# **ANNUAL REPORT**





TECHNOLOGY INFORMATION, FORECASTING & ASSESSMENT COUNCIL (TIFAC)

(Department of Science and Technology) A-wing, Vishwakarma Bhavan, Shaheed Jeet Singh Marg, New Delhi - 110 016 www.tifac.org.in TECHNOLOGY INFORMATION, FORECASTING & ASSESSMENT COUNCIL (TIFAC) (Department of Science and Technology) www.tifac.org.in

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### TECHNOLOGY INFORMATION, FORECASTING AND ASSESSMENT COUNCIL (TIFAC) (Department of Science & Technology)

A-Wing, Vishwakarma Bhavan, Shaheed Jeet Singh Marg, New Delhi-110016 www.tifac.org.in

TIFAC

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### **EXECUTIVE SUMMARY**

The Technology Information, Forecasting and Assessment Council (TIFAC), an autonomous society set up under the Department of Science and Technology in 1988, is mandated to assess the state-of-the-art technology and set directions for future technological development in India in important socio-economic sectors. As a unique knowledge network institution in India, TIFAC activities encompass a wide array of technology areas. During the year 2009-10, TIFAC continued to consolidate activities in the areas of studies, technology facilitation mechanisms and technology demonstration projects in different sectors. A summary highlighting a few significant achievements during the year 2009-10 is as follows.

**Foresight and Assessment Activities:** A new study has been taken up to draw a 'Technology Road Map for Indian Aluminium Industry'. The ongoing studies on Impact and Determinants of FDI & R&D as well as studies in other sectors were continued towards preparation of final reports. Besides these, two new studies for assessing technology gaps in the Handmade Paper Cluster of Sanganer and the Rubber Industry Cluster of Agartala were taken up and study focusing on Food Processing Cluster of Malda was completed.

**Innovation Support:** Technology Refinement and Marketing Programme – 'TREMAP' is facilitating innovative technologies towards commercialization through different centres established. Several technologies have been supported during the year.

**Agriculture:** In this sector, seven different projects covering different aspects of increasing farm productivity particularly quality seed production, crop diversification, deep water rice cultivation, deployment of IPM practices and organic farming were completed. Seven other ongoing projects progressed towards completion.

**Collaborative Automotive Research (CAR):** A 'Technology Roadmap for Electric and Hybrid Electric Vehicle introduction' was initiated to determine specific component technology requirements for different categories of vehicles and to assess technology options for the country. Different technology demonstration projects completed include application for IT for vehicles tracking and quality control of engines.

**Bio-Products & Bio-processes:** TIFAC continued its efforts in generating and implementing projects in collaboration with academia / R&D labs / industries in areas of nutraceuticals, phytochemicals, value-added bio-products, stereo-specific optically pure bio-molecules, bio-energy etc. Carrying out specialized studies in areas like biomass availability and its surplus, bio-products etc. was also an important activity of the programme. (Contd.)



**Mission REACH:** Under the programme, efforts were continued to make higher education relevant by involving industry as stakeholders. New Centres of Relevance and Excellence (COREs) are being initiated in different disciplines.

**MSME Programme:** TIFAC continued to establish symbiotic relationship between MSME Clusters and technical institutions towards providing clusters with R&D and technical support. In the clusters of Howrah Foundry and Baruipur Surgical Instruments, the established R&D and Innovation Centres have started reaching out to the industries with R&D and manpower training support.

With the cumulative experience of pursuing studies and implementing technology demonstration projects during the previous years, TIFAC is looking forward to play a major role in identifying crucial technological areas, and nucleating initiatives for technology development and demonstration through synergizing actions with the major stakeholders and network of experts. TIFAC is also looking towards commissioning further studies in technology assessment as well as technology foresight.

Pr. R. Chiclamboran Chairman



### Foresight and Assessment Activities

#### **1.1 TIFAC Studies & Reports**

TIFAC has been bringing out reports that assess the status and needs of a wide spectrum technology sectors, with a view to examine technology options for India in a fast changing economic environment. The reports intend to review the technology status in India vis-à-vis global trends and assess market potential as well as technological aspects. They provide valuable inputs to R&D institutions, academia, government and financial institutions. While some of these studies are demand driven and are undertaken based on specific needs, the others are targeted to enrich the knowledgebase for addressing technological challenges.

The progress of activities during the period is given below:

#### **Ongoing Studies**

**Packaging Technology Study Series** Consultants: SIES School of Packaging, Navi Mumbai; S. Ambrish Bhargava, Formerly president Rollatainers, India

The series of ongoing studies on packaging technologies aims to highlight the current status of packaging in six different areas in terms of packaging standards, technical requirements, consumption of packaging materials in India and developed countries, analyze the trends and needs and future potential in terms of domestic and export market. Materials, machinery and related aspects, export packaging requirements are also being addressed in the report. The analysis would cover the packaging systems for short/medium/long shelf life as relevant to product groups *viz.* personal care products, pharmaceuticals, fresh and processed foods, non perishables, display and promotional packaging & chemicals. A draft study has been completed for '*Personal care products*' and the same has been taken up for value addition & technical editing in terms of incorporating industry relevant information.

#### **Pesticide Encyclopaedia**

Consultant: Dr Vasant Gowariker (Chairman-Rajiv Gandhi S&T Commission, Govt. of Maharashtra) as the Chief Editor, with the organizational support of Jnana Prabodhini, Pune

The Pesticide Encyclopaedia is being developed as the concise information source on all crop protection systems. The document is being prepared as a sequel to well received 'Fertilizer Encyclopaedia', prepared by the same consulting team earlier. Over 1000 entries covering a wide span of pesticides are being covered in the work. The encyclopaedia work progressed during the year.

#### Series of Studies on Determinants and Impact of FDI in R&D Sector

TIFAC has initiated a series of studies to bring out the dynamics, constraints and enablers and impact of foreign direct investment (FDI) in the Indian R&D sector. These studies have been planned to bring out well researched, scholarly outputs of policy significance. These are planned as multi-sectoral studies focused on regions of high concentrations and/or as



sector specific studies in key sectors like pharmaceuticals, information technology, etc. The studies would address aspects like estimating value creation from FDI in R&D and the resulting spillovers. This study series has been taken up as a follow-up to the earlier TIFAC study on '*FDI in The R&D Sector: Study for Pattern in 1998-2003*', which was well accepted as an Indian landmark document in terms of much needed indicative assessment in this difficult terrain where information is scarce and not easily available. The following studies were initiated during the period under the series:

#### Centre for Global or local for Global? An examination of FDI in R&D Centres of IT MNEs in India

Consultant: IIT Delhi, New Delhi

This study is focused towards understanding aspects like the nature and intensity of FDI in R&D by the multinational enterprises in the IT sector, whether Indian R&D centers are executing arms of the global head quarters or equal partners in technological collaborations and the extent of spillover on local science and technology system. In order to provide additional information for the study, a brainstorming workshop on the topic '*Enabling Research and Development in Indian IT industry*' involving key stakeholders and experts was also held. The draft report of the study is under assessment

#### **Impact of FDI in R&D on Indian Production and R&D Systems** Consultant: NISTADS, New Delhi

The study focuses on the impact of the presence of foreign R&D centres on corporate R&D and the production system by assessing and evaluating the nature, type and mode of linkages that these R&D centres have with the Indian R&D and production system. It also seeks to probe how the presence of these R&D centres affects the host country's technological capabilities, competitiveness and skill development. As a part of the study, a workshop was organized in Bangalore with experts and stakeholders to identify the constraints and policy related issues that can create an enabling condition for promoting FDI in R&D for strengthening technological capabilities and innovation. This study progressed towards completion.

#### Determinants and Impact of FDI in R&D in Creation and Diffusion of Knowledge in Automobile Industry

Consultant: Institute for Studies in Industrial Development, New Delhi

This study focuses on analysis of impacts and determinants of FDI in R&D as an exogenous source of knowledge in automobile industry and how they influence the endogenous growth of knowledge intensive output. It aims to understand the determinants of inflow of FDI in R&D in the automotive sector linkages in the spatial context; knowledge spillovers and flows to firms operating at different levels of technology in the value-chain & the impacts of foreign R&D institutes on the highly skilled labour market within India. The study has been commissioned recently.

#### **New Studies**

#### Technology Roadmap for Indian Aluminium Industry

A study was taken-up to prepare a 'Technology Roadmap for Indian Aluminium Industry', in association with Aluminium Association of India (AAI), Bengaluru



#### **1.2 TIFAC Information Interfaces:**

TIFAC maintains the following three websites:

- TIFAC Website (<u>http://www.tifac.org.in</u>)
- Mission REACH
   (<u>http://www.missionreach.org.in</u>)
- Patent Facilitating Centre (PFC) (<u>http://www.indianpatents.org.in</u>)

The revamped TIFAC website, launched during early 2009, has distinctly divided and organized sections covering individual programme-wise overviews a well as detailed accounts of the TIFAC activities and projects. The website has improved access facilities, with state-of-the-art

user-friendly features. The website witnessed a sudden surge in the number of users, as indicated by the increase in number of monthly hits from about one lakh to seven lakhs, immediately after the launch and the period thereafter. About 300 gueries received as webmail, were serviced during the period. The Mission REACH website acts as a platform to network the 37 different TIFAC-COREs set up in various educational institutions with active patronage of industry, academia, student community and other stakeholders. The website was accessed by more than 18 lakh users during the year. During the year, the Mission REACH website was redesigned for a newer user-friendly look.





### **Innovation Support Programmes**

## 2.1 Patent Facilitating Centre (PFC)

PFC continued to strive for creating awareness about intellectual property rights (IPR) in the country, assisting educational institutions in protecting their inventive works, involving state governments in spreading IPR culture in the States, evolving policies and interacting with other science departments. Besides this PFC is handling IP portfolio of DRDO and also conducting one year training on IPR for women scientists under the Women Scientist Scholarship Scheme (WOS-C) of the Department of Science & Technology.

#### **Facilitation of IP Protection**

PFC has been facilitating protection of various forms of intellectual property (IP) generated at the Indian universities, educational institutions and the public funded R&D agencies. PFC extends full technical and financial assistance to government R&D institutes, universities, educational institutions, and schools in protecting their inventions in India and elsewhere. These institutions do not have the necessary financial resources and expertise to carry out this work.

During the year, PFC examined more than 48 invention disclosures other than DRDO, out of which 28 patent applications were filed in India. The IP applications filed earlier were prosecuted and maintained as per their time lines. A total of 28 patents were granted to academic/research institutions. While about 50 patents were renewed during the period, PFC decided to abandon many patents that were aging. Two copyright works were also registered.

About 74 patent and other IP applications other than the above were considered on behalf of DRDO and passed on to attorneys for filing. A total of 68 applications were filed including four trademark applications and two design applications. Three patents were granted to DRDO during this period. In all 132 applications for IP protection were handled by PFC and about 98 applications were filed.

#### **IPR Cells in Universities**

PFC had earlier established Patent Information Centres (PICs) in 19 states for implementing IPR related activities at the state level. PFC has now established 52 IPR cells in 52 universities in 12 states through these PICs. The IPR cells in the universities have been created with the aim of guiding the university academicians in the matters related to IPR like patent searches, IP audit of the university and coordinating with PIC at the state level for filing and prosecution of the IP applications emanating from the research activities at the university.

#### **Awareness Creation**

While continuing with its effort of creating



awareness about IPR, PFC organized 20 patent/ IPR awareness workshops throughout the country sensitizing about 3,000 scientists and technologists.

