



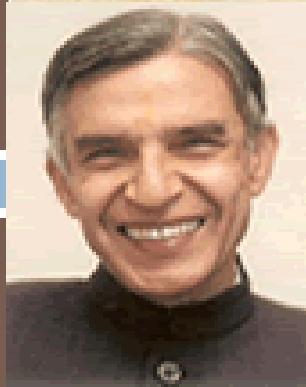
# **FINANCIAL ASSISTANCE for Commercialization of Innovations**

**BY**

**TECHNOLOGY DEVELOPMENT BOARD**  
DEPARTMENT OF SCIENCE & TECHNOLOGY  
TECHNOLOGY BHAVAN, NEW MEHRAULI ROAD  
NEW DELHI – 110016  
[www.tdbindia.org](http://www.tdbindia.org)

# MINISTRY OF SCIENCE AND TECHNOLOGY

## Government of India



Shri Pawan Kumar Bansal  
Hon'ble Minister for Ministry of  
Science & Technology,  
Ministry of Earth Sciences and  
Ministry of Parliamentary Affairs

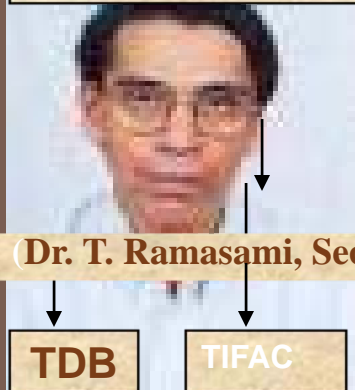


Shri Ashwani Kumar  
Hon'ble Minister of State for Ministry  
of Science & Technology,  
Ministry of Earth Sciences, Ministry  
of Planning & Ministry of  
Parliamentary Affairs

Department of Science  
& Technology

Department of  
Scientific &  
Industrial Research

Department  
of Biotechnology



(Dr. T. Ramasami, Secretary)

TDB

TIFAC

R&D  
Labs

(Dr. S K Brahamchari , Secretary )

CSIR

CEL  
NRDC

(Dr. M.K.Bhan Secretary)

R&D  
Labs



Shri H.K. Mittal  
Secretary

TDB services for commercialization of innovations:-

- Term loans ( @ 5% simple interest)
- Seed Capital to TBIs/ STEPs.
- Funding to VCFs
- Grants for Technologies of National Interest

### SOME SUCCESS STORIES

- Hepatitis Vaccines
- Energy from Municipal Solid Waste
- Battery Operated Car, Indigenous Sedan / Station Wages Car
- Epidermal Growth Factor
- Passenger Air Craft, e-Governance

# CHALLENGES IN COMMERCIALIZATION OF INNOVATIVE TECHNOLOGIES

- **Development & commercialization needs to be done concurrently**
- **High Risk**
- **Difficult to appraise the viability**
- **Difficult to get finance from FIs/ Banks**
- **Commercialization is relatively costly**

# TECHNOLOGY DEVELOPMENT BOARD

- **GOI constituted TDB in Sept 1996 under the provisions of the TDB Act 1995.**
- **TDB provides financial assistance to the industrial concerns and other agencies for development and commercialization of innovative technologies.**
- **financial assistance in the form of Soft Loan, Equity or Grant-in-aid.**

## TDB functions as defined in the Act:-

- Technology Development Board, would-
  - a) **Provide equity capital, subject to such conditions as may be determined by regulations, or any other financial assistance to industrial concerns and other agencies attempting commercial application of indigenous technology or adapting imported technology for wider domestic applications;**
  - b) **Provide financial assistance to such research and development institutions engaged in developing indigenous technology or adaptation of imported technology for commercial application, as may be recognised by the Central Government;**
  - c) **Perform such other functions as may be entrusted to it by the Central Government**

# TDB Funding Channels

## Soft Finance

- To industrial concerns
- Technology Start up Companies
- Consortiums
- And like.

## Seed Capital Support

- Through Technology Business Incubators at Centres of Technology / Academic Excellence
- **Fifth round applications: July 31, 2011**

## Support to Venture Capital Funds

- For financing Technology start ups.

