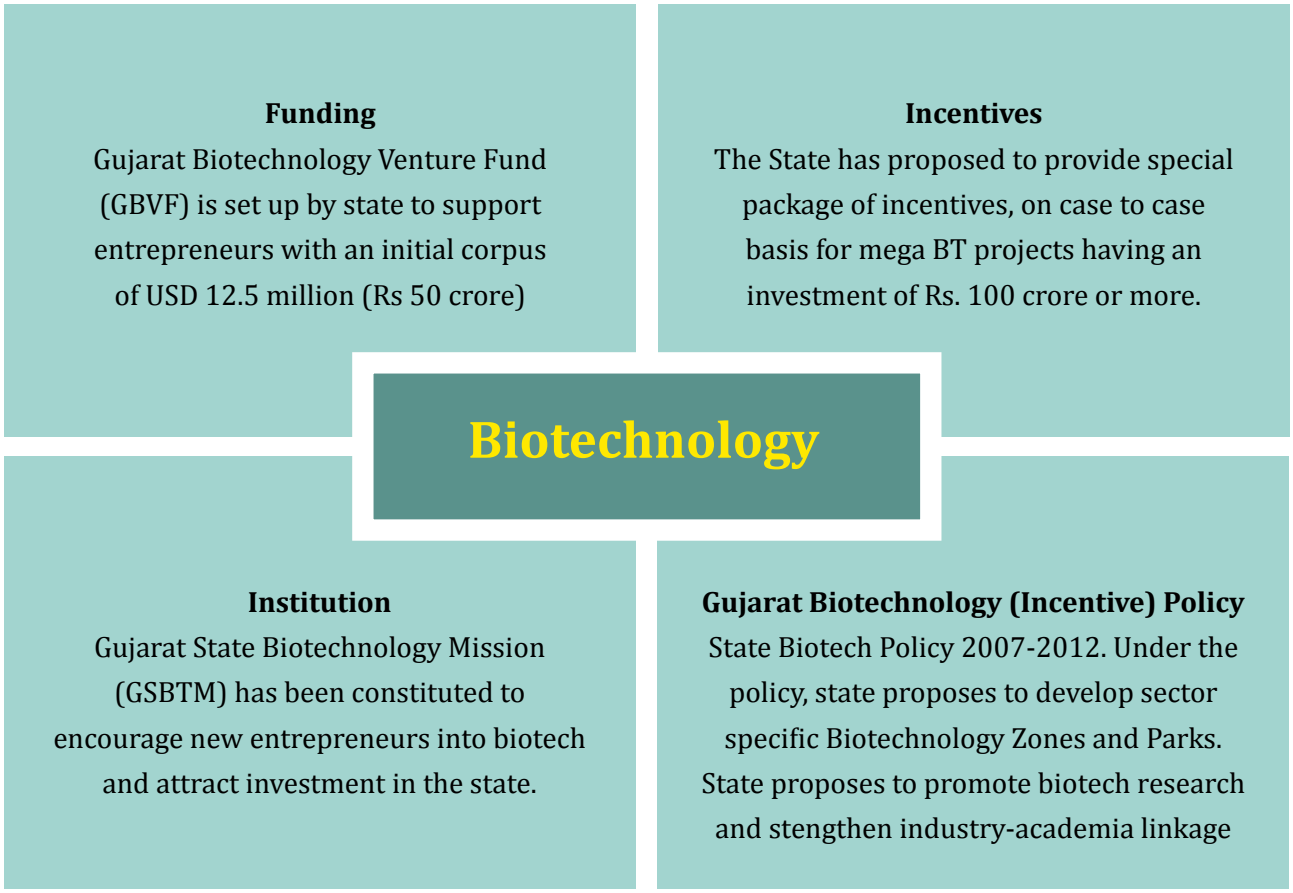

Fig 2.1 : Initatives taken by Gujarat Govt. for Biotechnology

3.90. International Scholarships for Study and Research by the Research Council of Norway

NOK 27,000/M

The Purpose of this Scholarship is to strengthen Norwegian research institutions and to promote contact between foreign scientists and Norwegian researchers. Eligibility: The programme provides grants for research stays for Ph.D. students and younger researchers who are affiliated with a higher education and/or research institution in the following countries (regardless of citizenship) Non-European countries: Argentina, Brazil, Chile, Egypt, India, Israel, Japan, Mexico and South Africa. Contact local nominating authorities for full details. **Deadline:** 28th November 2012. **Duration:** 3-12 months. **Priority research areas:** Unrestricted. **Support:** NOK 13 500 per month (without family), NOK 27 000 per month (with family).NOK 10 000 (without family)/NOK 20 000 (with family) in a one-time travel grant for applicants from non-European countries: Argentina, Brazil, Chile, Egypt, India, Israel, Japan, Mexico and South Africa. **Average time for approval:** The outcome of the assessment process will be announced in April 2013. **Examples of Indian Scholar:** This information cannot be provided. **Contact:** International Scholarship Section. **E-mail:** intstip@forskningsradet.no. **Tel No:** +47 22 03 70 00. **Address:** The Research Council of Norway, International Scholarship Section, P.O. Box 2700 St. Hanshaugen, N-0131 Oslo, NORWAY. **Website:** http://www.forskningsradet.no/english.

3.91. San Raffaele International Postdoctoral Programme

€36,000/Y

The San Raffaele Scientific Institute in Milan is launching its International Postdoctoral reserved to non-Italian citizens. The positions will cover two years of research activity and training in a strong research environment, offering competitive salaries and high quality seminars and workshops. Scientific Research at the San Raffaele Scientific Institute is organized in Divisions and Centres. Applicants will undergo a competitive selection, at the end of which they will freely choose a research project and the hosting laboratory among the ones accepting positions. **Deadline:** N/A . **Duration:** 3 years. **Priority research areas:** Topics span many areas of research, including Molecular Oncology, Neuroscience, Genetics and Cell Biology, Immunology, Transplantation andInfectious Diseases, Metabolic and Cardiovascular Sciences, Regenerative Medicine Stem Cells and Gene Therapy, Developmental Biology, Genomics, Bioinformatics and Biostatistics, and Experimental Imaging. **Support:** Gross annual salary of up to 36,000 Euros. **Average time for approval:** N/A. **Granting Agencies:** The San Raffaele Sci

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