#### **Database on Indian Patents**

The update of database 'Ekaswa C' on Indian Patent Applications published in the Official Journal of Patent Office during 2005 was also brought out. This database along with two other databases, Ekaswa A and B, is made accessible free of cost online.

#### Women Scientist Scholarship Scheme (WOS-C)

The one year training for the fourth batch of the women scientists under the Women Scientist Scholarship Scheme was completed in April 2009. The training for the fifth batch of the 68 women scientists started from May 11, 2009 after the candidates were selected through an all India level examination followed by interview. PFC conducted a combined one month long orientation programme for the candidates from all the four centres from May 11 to June 10, 2009 at New Delhi. During this programme they were trained in various aspects of all forms of IPR and their management including evolution and historical perspective, related laws and procedures, international treaties, patent mapping, patentability and freedom to operate analysis, patent drafting, IP valuation and licensing, IP audit and preparation of technology scan reports based on patents. They were also trained in patent searches. After the orientation programme, the candidates were placed with patent attorney

firms, IP departments of government agencies and industry for hands on and on the job training for rest of the period.

Two workshops were held at Kharagpur and Chennai centres and one was held at the Delhi and Pune centre for these candidates during the year. The workshops covered specific topics like patent drafting and other forms of IPR like trademarks, designs, copyright and geographical indications. The preparation for the selection of the candidates for the sixth batch also started during this time. The all India advertisement was brought out on October 2009 and written test was conducted in January 2010. Around 100 candidates would be selected to be trained at the four centres.

#### **Empanelment of new IPR attorneys**

PFC has an established panel of patent/IP attorneys for handling PFC filings, prosecution and maintenance of IPR portfolio. Efforts were taken for the renewal and expansion of panel by including new patent/IP attorney firms.

#### 2.2 Technology Refinement & Marketing Programme (TREMAP)

TREMAP was formally launched by TIFAC during 2008-09 with an objective of pushing innovative products / prototypes, up the commercialization cycle, towards market through a network of facilitation agencies.

Under the programme, so far a network comprising of six Technology Commercialization Facilitation Agencies (TCFAs) has been created. The TCFAs act as



extended (regional) centres of the programme. The technologies for innovative prototypes and potential having high products of commercialization are provided marketing support for technology transfer. The programme would also encourage to work out and develop a package for each technology to attract the customers, which in addition to the technology itself may consists of the logistic help regarding market survey, DPR / Business Plan, details about financial resources, regulatory compliance, marketing support, etc. Support would be extended to minor refinements. if found necessary.

The following are the six agencies which act as TCFAs:

- 1. FITT, IIT-Delhi
- 2. IIT-Kharagpur
- 3. MCIIE, Institute of Technology, BHU
- 4. M.S. Ramaiah School of Advanced Studies, Bangalore
- 5. Vellore Institute of Technology TBI, Vellore
- 6. Andhra Pradesh Technology Development & Promotion Centre (APTDC), Hyderabad

#### **Projects Initiated:**

## Side View Mirror Adjustment & Protection System

The technology is for automatically adjustable side view mirror for the automobiles (fourwheelers). It aims to provide a cost effective option of the automatic side view mirror which can be electronically controlled for horizontal and vertical adjustments from inside the vehicle. Special features in the mirror include very near object detection through a sensor and a mechanism for automatic closing of the mirror to prevent mirror damage while moving in narrow roads with heavy traffic. It is meant for middle-end automobiles.

## Novel Fluorescent Reagent for Detecting Fingerprints

The technology is for detecting fingerprints at crime scenes in the event that the perpetrator of crime has tried to destroy or degrade the fingerprint by spilling water, dust, soil, etc. or when external things like rain, dust particles, etc have degraded the fingerprints and where normally available fingerprint detection methods & technologies are unable to do so.

#### 2.3 Technopreneur Promotion Programme (TePP)

Technopreneur Promotion Programme (TePP) was initiated in1998 as a joint program of TIFAC and the Dept. of Scientific and Industrial Research (DSIR) with an objective of supporting individuals and start up companies to convert their scientific ideas and concepts into working models and proto types. In 2008, it was decided that DSIR would be responsible for implementing the new TePP projects, while TIFAC would to continue to manage and fund the ongoing projects.



The achievements during the year are detailed below.

#### **Projects Completed**

The following seven (7) projects were completed successfully during the year:

S. No.	Project Title (in brief)	Innovator
1.	Bearing mounting and de-mounting device	Sh. S. Selvaraj, Coimbatore
2.	RESQ- Eye	Sh. Pravendra Kumar Rao, Lucknow
3.	Development of pulse thresher	Sh Gopal Bhai Surtia, Vadodara
4.	Development of thermal conductivity measuring apparatus	Sh. S.N. Mallik, Kolkata
5.	Sketching Device for use by a visually challenged person	Smt. Pragnya Dilip Bhatt, Ahmedabad
6.	Development of commercial prototype of plant oil stove	Sh. Santi Bhai Patel, Ahmedabad
7.	Single degree of freedom rate table	Mr. Brahm Dutt Awasthi, Mumbai (Earlier based in Kanpur)

During the period 1998-2008, TIFAC had supported a total of 105 projects, out of which 87 projects were completed.

#### **Ongoing Projects**

The following is the list of ongoing projects:

S. No.	Project Title	Innovator
1.	New process of pelleting poultry feed in mini plants	Sh. Shaikh Yunus Addul Rajjak, Satara
2.	Design and Development of Indigenous drug on Diabetes-II	Dr. Ganpati Sahoo, Balasore
3.	Powdered biomass fired burner	Ramesh Kumar Nibhoria, Zirakpur
4.	In-vivo dielectric measuring instrument for detection of cancer	Suresh C. Mehrotra, Aurangabad
5.	Novel internal combustion engine	Dr. G.N. Prasanna, Bangalore
6.	Complete Florescent Lamp	Shri Rajesh Gaba, New Delhi
7.	Fungal biosorbent for removal of water hardness	Dr. P. Maruthi Mohan, Hyderabad
8.	Opto-electronic diameter controller	Prof. Nagendra Nath, Kurukshetra
9.	Design and development of variable reluctance electric servo actuator	K. Srinivas, Bangalore



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S. No.	Project Title	Innovator
10.	Mikshafut-Tareeq – A path detection device	Bashir Ahmad Wani & Dr. G. Mohiuddin Bhat, Srinagar
11.	Re-configurable Autonomous Air Vehicle	Dr. M. Sinha, Kharagpur
12.	Homeo Plant Nutrients and Plant Protectors	Sh. G.S.C. Murty, Srikakulam
13.	Improved escalator	Smt. Anshu Srivastava, New Delhi
14.	Whole stalk paddy thresher	Sh. Mahipal Singh Rana, Surat
15.	Rubber tyre tube protection device	Sh. Sounak Chaterjee, Kolkata
16.	Dev. & validation of Blood Glucometers	Prof. P.C. Pandey, Varanasi
17.	All purpose cleaning machine	Sh. T.A. Ananthu, Bangalore
18.	Fundus Camera	Dr. S.C. Gupta, New Delhi

The ongoing projects were monitored and steered towards their successful completion.



### **3** Technology Development Programmes

#### 3. Advanced Composites Programme (ACP)

The Advanced Composites Programme has been catalytic in helping Indian composite industry for absorption and adaptation of select technology intensive processes and products. The programme has attempted to enhance the utilisation and application of composites as an important performance material in various sectors and to improve the laboratory-industry linkages towards development and commercialisation. This effort has contributed significantly in the upgradation of composite technology in terms of basic design parameters, raw material selection, process of fabrication, testing, quality assurance and certification resulting in the development of novel composite products for a wide array of applications.

#### **Programme Achievements**

So far the Advanced Composites Programme has launched 44 projects with active participation by the industry, national laboratories/academic institutions and user agencies. A basket of products developed successfully under the programme has reached the threshold of commercialization due to an effective project management and timely implementation by regular project reviews by the experts/users. The programme has also facilitated skill development and enhancement for the industry personnel. Achievements during the year are reflected below.

#### **Completed Projects**

## Composite Applications Laboratory (CAL)

Partner: Dept. of Chemical Engineering, IIT Kharagpur

The Composite Applications Laboratory (CAL), set up at the Dept. of Chemical Engineering/IIT-Kharagpur, was conceptualized as an industry focused and industry oriented centre of excellence. Advanced fabrication techniques have been established and they are now fully operational. The characterization laboratory for composites has also been established and is equipped with advanced testing equipment. Towards imparting adequate knowledge on composite technology to engineering students, a course on 'manufacturing & characterization of polymer matrix composites' is being offered regularly to B.Tech & M.Tech students. The B.Tech, M.Tech and PhD students have started their research and experimental projects at CAL. The project was successfully completed in December 2009.

## Composite bamboo laminates & accessories (Phase II)

Industry Partner: M/s Emmbee Forest Products Pvt. Ltd., Kolkata

The project was launched with the aim at establishing an integrated and line-balanced production line. Most of the bamboo pole and process waste generated during primary and



secondary processing were utilized to produce bamboo flat boards, floor tiles, furniture sections, window shutters, door frames, table tops etc. Under this project, the company had successfully created sufficient infrastructure suitable for manufacturing and supplying bamboo composite sections required for fabricating various products for catering to bulk orders.

#### **Ongoing Projects**

## Filament wound composite pipes and pipe-fittings

Industry Partner: M/s. EPP Composites Pvt. Ltd., Metoda, Rajkot District

High-pressure filament wound glass-reinforced

epoxy (GRE) pipes and pipe-fittings are being developed for oil & gas sector as per the international standards corresponding to API 15 LR. The necessary production and laboratory facilities were commissioned. GRE piping system offers complete solution for offshore environment against highly corrosive fluids at various pressures, temperatures, adverse soil and weather conditions, especially in oil exploration, desalination, chemical plants, fire mains, dredging, portable water, etc. The major project milestone was development of two critical equipment viz. long-term cyclic pressure test and hydrostatic collapse pressure test. The samples undergo the entire range of tests (type & routine) as per API guidelines.



# **4** Umbrella Scheme on Technology Vision 2020 Projects in Mission Mode (TV2020)

#### 4. Umbrella Scheme on Technology Vision 2020 Projects in Mission Mode

#### 4.1 Agriculture and Fisheries

#### 4.1.1 Agriculture

Food security has been among the top most priorities of India's developmental programmes. To meet these challenges and boost agriculture production, a 'Technology Vision 2020' programme was initiated by TIFAC. During the journey initially, the main thrust of the agriculture programme was promotion of system approach (timely availability of good quality seed along with improved crop management practices) to increase the productivity of crops. The results were very encouraging. To reap the higher benefits further, a crop diversification programme through cultivation of aromatic plants and its distillation techniques, integrated nutrient management, water resource bio-pesticides, management, primary processing of crops etc. were promoted among the farming community. The farmers were regularly motivated and trained to employ various aspects of improved agricultural technologies. Projects were monitored on a continuous basis. The outcome and progress of various projects during the year are given below.

#### **Completed Projects:**

#### **Demonstration of System Approach in Selected Regions of Deoria District**

Implementing Agency: Bhanu Foundation Research & Development Society (BFRDS), Deoria (U.P.)

Location: Deoria and Bhalauni blocks of Eastern U.P.