## Technologies of National Importance

- To consortiums of Industry, Labs and Contract Research organizations

**Soon: US Aid Corpus of Rs 200 crores for social innovations**

**Integrated programmes for development and commercialization of technologies**

# TDB FUNDING CRITERIA

- Who can be funded ?
  - Commercial enterprises, startup companies (excluding sole entrepreneur/ proprietorship concern)
- Source of Technology
  - National Laboratories
  - In-house R&D unit of a company recognized by DSIR
  - Individuals holding IPRs
  - Adaptation of imported technology to wider domestic applications
- TDB is not Software Development Board neither it is Technology Application Board.
- **Substantial nature of Technology Development is the mandate.**



**Prototype  
Development should  
be completed**

# Terms & Conditions of TDB Funding

## ➤ Term/ project Loan to commercial entities

- upto 50% of project cost to be incurred at the date of application
- @ 5% simple interest
- Total project debt to equity of promoters/ partners ratio: 1.5 : 1.
- in installments
- Accumulated interest spread over
- Moratorium of 1 year
- Repayment in six monthly nine installments
- No prepayment charges.
- Working capital not included.
- R & D / marginal Design development / software development charges not included :
- Technology should be ready for commercialization / proven at pilot plant level / beta level.

# Terms & Conditions of TDB Funding

- **Term/ project Loan to commercial entities**
- **Equity in public entities upto 25% of project cost**
- **Grants-in aid to projects of national interest**
- **Royalty @ 0.5 % for the duration of re-payment.**
- **Implementation within 3 years**
- **Customs duty exemption on import of R&D equipments**
- **No Processing/Administrative Charges**
- **Soft Collaterals**

# What can be funded: Development and commercialisation of

- ❖ New product/process/application through indigenous technology.
- ❖ Significant improvements in the existing product/ process/ application.
- ❖ Substantial quality upgradation, reduced material consumption, reduced energy consumption, cost reduction, improved competitiveness, improved ergonomics.
- ❖ Development and deployment of technology or design to satisfy existing occupational health and/or safety standards, or improve upon them.
- ❖ Development and deployment of technology or design necessary to satisfy domestic or foreign environmental requirements or standards current or anticipated.

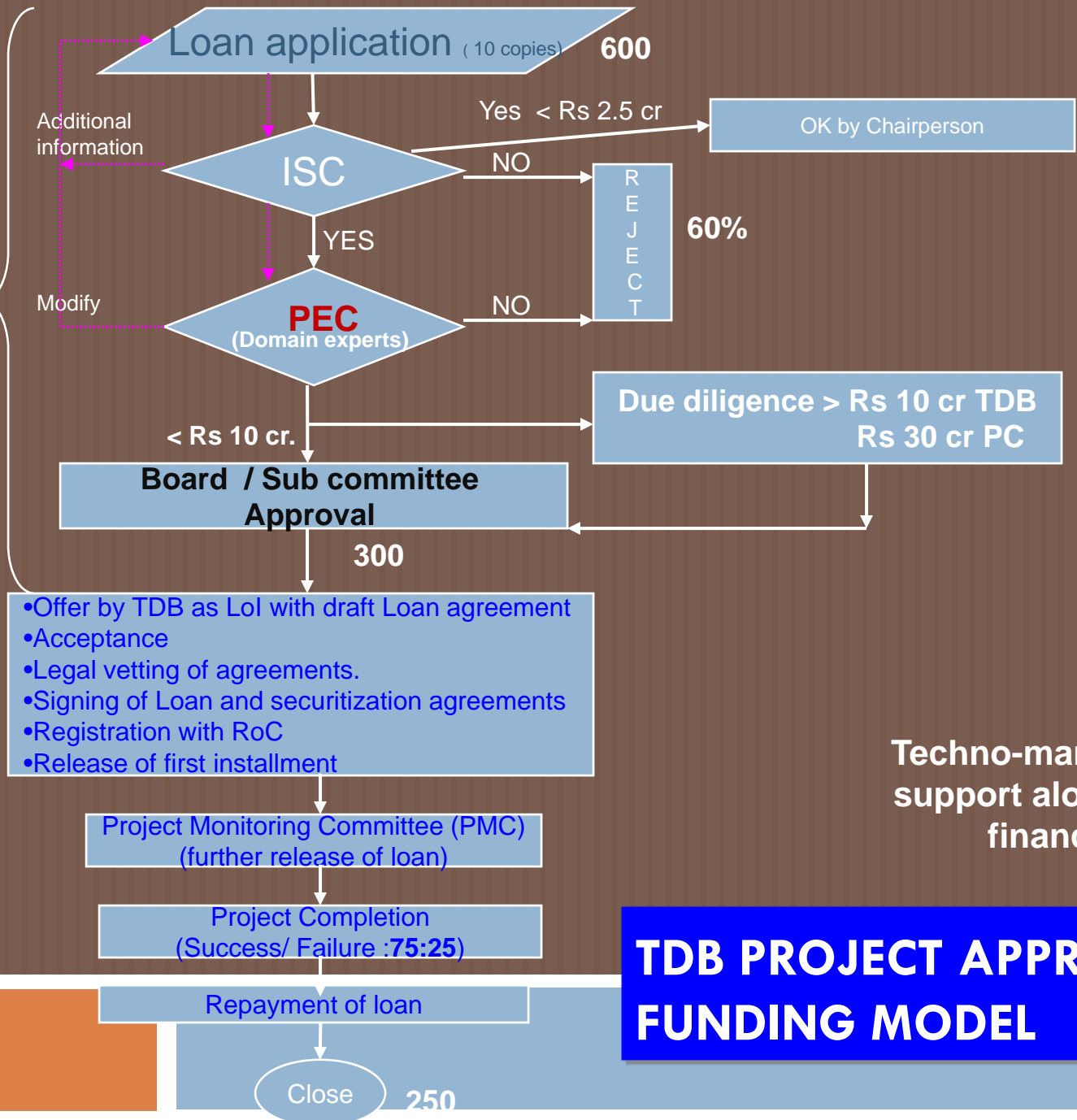
# What can be funded: Development and commercialisation of

- ✱ **Development and deployment of technology or design necessary to satisfy the requirements of domestic legislation, and/or decisions of the judiciary or product liability legislation in export markets.**
- ✱ **Adaptation/modification to product/process which has been imported so as to make it suitable for wider domestic application.**
- ✱ **Replacement of imported raw materials/components with indigenous substitutes.**
- ✱ **Providing the socio-commercial viability of new and/or renewable sources of energy commercially deliverable to consumers.**
- ✱ **Development of technology to meet the medical standards and providing socio-commercial viability of bio-medical equipment and devices.**
- ✱ **Hazardous, waste recycling.**

# TDB SUPPORT IS NOT AVAILABLE FOR

- **Refinancing**
- **Basic Research**
- **Establishment of new R&D centres**
- **Travel, Conferences, Workshops etc unless they form part of project approved by TDB**
- **Writing of books, reports unless they are essential component of approved project**
- **Mere creation of technical infrastructure**
- **More than 2 projects at a time to an industrial concern**
- **An industrial concern that is sick**

3 - 4 months



Techno-managerial support along with finance

# TDB PROJECT APPRAISAL & FUNDING MODEL

# Cost of the Project

- Land
- Site Development
- Building/Civil works
  - a. Factory
  - b. Administrative
  - c. Others
- Plant & Machinery
  - a. Imported
  - b. Indigenous
- Miscellaneous Fixed assets
- Technical know-how & Engg. Consultancy fee
- Cost of filing patents
- Contingency
- Margin money for WC

- **TDB support is limited to 50% of the project cost to be incurred on the date of the application**
- **Debt: equity ratio of 1.5:1**

**Submission of application**

**Internal Screening**

**Project Evaluation**

**Signing Loan Agreement**

**Project Monitoring**

**Project completion &  
Repayment**

Proposals are screened by Internal Screening Committee on the following aspects

- ❑ Point of view of Completeness of the Application
- ❑ Objective of the Project
- ❑ Status of the Technology
- ❑ Track Record of the Applicant
- ❑ Project Cost

**Submission of application**

**Internal Screening**

**Project Evaluation**

**Signing Loan Agreement**

**Project Monitoring**

**Project completion &  
Repayment**

**Proposals are Evaluated by Project Evaluation Committee on the following criteria**

- ❑ **Soundness, Scientific Quality and Technical Merit**
- ❑ **Potential for Wide Application and the benefits expected to accrue from Commercialisation**
- ❑ **Adequacy of the Proposed Effort**
- ❑ **Capability of the R&D Institution in the proposed Action Network**
- ❑ **Organisational and Commercial Capability of the Enterprise including its Resources**
- ❑ **Reasonableness of the Proposed Cost and Financing Pattern**
- ❑ **Measurable Objectives, Targets and Mile-stones**
- ❑ **Track Record of the Entrepreneur**