The crop productivity in eastern Uttar Pradesh has been quite low as compared to other regions, the main constraint being lack and timely availability of quality seed. This project was formulated to train and encourage farmers to produce by themselves quality wheat and rice seeds. The project was implemented during the last six years. The farmers being new to the seed production, village level training programmes were emphasized. During the entire project, more than 2,000 farmers belonging to 74 villages were trained on various aspects of improved seed production of wheat and paddy through a total of 47 training camps. The project resulted in 115 farmers producing more than 800 tonnes of paddy seed from 189 hectares of land. Similarly, 126 farmers produced 656 tonnes of wheat seed from 147 hectares of land. One comprehensive seed processing unit has also been installed for the processing of rice and wheat seed by the farmers at project site. This would help the farmers reap the benefits of the project even after TIFAC moving out of the project. The project impact indicators reveal that many farmers are being able to earn good profit by selling quality seed to neighbouring farmers and several other farmers are becoming interested in the seed production activities.



#### Agricultural Diversification for Enhancing Productivity of Acidic Uplands of Eastern India

Implementing Agency: Directorate of Water management (Formerly Water Technology Centre for Eastern Region), Bhubaneswar and Social Reconstruction and Economic Empowerment (SREE), Balasore

Location: Remuna block (Balasore district) and Barasahi block (Mayurbhanj districts), Orissa

Soil acidity is one of the limiting factors adversely affecting crop production to a considerable extent. This true with light textured soils in the coastal parts of Orissa. Almost 80% (about 13 million hectares) of soil in the state of Orissa is mild to strongly acidic. With R&D efforts of Orissa University of Agriculture & Technology, Bhubaneswar, paper mill sludge (PMS) was found to be a relatively cheaper source to reclaim acid soils. Hence, a project was taken up to reclaim the acid soils of the coastal region utilizing Paper Mill Sludge (PMS). Rainwater harvesting and optimizing its productivity through multiple uses of harvested water were also included in the programme. With TIFAC intervention during the last three years, strong acid soils of the region were reclaimed with the application of PMS at the rate of 2.5 tonnes/hectare 4-5 weeks prior to sowing of seeds. With this, rice yield of 4.68 tonnes/hectare was recorded as compared to 3.32 tonnes/hectare in untreated plots. Similarly, Kharif season groundnut yield increased from the average of 7.14 quintals/hectare in untreated plots to10.3 quintals/hectare in treated plots. To address the water shortage in Rabi season, two water harvesting structures were constructed in project sites of Balasore and Mayurbhanj districts. The farmers utilized this

pond water in Rabi season for integrated farming practices including dyke horticulture, vegetable cultivation, growing of field crops, aquaculture, etc. With the implementation of this technology, farmers earned a profit of Rs. 30,000 to 35,000/hectare, which is about 3-4 times higher than earnings through traditional practices. The reclamation of acid soils with PMS has prompted the farmers to grow cash crops like groundnut during Kharif season and pulses, vegetables and oilseeds during Rabi season. The productivity increase in vegetables was found to be two-fold while that of oilseeds and pulses was one-fold.

#### **Enhancing Water Productivity of Deep Water Rice Area**

Implementing Agency: Directorate of Water management (Formerly Water Technology Centre for Eastern Region), Bhubaneswar and Association for Integrated Development (AID), Bhubaneswar

Location: Puri Sadar and Satyabadi blocks (Puri district), Orissa

The saucer shaped landforms, high rainfall, poor drainage conditions make the coastal region of Orissa susceptible to water logged conditions, often upto a depth of 2.5 meters during July – October. Farmers grow only rain-fed rice during rainy season, but growing profitable crops without supplemental irrigation during winter season remained a problem.

The project, therefore, focused at cultivation of deep water tolerant rice variety, rainwater harvesting by draining out the excess water, storing such water and use the water for irrigating crops during the winter season. Thus, in the project, Hangseswari, improved deep water rice, was introduced in the area. The variety has been well adapted by farmers as it



gives higher yield even in water logged conditions. The variety during Kharif season vielded 2.4 – 2.5 tonnes/hectare in waterlogged conditions, which was about 200% higher than of local cultivar 'Bankei'. Four ponds, along with shallow tube wells, constructed to harvest excess water during raining season helped irrigation of Rabi seasonal crops. These enabled farmers earn a net profit of upto 28,500/hectare/season through vegetable cultivation. To disseminate the success of the project among the farming community, a kisan mela was organized at villages Alisa (Sukala) of Puri district and more than 500 farmers interacted with experts on various aspects of cultivation. The State Department of Agriculture has started the large scale seed production of Hangseswari for the benefit of farmers. The DARE/ICAR, in its 2009-10 Annual Report, has featured this project as a success story entitled as 'Management of seasonal waterlogged areas of coastal ecosystem'.

#### Transfer of IPM Technology Package to Farmers' Fields through Training and Demonstration against Insect Pests, Wilt Fungus and Root-knot Nematode Diseases Infecting Tomato and Cowpea (Bulandshahar, U.P.)

Implementing Agency: Amity Center for Biocontrol & Plant Disease Management, Amity University Uttar Pradesh (AUUP), Noida, U.P Location: Six identified villages in Sikandrabad and Khurja blocks in Bulandshahar District, U.P

This project was primarily aimed at promoting Integrated Pest Management (IPM) practices among vegetable growing farmers and training them disease diagnosis through symptoms caused by root-knot nematode, fungi and insect pests on root and foliar parts of the crops along with proper use of biopesticides and biofertilizers. The activities of the project also include conducting trials in farmers' fields in selected hot spots with fungal bioagents, oil seed cake, botanical antagonists and judicious use of chemicals for both transplantable and directly seeded crops.

With the implementation of the IPM practice, the frequency/density of root-rot fungus and root-knot nematode in Okhra was reduced to 12-15% and 1-3 larve/gm of soil, respectively, from 60-74% and 8-10 larvae/gm of soil.

For demonstration of IPM technology in tomato, around 30 farmers were selected from three villages of Khurja block viz. Aherauli, Firozpur and Zahidpur, 10 farmers from each village. These farmers' crops had heavy infestation with root rot fungus and root knot nematode in tomato. A training programme on practice of IPM Technology in tomato cultivation was conducted at village Ferozepur, Bulandshshar. About 30 selected farmers (10 farmers from each of the 3 villages *viz.*, Ferozepur, Zaidpur and Aheruli) were imparted training on various components of Integrated Pest Management (IPM) to promote and adopt biopesticides.

Prior to demonstration trials, frequency/density of root wilt fungus and root knot nematode in tomato were 72-84% and 12-18 larvae/g respectively estimated in tomato which on completion of the trials following the IPM package showed considerable reduction to the extent of 14-19 % in root rot while for the nematode population observed to be 1-4 larvae/ gm of soil.

About 600 packets of each containing 200g of fungal bio-control agent grown on sorghum were prepared and supplied to select farmers of each of the above antagonist for use during demonstrations trials against diseases, root knot nematode and pests. Farmers were trained to produce biopesticides by themselves. Quality



control measures of fungal biocontrol agents produced by the farmers on examination, in general were found satisfactory in terms of CFU value ranging from  $1.0 \times 10^8$  to  $5.8 \times 10^8$  of fungal biocontrol agents. Apart from distribution of bio-control formulations of fungal agents' *viz.*, *Trichroderma viride*, *Paecilomyces lilacinus* & *Beauveria bassiana* prepared in lab to the farmers application of oil seed cakes like neem and karanj as biopesticides were also demonstrated in okra and tomato crops.

In order to popularize the IPM technology for effective crop protection and sensitize farmers about usage of biocontrol agents, a large scale Kissan Mela (Farmers Exhibition) was organized at Village Zhaidpur, Khurja Block, Distt. Bulandshshar. This was attended by more than 150 farmers from near by villages. The project was completed in January, 2010.

#### Support to training, employment and income generation programme for farmers and rural women processing and value addition of Agricultural produce.

Implementing Agency: Citizens Association for Rural Development (CARD), Berhampur, Ganjam Distt. Orissa

Location: Two blocks (Rangeilunda and Kukudakhandi) in Ganjam District, Orissa

The project, started in October, 2007, initially focused on providing support and training for semi-mechanised groundnut processing and pulse milling at two blocks *viz.*, Rangeilunda and Kukudakhandi in Ganjam District, Orissa, to fetch better income by farmers.

During the reporting period training, capacity building programmes and technology demonstrations were organized at various villages of the project area in association with local Krishi Vigyan Kendras (KVKs), the Orissa

University of Agriculture and Technology (OUAT), Bhubaneswar and the district agricultural officers (DAOs) and also facilitated marketing of the products through local channels at Ganjam district. Meetings were organized involving farmers at various villages and sensitized farmers regarding benefits of groundnut and pulses cultivation, their processing. Around 195 farmers cultivating Moong/Groundnut in 231 acres were involved in the project for processing activity. Processing machinery/equipment like Groundnut decorticator, Mini Dal mill were procured and installed at identified locations in project area. Around 2,700 quintals of groundnut and 2,450 quintals of pulses procured for out of which around 1,250 and 1,850 quintals of groundnut and pulses respectively were processed and marketed. The profit received by farmers per Kg of groundnut and pulse (green gram) processing is Rs.5.00 and Rs.5.50 per Kg respectively. Although the project activities stand completed, the farmers are being trained on operation of different processing machinery and value addition of produce and marketing.

#### Strengthening livelihoods of small and marginal farmers in organic farming of lower Palni Hills

Implemented By: M S Swaminathan Research Foundation (MSSRF), Chennai

Location: Lower Palani Hills, Dindigul Distt. Tamil Nadu

The project focus was promoting scientific methods of organic farming, especially for crops such as Coffee, Pepper, Banana and Citrus. Towards this, farmers were trained on various concepts of organic farming and input providing services. The project was implemented in three villages, *viz.*, Thonimalai, Pulayar Theru and Pudur of lower Palni hills region in Dindigul



District, Tamil Nadu covering 220 hectares of area belonging to 110 farmers.

During the reporting period, organic based nutrient and pest management techniques were demonstrated to farmers. For generating awareness and convincing the farmers regarding scientifically developed environment friendly organic cultivation practices, various training programmes were conducted through bio-village concept and Farmer Field School approach on biological control of crop pests and diseases, production and use of botanical pesticides. Such pesticides included stem injection of neem oil; preparation & spraying of garlic extract and application of neem cake formulation.

Eco-friendly inputs like pheromone traps, neem oil, bio-pesticides and bio-fertilizers prepared at MSSRF lab were provided to the farmers. At the same time, farmers were trained for preparation of bio-compost and vermicompost using locally available material and enrichment of compost with biofertilizer inoculants like Azospirillum, Azotobacter, Arbuscular Mycorrhizae. Training imparted to farmers on application of biopesticides like Trichroderma, Paecilomyces & Beauveria bassiana along with usage of natural predators like Mexican Beetle and Army ants to control insect pests. A model organic farm was developed at each village as demonstration field. About 18 farmers training programmes were organized during reporting period.

With the project intervention, a reduction by about 70% in coffee borer attack and a reduction by more than 50% in banana stem borer were achieved while wilting of pepper was reduced by nearly 70%. These resulted in an increase in the average yield of Coffee (Berry yield), Lemon, Pepper and Banana by 25.5%, 10.6%, 54.0% and 10.0%, respectively.

All the trainee farmers' fields are being certified as fully organic by IMO Control Pvt. Ltd., Bangalore and the total area under certification is around 220 hectares. Based on the interventions at field level, horizontal linkages were established among farmers for efficient utilization of resources. Backward linkages established with local farmer groups and agencies like Coffee Board, Regional Horticulture Research Station and Department of Horticulture for technical support. Market linkages established for organic products using certification. An agreement has been signed between MSSRF and Lin Foodz, Chennai for regular purchase of organic Coffee, Lemon and Pepper. The project was successfully completed in August, 2009.