**Submission of application**

**Internal Screening**

**Project Evaluation**

**Signing Loan Agreement**

**Project Monitoring**

**Project completion &  
Repayment**

## **Signing of Loan Agreement**

- ❑ **Based on the recommendations of PEC, the Board may approve the project**
- ❑ **For bigger projects, due-diligence exercise may be conducted**
- ❑ **The terms of loan assistance may differ based on the type of project**
- ❑ **Loan agreements are signed at New Delhi**
- ❑ **An Agreement is signed in duplicate**

**Submission of application**

**Internal Screening**

**Project Evaluation**

**Signing Loan Agreement**

**Project Monitoring**

**Project completion &  
Repayment**

## **Project Monitoring**

- ❑ **Project is monitored by PMC consisting of technical & financial experts**
- ❑ **Before each monitoring, the enterprise is required to submit the prescribed returns**
- ❑ **Monitoring of the project is done before release of subsequent instalment except the first.**
- ❑ **Monitoring is done to review the physical, technical and financial progress of project**
- ❑ **Based on the recommendations of PMC, next instalment of assistance may be released, or appropriate decision taken by the Board**

**Submission of application**

**Internal Screening**

**Project Evaluation**

**Signing Loan Agreement**

**Project Monitoring**

**Project Completion &  
Repayment**

## **Project Completion & Repayment**

- ❑ **On completion of the project, completion report is required to be submitted.**
- ❑ **Repayment is spread over a period of 5 years**
- ❑ **Repayment commences after one year of completion of the project**
- ❑ **Payment of accumulated interest is spread over 3 years commencing after one year from the start of the repayment**
- ❑ **All the payments/ repayments are payable at Delhi**

# INVITATION .....

**TDB look forward for  
Partnership/Networking  
Opportunities to  
Commercialize Innovations**

**For further information, please contact :  
Secretary  
Technology Development Board  
Department of Science & Technology  
Wing-A, Ground Floor, Vishwakarma Bhawan  
Shaheed Jeet Singh Marg  
New Delhi – 110016**

**E: mails : [hk.mittal@nic.in](mailto:hk.mittal@nic.in)**

**Website: [www.ttdb.gov.in](http://www.ttdb.gov.in)**

# Before applying.....

- It is advisable to
  - ▣ Check edibility from Technological efforts and uniqueness.
  - ▣ Project Techno-economic feasibility report.
  - ▣ Project Cost and means of financing proposed as per the TDB Act/ Rule provisions.
  - ▣ Pre-consultations.

# BENEFICIARIES

## HEALTH AND MEDICINE

### **\*\*Biocon India Limited\*\***

- ❖ The company has commenced the production of Mycophelionate Mofetil through 'PlaFractor' technology. The PlaFractor is a unique fermentation facility invented by the company.
- ❖ Mycophelionate Mofetil is an immuno-suppressant.



(Rs in lakhs)

**Total cost of Project – 2560**

**TDB Loan Assistance – 970**

# BENEFICIARIES

## HEALTH AND MEDICINE

**\*\*Bharat Biotech International Limited\*\***

- ❖ The company launched its maiden product 'Revac-B' for Hepatitis-B in October 1998
- ❖ The vaccine is manufactured using Saccharomyces (yeast) with a plant capacity of 100 million doses per annum



(Rs in lakhs)

**Total cost of Project –1221**

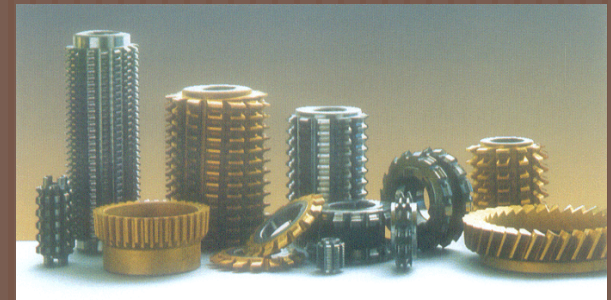
**TDB Loan Assistance – 325**

# BENEFICIARIES

ENGINEERING

## **\*\*AV Alloys Limited\*\***

❖ The company has commenced commercial production of ESR processed special alloy steel rounds and bars.