#### Primary Processing and Packaging of Certified Organic Vegetables in Shimla District, H.P.

Implementing Agency: M. R. Morarka GDC Rural Research Foundation, Jaipur, Rajasthan Location: Four blocks (Theog, Rampur, Mashorba and Choupal blocks) in Shimla District, Himachal Pradesh.

Under the project, a series of farmers meetings, awareness camps and training programmes were organized for capacity building of farmers in primary processing of vegetables. Processing equipments were procured during the year, though the processing unit was yet to be installed. The farmers cleaned and graded their produce on farm site through training and awareness programmes and this has resulted in quick disposal of their produce in the market. However, the project was short-closed in June, 2008 due to non-willingness of farmers to participate in the project further.



#### **Ongoing Projects**

#### Improved Seed Production and Multiplication at Paliganj, Bihar

Implementing Agency: Paliganj Vitarni Krishak Samiti (PVKS), Paliganj Location: Paliganj, Patna

TIFAC continued its efforts towards making quality seeds of rice, wheat, pulses, etc. available to the farmers of Paliganj area, by training and encouraging the farmers to quality seed themselves. Certified seed produced by Patliputra Beej Utpadak Swablambi Sahkari Samiti, a farmers' cooperative, has earned its reputation and hence demand is increasing. This initiative has helped in increasing the productivity of crops in Paliganj and its surrounding. The training was considered a major component of the project to strengthen the farmers' confidence for quality seed production. During the year, 10 training camps were organized on improved seed production technology of wheat, paddy and pulses, benefiting 483 farmers from 42 villages. Beside, two institutional trainings on compost making, horticulture and vegetable cultivation were also organized at Rajendra Agriculture University, Pusa (Bihar), benefiting 20 participants, including 15 progressive. During the year, 140 quintals of certified rice seed was produced from 7.5 hectares of land and 557 guintals of rice seed was produced by the farmers from about 52 hectares of land for self consumption. Additionally, 5.6 and 3.12 hecares were under certified seed production of wheat and pulses, respectively. Apart from this, farmers cultivated about 40 hectares of land for wheat seed production and about one hectare for pulses seed simultaneously production, for self consumption. One Krishi Prasar mela was organized at village Jalpura (Paligani) to

spread the awareness on quality seed and improved cultivation practices and more than 4,000 farmers attended the mela.

**Promotion of Medicinal and Aromatic Plants in Paliganj Area, Patna (Bihar)** Implementing Agency: Gramin Vikas Pratisthan (GVP), Paliganj Location: Paliganj, Patna

The rice and wheat are the two main crops among the farming community of Paliganj area in Bihar. However, there was growing realization among the farmers about cultivating cash crops as an alternative to the rice-wheat rotation system. This project, therefore, was formulated to promote the cultivation of aromatic and medicinal plants as cash crops for better earnings of the farm through the crop diversification programme. Village level training was given, emphazining the importance of aromatic plants cultivation. During the year, a total of 12 awareness-cumtraining camps on improved cultivation practices were organized with a participation of 481 farmers from 45 villages. The training camps also covered distillation of essential oil from aromatic plants such as mentha, lemon grass, java citronella etc

Thirty two farmers planted aromatic crops in 102 acres of land and about 11 quintals of essential oil was produced during the year. Realizing the economic benefits of aromatic plants cultivation, two farmers have set up distillation plants on their own with the technical support from Gramin Vikas Pratisthan. As a multiplier effect, three more distillation units were set up by farmers with the financial support from the Ministry of Panchayati Raj, Government of India. Marketing of oil is insured to farmers by



establishing market linkages at Begusarai, Patna and Hyderabad.

#### Demonstration of Agriculture Diversification through Aromatic Plant Cultivation at Deoria, U.P.

Implementing Agency: Bhanu Foundation Research & Development Society (BFRDS), Deoria (U.P.)

Location: Deoria and Bhalauni blocks of Eastern U.P.

The aromatic plants cultivation is gaining popularity amongst the farmers for its potential of giving better economic returns. In this endeavour, crop diversification through aromatic plants cultivation programme has been given special thrust in the Deoria and Bhalauni blocks of Deoria district. Empowering farmers vide imparting knowledge on improved cultivation techniques of aromatic plants cultivation, distillation of oil and also marketing have been given importance. Accordingly, five village level training camps on improved cultivation practices including distillation of essential oil from aromatic crops such as menthe, lemon grass, etc., were organized, training 322 farmers from 20 villages. One institutional training camp on cultivation of aromatic plants was conducted at NDUA&T, Faizabad through which 20 farmers from 20 villages enhanced their skills on the improved cultivation of aromatic plants. During this year, 14 farmers planted mentha crop in 53 acres of land and 1580 kg of essential oil was produced and which was subsequently sold to M/s. Swaraj Herbals, Barabanki (U.P.). At present farmers are able to earn Rs. 5,000 to 6,000/acre by growing mentha crop between two major traditional crops. To create mass awareness on the aromatic plants cultivation, a Kisan mela was organized at village Majhauli of Deoria district and more than 600 farmers including women interacted with the experts on various aspects of aromatic plants cultivation.

#### On Farm Demonstration Popularisation and Commercialisation & Processing of Mentha Cultivation in Barabanki District of Uttar Pradesh

Implementing Agency: Narendradeva Institute for Development of Agriculture and Rural Upliftment (NIDAR), Lucknow

Location: Masauli and Harak blocks of Barabanki district

Barabanki district of Uttar Pradesh is known for mentha cultivation since long. However, cultivation technology needed improvement with improved cultivation practices along with introduction of latest improved varieties. Hence, Kosi variety recommended by Central Institute of Medicinal and Aromatic Plants (CIMAP) was taken up for large scale adoption by the farmers in Masauli and Harak blocks of Barabanki district. The major thrust areas identified in the project are demonstration of improved cultivation technology, extraction and processing technology of mentha oil. A total of 18 training camps were organized to sensitize and motivate the farmers about the various aspects of mentha cultivation and distillation of mentha oil in which 250 farmers from 20 villages were sensitized on crop maintenance, fertilizer application, harvesting precautions, pre-distillation processing of the herb and raising of planting material, etc. During the year, 50 acres of land covering 20 villages were under Kosi variety of mentha cultivation. Further, a group of 250 farmers have been motivated to form a mentha society with the contribution of Rs. 100 each as membership fee. Four different crop rotations followed by farmers i.e. paddy-potato-mentha, paddy-ramdana-



mentha, paddy-mustard-mentha and paddywheat-mentha were studied to work out the most economically feasible crop rotation. Among these crop sequences, paddy-potato- mentha seemed to be more remunerative to the farmers.

#### **Quality Mode Production in Rice-Wheat Cropping System through Farmers Interest Groups**

Implementing Agency: Banaras Hindu University, Varanasi

Location: Araziline, Pindra, Harauah and Badagaon blocks of Varanasi district

Excessive use of unwanted chemicals and pesticides are common in different parts of Varanasi district. The project is aimed to create awareness through demonstrations and trainings on the improved cultivation technology so that the pesticide residues level in crops remains within the acceptable limits. With the TIFAC intervention, pesticide residue level has started coming down in the wheat as well as in vegetables grown under quality mode production. Among the different crops analysed, 98% in wheat, 98% in rice, 59% in brinjal, 56% in tomato and 98% in orkra. were found to be below the ICAR recommended maximum residue level (MRL) of pesticide/insecticides. It may be emphasized here that, out of the 100 samples analysed among the different crops grown following normal practices, 47% in wheat, 52% in rice, 17% in tomato, 13% in brinjal and 19% in okra were only found to be safe for human consumption. As the farmers need to be continuously motivated and monitored to use the recommended as well as optimum level of pesticide/insecticides, 18 training camps and 84 demonstration camps were held for the benefit **Resource** conservation of 861 farmers. technology and conservation tillage (zero tillage) practices were also demonstrated in

wheat and rice crops on farmer fields. The practice of growing rice and wheat on narrow raised beds was also introduced to reduce water use, conserve rain water and to improve the crop productivity.

#### Enhancement of Farm Income of Farmers of Eastern U.P. from Value added Scented Rice (Kalanamak) Cultivation

Implementing Agency: Nand Educational Foundation for Rural Development (NEFORD), Lucknow

Location: Siddharthnagar, Sant Kabirnagar, Mau and Azamgarh districts of U.P.

Kalanamak, a salt tolerant rice variety with black husk, is well known for its aroma. It has better traits than Basmati except in the elongation characteristic. However, its low productivity (less than 1.5 tonnes/hectare) makes it prohibitive for the farming community to cultivate. In the project, two high yielding varieties of Kalanamak (K-3119 & K-3131) developed by the G.B. Pant University of Agriculture and Technology, Pantnagar were taken up for promotion. The varieties have a vield of about four tonnes/hectare and are salt tolerant as well. Promotion of these two varieties through demonstrations was given thrust in this project. During the year, more than 700 farmers were trained on various aspects, including direct seeding of rice, zero-till sowing of wheat, seed production and seed health management, post harvest processing & storage, etc. A rice yield was found to range from 16.55 to 17.14 tonnes/hectare, even in draught conditions of Mau and Azamgarh districts. At the same time, a yield range of 28.5 to 35 quitals/ hectare was achieved in Sant Kabirnagar and Siddharthnagar districts under normal rainfall distribution. As Kalanamak is a long duration rice variety ready for harvest only in the month



of December, Halna, a short duration wheat variety, was promoted for maximizing farmers' income. The farmers were able to obtain a wheat yield of 3 to 4 tonnes/hectare. Kalanamak variety of rice gave a yield range of 16.55 to 17.14 q/ha even in draught conditions of Mau and Azamgarh districts. More than 540 farmers were involved in the cultivation of Kalanamak variety of rice in 250 acres of land.

#### On Farm Demonstration and Commercial Cultivation of *Trichoderma* as Biopesticide and Growth Promoter

Implementing Agency: Division of Plant Pathology, Indian Agricultural Research Institute, New Delhi

Location: Jaipur (Samod & Chaksu Tehsils) and Kota (Digod Tehsil) Districts in Rajasthan

The project is focused on demonstration of low cost techniques for effective crop protection through *Trichoderma* bio-formulations by incorporating Integrated Pest Management (IPM) and also to develop a replicable entrepreneurship model for application and commercial production of *Trichoderma*. Presently, the project is being implemented in 20 villages — 12 villages in the Jaipur District and eight in the Kota district. Field trails of the bio-formulation of *Trichoderma harzianium* Th3 strain were carried out in farmers' fields for wheat, barley, fenugreek, groundnut and vegetables crops in Jaipur district and for wheat, soybean and rice crops in Kota district.

With the project intervention, incidence of root rot disease, especially in groundnut, was significantly reduced. Comparable results were reported in wheat, barely, chilli, cauliflower, onion, etc. As a result, the average yield of groundnut increased by around 80% over controls. Average increase in yields of fenugreek, barley, vegetables, wheat and soybean were found to be 50%, 32%, 27%, 16% and 14%, respectively.

A total area of 182 acres belonging to 101 farmers was covered so far by the project. Tailormade on-farm training sessions addressing farmers, NGOs, small scale industries and students, covering aspects such as use of *Trichoderma* on the farmers field, biopesticide development and its application, disease diagnosis and their management and commercialization of bioformulations. Training programmes on application of *Trichoderma* in farmers' fields and biopesticides development were organized at both the project sites, benefiting more than 100 farmers. A training manual on *Trichoderma* application techniques for farmers in Hindi has been published.

In order to popularize the technology for effective crop protection through *Trichoderma* bio-formulations and create awareness about IPM amongst farmers on a large scale a Kissan Mela was organized at Dodsar village in Jaipur District, which was attended by around 52 farmers from various villages. Around 375 Kgs of *Trichoderma harzianum* (Pusa Th3) was prepared at Biocontrol laboratory at IARI and supplied to farmers under project for application in the field during reporting period.

#### 4.1.2 FISHERIES

Fisheries sector aims at demonstration of technology interventions and adoption of new technologies related to production and processing of aquatic organisms. Two projects are under implementation and brief progress of the projects is as follows:



#### **Ongoing Projects**

### Processing and export of loin and steak of yellow fin tuna

Implementing Agency: M/s. Aswin Associates, Cochin, Kerala

#### Location: Cochin, Kerala

The project aims at production of frozen loins and steaks of yellow fin tuna and exporting the same. Yellow fin tuna and other fishes were frozen in the trolley freezer (3-TPD capacity) and stored in the cold storage (15-TPD capacity). The Implementing Agency has started exporting the products to countries like Vietnam, Thailand, South Korea, and China. During the year, about 222 tonnes of frozen fishes with a total value of about Rs.1.50 crores were exported. The project is satisfactorily progressing towards completion.

## Value addition of low value marine pelagic fishes

Implementing Agency: Rural Organization for Social Action (ROSA), Tharangambadi, Nagapatinam Dist., Tamil Nadu

Location: Coastal fishing villages of Tharangambadi, Kuttiyandiyur, and Perumalpettai in Tharangambadi Taluk, Nagapatinam Dist., Tamil Nadu

The project aims at training of fisherwomen folk and technology transfer for production and marketing of value added products from low value marine pelagic fishes. The project is being implemented in technical collaboration with Fisheries College and Research Institute (FCRI), Thoothukudi.

Three training programmes with 15 participants each were conducted by FCRI, through which 45 fisherwomen were trained on aspects such as personal hygiene, sanitation, fish cleaning schedule, prevention of fish spoilage, fish preservation, production of value added products, packaging, labeling, quality control, pricing and marketing techniques. Training was imparted on production of value added products such as fish pickle, smoked fish, fish burger, fish sandwich, fish puff, and fish cutlet. A training manual has been prepared and published in Tamil and provided to the trainees.

Majority of the equipments/ items in the project have been procured and installation is in progress. Pre-processing and sanitation facilities for maintaining proper hygiene have been established at the processing shed for production of value added products. Trial runs on production of value added products like brined oil sardine, dried fish, masala dried fish, prawn pickle, and fish pickle have been attempted and accordingly test marketing of value added fish products have been carried out. The project is progressing satisfactorily.

#### 4.2. Agro Food Processing Sector

#### 4.2.1 Milk Sector

The sector aims to demonstrate technology interventions to improve productivity, quality, and value addition including extending shelf life of perishable dairy products, and utilization of by-products and waste minimization. The following is the progress during the year:

#### **Completed Project**

Establishing integrated Clean Milk Production network at village level for manufacturing value added products

Implementing Agency: M/s. Milan Dairy Foods Private Limited, New Delhi

Location: Bulandshahar and Ghaziabad Districts, Uttar Pradesh

The project aims were formation of village level

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milk farmer associations/ societies, formation of a model village to demonstrate clean milk production (CMP) practices, use of bio-gas (nonconventional energy) as a source of energy for dairying and allied activities, providing input services and training to farmers, production of clean and quality milk and providing premium to farmers for the same, manufacture of vacuum packed paneer with extended shelf life, and utilization of whey for production of probiotic whey drink.



Vacuum Packed Paneer from clean & Quality Milk

A bio gas plant of 2-TPD capacity is being operated in the model village Bharna, mainly utilizing cow dung. The power from the bio-gas plant is utilized for operating two milking



Model Milk Collection Parlor at Bharna run by biogas plant (2TPD capacity)

machines (of four can cluster), two bulk milk coolers (BMCs) each having a capacity of 1,000 litres, and the automatic milk collection unit (AMCU).

A total of 27 BMCs, with a capacity of 1,000 litres each, were installed and are being used for collection/ procurement of about 40,000 litres/ day of clean and quality milk from 26 villages. The microbial quality of procured milk was found to be improved, as indicated by Methylene Blue Reduction (MBR) time which has increased from less than 30 minutes to 90 minutes.



Clean Milk Collection & Procurement Centre Facilities (Bulk Cooler & AMCU unit)

Milk collected at BMC's is being transported to the processing plant at Siyana and processed to paneer. The paneer is packed in vacuum to increase the shelf life to 21 days as against a week-long shelf life commonly packed paneer. Towards meeting the objectives of by-product utilization & value addition, the whey, resulting from paneer production, was utilized for production of whey drink with pineapple & jaljeera flavours. This process is based on the technology transferred from National Dairy Research Institute (NDRI), Karnal. The implementation of this project has been successfully completed.





Probiotic Whey Drink in Pineapple & Jal Jeera Flavours

#### **Ongoing Project**

#### A project on Clean Milk Production in West Bengal

Implementing Agency: West Bengal Cooperative Milk Producers' Federation, Kolkata Location: 24 Parganas (North) District, West Bengal.

The objective of the project is to develop a demonstration model of productivity enhancement and clean milk production. *Towards meeting these objectives, electronic weighing systems, testing equipment and computerized recording were installed. A scheme for providing incentives to farmers for supply of low bacterial count milk was also designed.* Implementation of the project is being continued in nine milk societies involving 900 farmers at Ichhamati Milk Union in 24 Parganas (North) District.

#### 4.3 Health Care and Herbal/ Natural Products

The Programme has the twin objectives of improving the utilization of vast natural

resources of herbal & natural products and to develop, demonstrate and commercialize the few selected technologies, products & processes; and to develop and establish/ demonstrate new approach towards health care system.

#### **Ongoing Projects**

## Mobile Hospital and Research Centre in Uttaranchal (Garhwal)

Implementing Agency: Himalayan Institute Hospital Trust (HIHT), Dehradun Location: Garhwal

The project aims at improving the health status of the people of Garhwal region of Uttarakhand and includes addressing the health needs of the under privileged population in remote inaccessible areas.

A mobile van with diagnostic facilities conducts the following and provides the following services:

- Community needs assessment
- Out Patient Clinic based Services
- Health Education
- Referral



The Mobile Hospital



The mobile unit conducted 15 campsite visits on a monthly basis, through which a total of about 17,500 patients benefited during the year. Since the inception of this project in March 2007, a total of about 46,000 patients (nearly 11% BPL) were attended to by this mobile unit. A quick analysis of the diagnosis/treatment data as collected by this unit indicates the prevalence of G.I disorders (20.5%) followed by Respiratory system disorders (16.9%), Dermatoses (12.3%), Musculo skeletal disorders (12%) and Genitourinary system disorders (8.6 %) among the populace. Other diseases diagnosed include metabolic disorders, cardiovascular disorders, anemia and ENT problems. An effective referral mechanism is adopted and patients are referred to nearest Health facilities/ Referral units (Private or Public) for secondary and tertiary care. Subsidized tertiary care at HIHT is assured for the patients. An important point about this project is that the total operating cost of the mobile unit is borne by HIHT, Dehradun.



Examining a patient inside the bus during heavy rain

#### Demonstration of Development and Commercialization of Plasma Products by National Plasma Fractionation Centre, Mumbai

Implementing Agency: National Plasma Fractionation Centre, Mumbai Location: Mumbai

The project aims at manufacturing of low volume and high value virus safe plasma products such as Albumin, Immunoglobulin and Factor IX Complex, through the process of fractionation.



Physician examining patients at Nandprayag

The progress of the project was reviewed periodically and the recommendations of the Project Review and Monitoring Committee were pursued for implementation. Civil works and recruitment of staff are in the process. The term of the project was extended for complete implementation of the project.



Standardization and international commercialization of *Bacopa monnieri* extract for its cognition enhancing activity by Natural Remedies Pvt. Ltd., Bangalore.

Implementing Agency: Natural Remedies, Bangalore.

Location: Bangalore

The objective is to develop a standardized *Bacopa monnieri* extract suitable for memory enhancing activity and to scientifically establish the utility of this extract, as dietary supplement, in the management of senile dementia for cognition enhancement.

The activities during the period included purchase of equipment, standardization of plant material, identification of responding bio-assays for bio-activity guided fractionation, optimization of extraction procedure, initiation



Harvesting Bacopa monneri (at Natural Remedies Farm)



Processing of Bacopa monnieri Liquid Extract

of safety studies in laboratory animals, initiation of clinical trial and development of product promotional material and plans. The project also envisages better value addition by brand building in the international market.

#### **4.4 Mission REACH**

TIFAC launched Mission REACH (Relevance & Excellence in ACHieving new heights in educational institutions) in the year 2000 to establish TIFAC-COREs (Centres Of Relevance & Excellence) in diverse disciplines in different educational institutions throughout the country as an embedded mission under the umbrella of Technology Vision 2020. The Mission aims to bring about an architectural change in higher education system by synergizing course content, opportunities and investments to evolve worldclass institutions in the form of TIFAC-COREs.

Presently, there are 37 TIFAC-Centres of Relevance & Excellence (COREs) functioning in as many disciplines under this programme at various colleges, institutions/ universities across the country. The following is an account of the achievements during the year. Technology Information, Forecasting & Assessment Council प्रौद्योगिकी सूचना, पूर्वानुमान एवं मूल्यांकन परिषद्



#### **Completed Projects**

Following five TIFAC-CORE projects, including one Technology Enhanced Learning Project, have been completed and these COREs are now functioning of their own:

- 1. 'Clastic Petroleum Reservoir Engineering' at Dibrugarh University, (Dibrugarh,
- 2. '**Biomedical Technology' at Amrita Vishwa Vidyapeetham**, Amritapuri, (Kollam, Kerala)
- 3. 'High Voltage & Power Systems Engineering' at Jabalpur Engineering College (Jabalpur, MP)
- 4. 'Product Design, Optimization and Collaborative Product Commerce' at PSG College of Technology (Coimbatore, Tamil Nadu)
- 5. The Technology Enhanced Learning project on 'e-Outreach' at KReSIT, IIT Bombay (Mumbai, Maharastra)

#### **Ongoing Projects**

The salient achievements of existing projects TIFAC-COREs are detailed below.

#### TIFAC-CORE in "Aircraft Maintenance" at Hindustan Institute of Technology & Science, Chennai

- Launched M.E. in 'Aircraft Maintenance & Avionics' for the first time in the country.
- TIFAC-CORE organized a 3-day International Seminar on 'Composites for Aerospace Applications' during March 24-26, 2009. Over 18 eminent experts, including experts from abroad, delivered expert addresses and presented research

papers during the seminar. Over 150 participants including faculty, students benefited out of the seminar.



• Unique Boeing 737-200 Airframe (Fuselage) and MIG-23 Aircraft facility was established in association with Blue Dart Aviation Limited and Indian Air Force respectively for training purposes. Hindustan Aeronautics Limited (HAL) has recognized this TIFAC-CORE as the training centre for HAL Engineers.