❖ The product was launched on the Technology Day, 11<sup>th</sup> May 2000



(Rs in lakhs)

**Total cost of Project -1047**

**TDB Loan Assistance – 450**

# BENEFICIARIES

## INFORMATION TECHNOLOGY

### **\*\*PiCoPeta Simputers private Limited\*\***

❖ The Simputer, or the simple, inexpensive, multilingual, people's computer, is an ideal field device for a variety of applications.

❖ The linux-based device is slightly larger than a palm but has ten times the processing speed.



(Rs in lakhs)

**Total cost of Project –200**

**TDB Grant – 200**

## **Air Transport project by National Aerospace Laboratories (NAL) BA**

**NAL has developed the first prototype of the multi-role Light Transport Aircraft (LTA) – named as SARAS and the Aircraft made its maiden flight successfully on 29<sup>th</sup> May 2004. It reached a speed of 150 nautical miles and flew 35 kms at an altitude of 8000 feet**



**Total Cost: 13138 lakhs  
TDB Grant: 5380 lakhs  
TDB Loan : 1100 lakhs**

# BENEFICIARIES

ROAD TRANSPORT

## **\*\*Eicher Motors Limited\*\***

❖ The company has been provided financial assistance by the Board for design and development of 12 tons GVW and above category heavy commercial vehicles.



❖ The company had commenced the engine development in Dec 1997. The company has produced 8 prototypes of the HCV s



(Rs in lakhs)

**Total cost of Project – 6154**

**TDB Loan Assistance -1500**

# BENEFICIARIES

ROAD TRANSPORT

## **\*\*Reva Electric Car Co. Ltd\*\***

- ❖ The battery operated Reva Electric car has been launched by the company in Bangalore & Delhi.
- ❖ The payload capacity of the car is 250 Kg with curb weight of 700 kg. The car has a driving range of 80 Km per charge and top speed of 65 Km/hour.



(Rs in lakhs)

**Total cost of Project – 1800**

**TDB Loan Assistance -465**

# BENEFICIARIES

## ROAD TRANSPORT

### **\*\*Tata Motors Limited\*\***

❖ The company has developed and manufactured two variants of Indica car – Tata Sedan and Tata Estate under Indica Platform.

❖ The Indigo Sedan was launched in December 2002 and Indigo (Marina) was launched in August 2004. Tata Motors was given the National award by TDB on the technology day on 11<sup>th</sup> May 2004

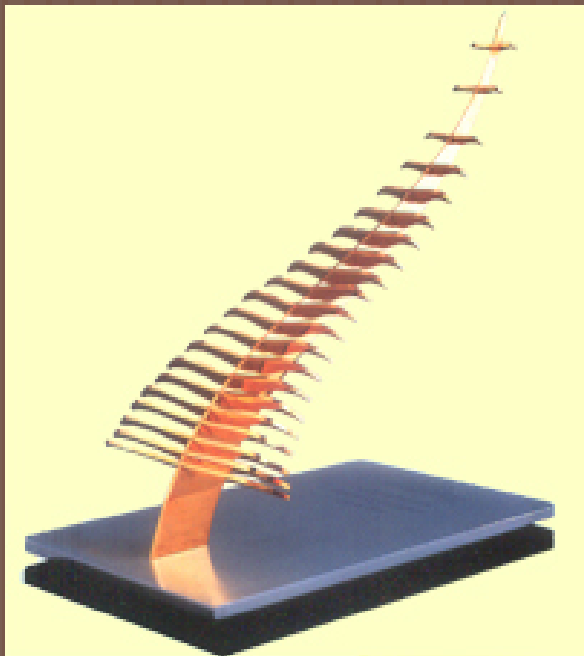


(Rs in lakhs)

**Total cost of Project –34200**

**TDB Loan Assistance -3000**

# National Award for successful technology



Technology Development Board has instituted a 'National Award for successful commercialization of indigenous technology' by an industrial concern. The National Award of Rs. 10 Lakhs each is given to the industrial concern that has successfully commercialized the indigenous technology and the developer/provider of such technology.

# National Award to a SSI unit for successful technology



The Technology Development Board also provides a cash award of Rs. 2 lakhs to be given to a Small Scale Industry (SSI) that has successfully commercialized a product based on indigenous technology.



***THANK YOU***