TIFAC-CORE in "Technical Textiles" at Textile & Engineering Institute, Ichalkaranji

 Launched M.Tech in 'Technical Textiles' first of its kind in the country.



#### TIFAC-CORE in 'Interventional Radiology' at Jawaharlal Nehru Medical College, Wardha

• The CORE carried out a total of about 2,500 diagnostic & therapeutic intervention procedures, 9,500 ultrasonography procedures and 2,300 colour Doppler interventional radiology procedures were performed by using TIFAC-CORE facility.

#### TIFAC-CORE in 'Power Transformer Diagnostics' at National Institute of Technology, Hamirpur

- Launched a post-graduate programme on 'Condition Monitoring, Control and Protection of Power Apparatus' — first of its kind in the country.
- A unique transformer facility with the rating of 7.5 MVA (132/33 KV) was established in association of Himachal State Electricity Board (HPSEB), Himachal for research.



#### TIFAC-CORE in "New Drug Delivery Systems" at MS University, Vadodara

- Five patents were filed in India in the area of Drug Delivery Systems.
- During the year, 22 research papers were published in reputed national as well as international pharmaceutical journals. A total of 15 research papers were presented in various national/ international conferences.

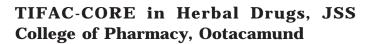
#### TIFAC-CORE in "Green Pharmacy" at B R Nahata College of Pharmacy, Mandsaur

• Three Indian patents were filed in the field of Green Pharmacy.

#### TIFAC-CORE in Product Design, PSG College of Technology, Coimbatore

• During the year, more than 100 industries made use of facilities at the TIFAC-CORE for Digitizing or Rapid Prototyping and Rapid Tooling. In all, 286 transactions with industry were registered during the year. The Rapid prototyping of REVA Headlight Assembly part was performed for M/s Reva Electric Company Limited, Bangalore.





• TIFAC-CORE organized Indo-Australian Workshop on 'Plant Nutraceuticals and Bioactive molecules: A growth opportunity for Pharmaceutical industries in India & Australia' during June 2-6, 2009. Nine delegates from Australia and 13 from India participated. The delegates agreed to work on development of plant nutraceuticals and bio-active compounds for neurodegenerative disorders.

#### in Industrial Safety, Mepco Schlenk Engineering College, Sivakasi

• With a view to minimize loss of lives and property, following an intervention of District Collector- Virudunagar, the TIFAC-CORE conducted a five-day training programme on 'Fire Protection and Safety Management in Pyrotechnic Industries' for the supervisors in pyrotechnic industries during November, 2009. With significant hands-on experience component, this programme was aimed at exposing the Supervisors to potential threats and problem areas in their units.

#### TIFAC-CORE in Telematics, VR Siddhartha Engineering College, Vijayawada

• State-of-the-art Telematics Lab was established with equipment worth more than seven Crores, in partnership with National Instruments. This will facilitate exposure to real-world problems and experience in various phases of life-cycle (design and prototype deployment) of a Telematic product. Faculty and students after training would be able to design and develop a Telematic product.

#### TIFAC-CORE in Environmental Engineering, Sarvajanik College of Engineering & Technology, Surat

 Gujarat Pollution Control Board (GPCB), Gandhinagar recognized TIFAC-CORE as Schedule I Environmental Auditor, for carrying out the environmental audit of the industries falling in Schedule I and II, with one audit team. A maximum of 15 numbers of environmental audits can be done per year. TIFAC-CORE has also been selected for third party monitoring work of about 500 industrial units of Ankleshwar, Panoli and Jhagadia GIDC in the state by GPCB.

#### TIFAC-CORE in Network Engineering, Kalasalingam University, Srivilliputtur

• The four Groups on Network Technologies, Network Security, Embedded Networking and Software Technology under the TIFAC-CORE together conducted 18 Short Term / Certification courses during the year. More than 750 participants obtained training through the courses. IBM established its Software Centre of Excellence as a part of this TIFAC-CORE during the year.

#### TIFAC-CORE in Food Processing & Quality Control, Techno India, Kolkata

• TIFAC-CORE stepped in development of traditional sweetmeat with exotic



combinations and came out with unique Rasogollas in three distinct fruit flavours mango, litchi and pineapple. These organoleptically tested products are expected to enhance marketability of traditional Rasogolla, throwing up new opportunities for entrepreneurship.



TIFAC-CORE in Environmental Geomatics, JNTU- Hyderabad

 TIFAC-CORE prepared 'Land-use/ Landcover maps of 56 Mandals of Prakasam District, Andhra Pradesh'under a project funded by the DST. This will be highly useful to those engaged in development of District Spatial Data Infrastructures (DSDI), Geo-spatial technology based applications development and land-use/ land-cover mapping etc. on a large scale.

#### TIFAC-CORE in Pharmacogenomics, Manipal University, Manipal

• TIFAC-CORE constructed and characterized the first Indian human Bacterial Artificial Chromosomes (BAC) Library. BACs have served as the primary source of archived genomic DNA for a variety of genome mapping, copy number studies and sequencing projects. The Library will serve as a genetic resource facilitating medical, diagnostic, pharmacological, physiological and evolutionary studies for the scientific community in India and worldwide

#### **TIFAC-COREs Meet (TCM-2009)**

Annual TIFAC-COREs Meet (TCM-2009) was organized jointly by TIFAC and TIFAC-COREs at PSG, KCT & Amrita, Coimbatore during December 23-24, 2009. The Meet was inaugurated by Dr. R. Chidambaram PSA to Government of India and Chairman-TIFAC and attended by over 150 participants. The TIFAC-COREs presented their achievements and activities through the Exhibition organized on the occasion and also through parallel technical sessions. Speakers from academic, Industry and Government shared their views on industry-academia interaction and opportunities for TIFAC-COREs.





#### **New Projects**

Six New TIFAC-COREs have been initiated at the following institutions:

- 1. 'Quality assurance and International Regulatory Affairs for Pharmaceutical Industry' at Annamalai University (Annamalai Nagar, Tamil Nadu)
- 2. 'Farm Automation & Agro Processing' at Amal Jyothi College of Engineering (Kanjirapally, Kerala)
- 3. 'Industrial Automation & Robotics' at Ajay Kumar Garg College of Engineering (Ghaziabad, UP)
- VLSI Testing' at BVB College of Engineering & Technology (Hubli, Karnataka)
- '3G/ 4G Communication Technologies' at National Institute of Science & Technology (Berhampur, Orissa)
- 6. 'Electrical Transport Systems' at Arunai Engineering College (Thiruvannamalai. Tamil Nadu)

#### 4.5 Collaborative Automotive R & D (CAR)

The Core-group on Automotive R&D (Core-Group) which was set up in April 2003, as an academia-industry-interaction forum to define the technology priorities in India for the Road Transportation Sector, was rechristened as Collaborative Automotive R&D (CAR) in the year 2008. The inter-ministerial program coordinated by TIFAC and the implementation is overseen by the CAR Program Committee with membership nominated by Department of Heavy Industries (DHI), Department of Information Technology (DIT) and Department of Science & Technology (DST) and Office of the PSA (PSAO).

Technologies in the automotive sector have interdisciplinary nature. Since the Indian foray into the automotive sector was relatively recent, the sector needed cooperative research efforts to face up to the challenges of global competition, strict emission norms and demanding consumers. The short product life-cycle and new complex technologies have driven up costs of R&D projects and globally, making cooperation among competing firms to develop platform technologies imperative. CAR projects are carried out in consortia that bring together academia and R&D institutes, vehicle manufacturers and component manufacturers. CAR also works closely with Society of Indian Automobile Manufacturers (SIAM) and Automotive Components Manufacturers' Association (ACMA). So far CAR partnered with National Laboratories/ Academic 17 Institutions, five major vehicle manufacturers, 19 component/ subsystem manufacturers and three foreign R&D institutions, for implementing CAR consortia projects.

During the year, the reconstituted Panel on IC Engine and Drivetrain had its first meeting in June 2009, the Panel identified the following



priorities for initial implementation:

- 1. Direct injection CNG engine
- 2. Homogeneous Charge Compression Ignition Engine
- 3. Camless engine
- 4. NOx control in IC engines

Subsequently project development meeting was held on each of these topics. Preliminary proposals have been developed in case of the topics on Direct Injection CNG Engine and Homogeneous Charge Compression Ignition Engine. For development of camless engine, the process of outlining project deliverables and implementation strategy has been initiated with some academic and industrial partners. Based on a project development meeting on Nox control, a study is being conducted by a subgroup, comprising experts from both academia and industry.

**Technology Roadmap for Electric and Hybrid Electric Vehicle Introduction:** The National Manufacturing Competitiveness Council (NMCC) has decided that technology inputs for EV-HEV Technology may be provided by CAR Panel on EV-HEV. Accordingly the Panel has constituted a subcommittee to draw-up a technology roadmap for electric and hybrid electric vehicle introduction. The indicative outline for this roadmap will comprise the specific requirements for different categories of vehicles, appropriate technology options for India, identification of specific technology area to work on.

### **Completed Projects**

# Vehicle Tracking and Control System using GPS/ GPRS

Consortium Members: International Institute of Information Technology , Bangalore, Ashok Leyland Limited, Siemens Information Systems Limited, BSNL Limited, Lattice Bridge Infotech Limited, Pallavan Transport Consultancy Services Limited

Other Partners: Metropolitan Transport Corporation Limited, Chennai. State Express Transport Corporation Limited, Chennai, Aum Infotech Private Limited, Bangalore, Nutek Limited, Hyderabad, SiRF, Bangalore, Mapunity Services, Bangalore

The objectives of the project was to develop an open standard model for GPS/ GSM based optimal management of public bus fleet to improve the fuel efficiency the convenience of passengers and operators. The GPS/GSM system assists bus drivers to arrive at dynamically assigned parking bays at the terminus. The passengers can know the time of arrival of the next bus, its departure time, and route and help the passenger to plan their travel.



Technology Information, Forecasting & Assessment Council प्रौद्योगिकी सूचना, पूर्वानुमान एवं मूल्यांकन परिषद्





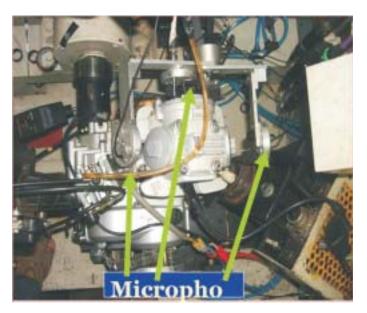
Display systems provided centrally at the terminus, at platform entrance locations and at bays provide passengers information on arrival/ departure of the vehicles. There will be another set of displays at each city-bus-stop to inform the passenger waiting time for the next townbus toward different locations.

The project was successfully completed in September 2009. The System was transferred to Pallavan Transport Corporation (PTC), Chennai. The PTC has implemented the system covering more than 700 buses and is planning to cover the entire bus fleet in Chennai. The consortium members have been retained by the Tamil Nadu Transport Department to assist PTC. Department of Heavy Industry has expressed interest to support for replication of the system at B.E.S.T. Mumbai through CAR.

#### **Intelligent Acoustics Diagnostics for Quality Control of Automobile Engines:**

Consortium Members : Indian Institute of Technology Kanpur, Indian Institute of Technology Delhi, Indian Institute of Information Technology Allahabad, Kritical, Knowledge Online, TVS Motor Company

The project aims was to provide a generic solution using intelligent methodologies based



on neural networks, novel clustering algorithms, both fuzzy and neural, as well as other machine learning approaches to build a robust prediction scheme for quality assurance using audio signals & vibration patterns for the following applications:

- a) Classifying good and bad engines based on audio and vibration data collected during the running of the engine at various speeds; and
- b) Predicting possible type of the defect in engines.

The benefits envisaged included improved quality of engines, early detection of defects, reduction in rejections, reduction of testing cycle times and cost and improvement in the productivity.

The system has been demonstrated successfully at TVS Motors. The system is able to identify all the four types of noises viz. Tappet Noise, Cylinder Head Noise, Primary Gear Damage, and Cam chain noise that indicate any engine fault. The test rig, developed by IIT Kanpur,



with all the fixtures was installed at TVS Motors for testing and trials. TVS has tested over 1000 engines since the commencement of the project. The system was installed at assembly line and is working satisfactorily. TVS Motors has acknowledged this as one of the best projects ever implemented by them.

# Intelligent and Interactive Telematics using advance wireless technologies

Consortium Members: Amrita Vishwa Vidyapeeth, Amirtapuri, Kerala

The project aimed was at development of a vehicle tracking system using Wi-Fi based wireless access points. The system utilized open standards and architecture and the components included a central server, messaging unit, display systems, onboard vehicle unit, etc.

The project was completed successfully. All five components developed have been put through the development and testing cycle. The system has been installed in the 2-3 vehicles of Amrita University, and demonstrated for satisfactory working.

The AmritaVishwa Vidyapeeth has published the software codes and related information in the public domain under GPL dual-license. The Amrita Labs team will maintain the future releases of the software and develop a community of open source enthusiasts, beginning with a student community of the Amrita University.

### Shared Transport Services – A Study: An attempt to reduce carbon-footprint

The project is aimed at providing a high quality,

technology enabled shared transport services for the general public in both urban and rural areas. In urban areas, the intension was to provide CallAuto service and Shared Van service to transport people, whereas in rural areas, the purpose was to provide transport for carrying both goods and people.

The seed phase of the project has been completed. The objectives was to prepare a detailed project report which included the detailing of the early design stage work such as system specification requirements, implementation plan and the cost analysis of the equipments. The GPRS/ GPS based system provides for on-demand reservation in small vehicles such as taxi-cars, mini-bus, threewheelers, etc.

### **Ongoing Projects**

# Use of Straight Vegetable Oils in IC Engine

Consortium Members: International Centre for Automotive Technology, Manesar, Indian Institute of Science Bangalore, Indian Institute of Technology Madras

Use of Straight Vegetable Oils in IC Engine, a high pressure chamber facility has been designed, fabricated and installed ant IISc Bangalore to study the spray characteristics of straight vegetable oils. Preliminary experiments have also been conducted on effervescent atomization, which is being developed with an objective of achieving effective atomization of highly viscous fuel. At IIT Madras single droplet experiments have been carried out and multicomponent droplet evaporation model has been



developed and its validated with experimental data. The project aims at developing a database of SVO properties, and for this, 12 different SVO samples were procured form the market and property testing carried out by iCAT Manesar. Works on establishing correlation between SVO constituents and its properties have also been carried out at IIT Madras.

### Ultracapacitor for Electric and Hybrid Electric Vehicles

Consortium members : Indian Institute of Science Bangalore, Indian Institute of Technology Kharagpur, National Chemical Laboratory Pune, NED Energy Limited Hyderabad, Kaptronics Limited Bangalore

Benchmarking of commercially available ultracapacitors and hybrid capacitors have been carried out. Three prototype stacks for hybrid capacitors with ratings 6.0 V/ 40 F , 2.3 V/ 100 F and 12V/ 100 F respectively were made and demonstrated to the Oversight Committee. The consortium partners have also made significant progress in manufacturing materials for ultracapacitor electrodes. At IIT Kharagpur. Mesoporous carbon material with high surface area has been developed. NCL Pune has fabricated "all solid state" ultracapacitor based on Nafion/ S-MWCNT composite membrane.

**Process development in Semisolid Forming and Squeeze Casting of Alcomponents for automobile components** Consortium Members: IISc, Bangalore; Sundaram Claytons, TVS Motor Co., Mahindra & Mahindra, Tata Motors The objective is to introduce advanced aluminium alloy casting technologies for Indian automobile industries, so as to enable them to produce light weight components, with superior mechanical properties, higher integrity, and with potential for near net shapemanufacturing. Eventually, these technologies will lead to increase the percentage of aluminium usage in automobiles.

Specific objectives include competency development in squeeze casting (SC) technology and process development for semisolid forming (SSF) of aluminium alloy i.e. characterization of billet making and component making. The deliverables includes standardized bench scale billet making process for SSF applications and know-how for die technology for producing components by squeeze casting and semi–solid forming processes. Progress made so far are as below:

**Squeeze Casting:** A first prototype of automotive '<u>connecting rod</u>' was successfully

deve-loped using squeeze casting process. The microstructure of squeeze cast connecting rod exhibited no shrinkage porosity



and no

porosity.

The mechanical properties and hardness obtained in T6 heat treated condition was found to be superior to those obtained by chill castings and other conventional casting methods.

micro



**Semisolid Forming:** IISc has successfully developed "semi-solid billet" indigenously using electromagnetic stirring process. The rheological behavior of semisolid aluminium alloy (A356.2) slurry has been determined experimentally by using a concentric cylinder viscometer at different cooling rates and shearing continues under a constant shear rate. Both DC cast billets and static mould billets (75 mm dia & 180mm length) were manufactured.



"<u>Wheel hub</u>" was successfully developed using die supplied by M/s. Buhler and billet. The components produced by thxiocasting were tested for micro-structure and mechanical properties. The micro structures were found to be non-dentritic and free from porosity.

# Low Cost Robots for Automotive Industry

Consortium Members: IIT Madras, Systematics Pvt. Ltd, Magtorq Pvt. Ltd, IIT Bombay; TVS Motor Co., Mahindra & Mahindra, Sona Koyo, TVS Lucas, MICO Ltd.

The project aims at design & development of following three types of robotic arms meeting the reliability, motion precision & payload capacity as specified by the automotive companies (& testing as per ISO procedures) and validate its performance for 10 specific shop floor applications at factory environment:

- Low cost 4 degrees freedom SCARA (LCS),
- Direct drive 4 degrees of freedom SCARA (DDS)
- Articulated 6 degrees of freedom arm (A6A)

Two prototypes of robotic arms: Direct Drive Scara (DDS) and Low cost Scara (LCS) have been designed and developed indigenously. Design and development of cyclodrive is one of the key objectives under the project. Various types of cyclodrives were developed for LCS and A6A. Refining of cyclodrive motions are underway. It is expected that by end September, 2010, both DDS and LCS robotics will be ready for complete demonstration. Design & fabrication of 6 axis articulated robotic arms (A6A) is underway.

**Electro- Magnetic Manufacturing (EMF)** Consortium Members: BARC, Mumbai, AMPRI, Bhopal, Other Partners: IIT Bombay, IIT Delhi, Fleur-de-lis Technologies Pvt. Ltd, Wheels India, IFB industries Pvt. Ltd.



Electromagnetic Forming (EMF) is a quick, easy and economical method of shaping and joining a wide range of parts.

Electromagnetic forming relies on the force generated by a magnetic field to produce the desired shapes in electrically-conductive metal work pieces. Welding by EM process requires high energy levels compared to forming process. Advantages of EM process includes non-contact method (no tool marks), good precision can be obtained, no lubrication/cleaning required, less



spring back effect (close tolerances are possible), less wrinkling (retention of surface finish) etc. There is huge potential for application EM technology in automotive sector both for forming and welding.

The first phase involves design and development of 40 kJ EMM equipment with technology knowhow available



Magtorq Cyclo

with BARC and conducting EMM feasibility studies. In the second phase would be a project to build commercial size 100 kJ EMM equipment prototype to be taken up after 40 kJ EMM equipment development and proven through detailed experimentation. Efforts are on to develop 40 kJ EMF equipment using existing know how technology available with BARC.

### **Projects initiated**

### Flexible 3D Low-Cost Automated Visual Inspection Station

Consortium Members: CMTI, Bangalore; PSG College of Technology, Coimbatore; Soliton Technologies, Bangalore, PARI, Pune; Sona e-Design, Gurgaon; TVS Motors, Hosur.

German Partners:- IFF, Magdeburg, IZFP, IITB, Kaarlsruhe, IWU, Chemnitz, ESK, IOF ]

The objective is to develop an open source framework and necessary standards to enable efficient development of reconfigurable automated 3D inspection systems. The project will also involve developing/ defining standards in a limited way both for interfaces and inspection specification as well.

The proposed system may be targeted for three categories of inspection applications viz. measurement, feature detection and surface inspection. The 'imaging' system would be a fusion of multiple reconfigurable sensors, which would include cameras, optical elements, lighting, and lasers so that a wide variety of inspections can be performed on this station. Expertise from Fraunhofer will be availed in different areas of inspection, testing, software, etc. A Seed Phase Project has been sanctioned for developing a Detailed Project Report (DPR) by mutual interactions between Indian and German Partners. The DPR will contain high level (modular) system architecture; select use cases based on Industry requirement; select techniques/ sub components to be used / or developed; developing an outline of Inspection Specification Standard; and design the software framework & list of modules.

### 4.6 Targeted Programmes in other Important Areas

### 4.6.1 Bioprocess & Bioproducts Programme

The Bioprocess & Bioproducts Programme, launched in January 2007, has been aiming at addressing critical technology needs for biotransformation and enzymatic processes towards development of active pharmaceutical ingredients of high optical & chemical purity, neutraceuticals, phytochemicals, value-added bioproducts, bio-energy and biofuels.



#### **Programme Achievements**

Since its inception, eight projects have been launched under the programme towards development and demonstration of new technologies in partnership with industry / academia / R&D laboratories in the aforesaid areas. During the year, **one project** has been successfully completed, one project was shortclosed and three ongoing projects were reviewed. Three new academia / industry collaborative projects have been initiated during the period out of which two projects have been launched. Two specialized TIFAC studies were commissioned under the programme during the period. Seminars and brainstorming meets were organized towards sharing knowledge on multidisciplinary technological challenges in the sector and to sensitize people from industries/academia about its potential in terms of technology development & business opportunities. Papers/articles of TIFAC scientists were presented in national and international seminars/conferences and published in leading scientific & technical journals.

The progress and achievements of the projects under the programme are given hereunder:

### **Completed Project**

### Bio-conversion of racemic molecules to obtain stereo-specific active pharmaceutical ingredients

Partner: M/s Hi-tech Bio Sciences India Ltd., Pune

The project launched in November 2007 with the aim of developing three low volume, high value stereo-specific active pharma ingredients viz. *11-hydroxy canrenone, eplerenone and S-Indolene 2-carboxylic acid* at pilot plant level by biosynthetic route. Optimization of process parameters for all the three molecules was completed successfully and the yield has been stabilized. As an offshoot of the project, the partner company subsequently commissioned a 50 Kg/batch pilot plant for manufacturing eplerenone at Supa near Pune and the plant is operational. The project has been successfully completed in September 2009 achieving all its envisaged objectives.

### **Projects Ongoing**

Development and optimization of enzymatic process for producing Stevioside from Stevia leaves

Partner: M/s. Stanpack Pharma Pvt. Ltd., Baddi, Himachal Pradesh

The project, launched in 2008, aimed at indigenous development and optimization of process parameters for an efficient enzymatic pre-treatment and extraction process for producing Stevioside from *stevia rebaudiana* leaves conforming to international benchmark. Finalization of specification for process & utility equipment, engineering design, their fabrication & procurement and erection & commissioning along with the civil works for the scale-up facility were completed. Phase wise trials were conducted towards optimization of process parameters for all the equipment. Stevioside produced in lab-scale had been analyzed in terms of its purity.



# Development of prostaglandins & advanced intermediates

Partner: Hygeia Laboratories, Pune

The project was launched in 2008 with the objective of developing and optimizing the pilot scale process for the bio-transformed intermediate followed by the series of chemical conversions to arrive at the prostagladins for the domestic and international markets. All the equipments had been procured by Hygeia and commissioning of the pilot plant has been underway for biotransformation trials. The process would use cheap and easily accessible microbial sources (whole yeast cells), which are found to be highly efficient in producing the compounds with desired levels of chemical and optical purity. The entire plant is expected to be operational by July 2010.

### **Centre for Biofuels**

The project was launched in 2008 with National Institute for Interdisciplinary Science & Technology (NIIST), Trivandrum for undertaking cutting edge research activities in bio-refinery related technologies. The centre would also evolve as the leading seat of knowledge and pedagogy. Activities encompassing other fields of bio-fuel R&D including biodiesel had been projected for the future. A nationwide in-depth study on availability of biomass was carried out under the project as a spin-off and the same has been published as a TIFAC specialized report titled, 'Availability of Indian Biomass Resources for Exploitation'. While the civil works for the pilot

plant was completed, the process & detailed engineering design were underway. Most of the laboratory equipment for biomass characterization, analysis & testing had been procured. Compositional analysis for identified feedstock viz., *sugarcane bagasse, reed (bamboo), sugarcane tops, rice straw, cotton stalks* had been completed by NIIST. Some laboratory scale experiments for optimization of pretreatment process parameters of biomass feedstock were underway.

### **Short-closed Project**

### **Development of pharmaceutical grade chitosan & value-added formulations**

The project was launched in July 2008 in partnership with Indian Sea Foods, Kochi as industry partner & Ahmedabad Textile Industry's Research Association (ATIRA), Ahmedabad as the technology consultant. The project aimed at developing pharmaceutical grade Chitosan from raw shrimp and prawn shells, which are generated in large quantities as waste materials by seafood processing industries. In the backdrop of then global economic recession, the firm had been struggling with poor cash flow, which in turn resulted in lower investment by the firm. Due to lack of immediate demand of the product in Indian market and lack of no firm order for bulk supply to international market, the firm was not in a position to make any further investment in new project. The project was short-closed in December 2009 considering such bleak market scenario and acute financial crunch of the firm.



#### **Projects Initiated:**

### **Process development for production of** L-arginine by fermentation

The project was launched in January 2010 with Jawaharlal Nehru Technological University (JNTU) & M/s Celestial Labs Ltd., Hyderabad as the industry partner. The project aims to develop a process for L-arginine from the selected microorganisms. The strain would be improved by conventional mutagenesis and recombinant approaches. After production, Larginine would be purified followed by its crystallization in packaging form. L-arginine, an amino acid considered as the most potent nutraceutical, has numerous functions in the body.

### Efficient utilization of jatropha seed cake by detoxification and recovery of residual hydrocarbon

The project, launched in March 2010 with Osmania University & M/s. Naturol Bioenergy Ltd., Hyderabad as an industry partner, aims to carry out studies for selection of suitable dioxygenase and alkane hydroxylases from isolated pseudomonas and standard pseudomonas culture. Further, cloning of the aforesaid enzymes in yeast, recovery of residual hydrocarbon (biodiesel) and evaluation of toxic compound would be carried out in the project.

### Specialized Studies Completed/ Commissioned

### **Availability of Indian Biomass Resources** for Exploitation

A nationwide in-depth study on availability of

biomass was carried out under the Centre for Biofuels project and the same has been published as a specialized TIFAC report. The report covers detailed state-wise data on production of select biomass, available bioresources, their current consumption levels, storage and transport practices, sources of procurement and surplus biomass resources for their further exploitation and would be a good source of inputs in terms of data on potential biomass availability in the country for the various stakeholders.

### **'Biomass Derived Bioproducts –** Assessment of Technology Trends, Gaps & Opportunities for India'

Considering the challenging opportunities in technology innovation and vast potential for deriving value-added bio-products from available Indian biomass, TIFAC has commissioned the specialized study. The study would be a comprehensive assessment of the sector towards identifying the technology gaps, focused R&D needs & directions and technology linked business opportunities for their effective exploitation in India. The report is expected to emerge as a '*Technology Dossier*' for the biotech industries and research organizations in India to identify potential bio-products and technological routes for pursuing projects in R&D, pilot, semi-commercial or commercial level. The draft report was completed and reviewed for finalization. Four brainstorming meets with area experts from industry/ academia/R&D were convened in biotech hubs of India and new ideas/views were generated for their incorporation in the final report.



TIFAC organized one-day National Seminar on 'Bioprocess *Technologies* Emerging Opportunities' jointly with Indian Institute of Chemical Engineers (IIChE), Northern Regional Centre, New Delhi at Vishwakarma Bhavan on October 09, 2009. The seminar. inaugurated by Dr R Chidambaram, Chairman-TIFAC & Principal Scientific Advisor (PSA) to the Government of India, was attended by about 130 participants from academia, institutes, government agencies, professional bodies and industries. The technology developmental activities being pursued in the sector by various agencies in the country were deliberated in the seminar and multi-disciplinary knowledge was shared by the stakeholders in technological issues and challenges.

### 4.6.2 Synergizing S & T with Judicial Processes

This sector aims to enhance the level of interface of Science and Technology with Judicial processes by undertaking innovative technology demonstration projects in a collaborative mode with the Judiciary, investigating agencies, the forensic laboratories and S& T organizations.

### **Completed Projects**

During this year a project titled 'Crime Scene Recording System' was completed. The project was jointly implemented by Bangalore Police and M/s. Encore software Ltd, Bangalore by using a portable computing device for tamperproof acquisition, storage, and retrieval of Crime Scene data.

### **Ongoing Projects**

The following projects have been ongoing during the year:

- 1. e- Courtroom: Digital Recording and Retrieval System (e-DRRS)
- 2. e- Courtroom: Document cum Evidence Management System (DEMS)
- 3. Court Case Document Tracking Information System using RFID Technology
- 4. Tamperproof and Supervised collection of physical clues of Crime
- 5. Selection of Panel of SNP Markers for Forensic Analysis in Indian Population

### 4.6.3 Technology Up gradation of select MSME clusters

The programme is focused towards providing R&D support to SME's, on a sustainable basis, appropriate and plan technological interventions in select SME clusters. The approach is based on establishing and leveraging academia-industry interaction. Each project starts with a comprehensive assessment study of technology needs with specific focus on technology status (products & process) in a selected cluster, identification of gaps (in terms of competition and market equipments) in the cluster, and recommend a design and implementation module of targeted



interventions by the academic/ R&D Institutions. The outcome is a Technology Gap Study.

Eleven sectors have been identified so far for carrying out in depth technology assessment studies to bring out the gap in context of current global standards. The sectors are Casting (Howrah, West Bengal- Ferrous, Kolhapur, Maharashtra- Non ferrous), Sports Goods Cluster - Jalandhar, Punjab, Surgical Instruments (Baruipur, W.B.), Diesel Pump & Engineering Industry (Rajkot, Gujarat), Agricultural Implements Industry (Karnal, Haryana), Scientific Instruments (Ambala, Haryana), Carpet Industries Cluster - Bhadohi, UP, Food Processing Cluster of Malda, W.B, Handmade Paper cluster of Sanganer, Rajasthan, Pottery (All India survey) and Rubber cluster of Agartala, Tripura.

The progress and the achievements during the period are detailed below.

### **Completed Studies**

SI No.	Title of the Study	Knowledge Partner
1	Technology Gap Study for Food Processing Cluster of Malda	Central Institute for Subtropical Horticulture, Lucknow

### **Ongoing Projects / Studies**

### **Howrah Foundry Cluster**

The R&D and Innovation Centre for the cluster set up and Jadavpur University has started a Mobile Casting Clinic and the Clinic is providing services. The Clinic housed in a TATA Winger Van has sand testing equipment for testing of moisture, permeability, mould hardness, core hardness and green compressive strength of sand. The mobile unit moves in the cluster conducting tests in different foundries. During the period more than 50 foundries have been covered in Howrah for carrying out sand testing at nominal rates.

The R&D and Innovation Centre conducted energy audits on two cupolas to quantify the potential for energy savings with better designed Cupolas. As per the audit, there is scope for improvement of up to 30% of energy saving by design modification in existing Blast Cupolas. Modification of Divided Blast Cupolas in five foundries identified by Indian Foundry Association, Kolkata has been taken up by R&D and Innovation Centre at Jadavpur University.

A Documentary Film to highlight the best practices in the foundry industry is under preparation.

### **Baruipur Surgical Instruments Industry Cluster**

The R&D and Innovation Centre for Baruipur Surgical Instruments Industry cluster is now coming up with the installation of different testing equipments. The Centre once fully functional, will reach out to the cluster providing R&D and technical support. A 'Surgeons Meet' was organized on June 3, 2009 at the School of Bio-Science & Engineering, Jadavpur University, Kolkata to get a feedback on the surgical instruments being made in Baruipur Cluster regarding their quality, design etc. and plan further intervention. A one-day workshop was organized on "Advanced Manufacturing



Techniques" on December 7, 2009 at the Common Facility Centre, Baruipur, and West Bengal to expose the local entrepreneurs of the cluster to the modern manufacturing and fabrication technologies of surgical instruments.

An extensive hands-on training program on "Advancement in Manufacturing Techniques for Surgical Instruments" has been designed to train for 100 workers of the cluster in batches. School of Bio Science & Engineering, Jadavpur University, in association with surgeons and other departments of the University will conduct the training. The training will help the workers in getting acquainted with modern practices of forging, shaping, etc. The course content has been finalized in consultation with the industry representatives and some leading surgeons.

### Malda Food Processing Cluster

A training programme on 'Post Harvest Management of Fruits & Vegetables' was conducted by Central Institute for Sub-tropical Horticulture (CISH), Lucknow, from June 4-6, 2009 at Malda. The programme highlighted the modern harvesting technique, storage, packaging and transport of fruits and vegetables, etc., and was attended by about 25 local mango growers and processors

As a sequel, a training module on 'Value Addition and Processing of Fruits and Vegetables' was organized at CISH, Lucknow from January 20-22, 2010 for the same group of participants. This training covered modern processing technologies, quality assurance aspects, etc, in respect fruits and vegetable such as mango, pineapple, litchi, guava, citrus, orange and tomato.

A two-day training programme on 'Export of Mango & Mango Products from Malda' was organized during August 6-7, 2009 at Malda in coordination with Department of Food Processing Industries & Horticulture, Govt. of West Bengal, Malda. This training exposed about 60 local entrepreneurs about the legal and technical requirements for export of fruits and vegetables to different countries.

A feasibility study for establishing a "Pulp Processing cum Aseptic Pulp Packaging Plant at Food Park, Malda" is being carried out by Deputy Director of Agriculture (Fruits), Department of Food Processing Industries & Horticulture, Government of West Bengal, Malda. The study is an outcome of an earlier study by CISH, Lucknow that identified the need of an Aseptic Packaging Plant at Malda to fully exploit the commercial potential of the mangoes and other fruits at Malda.

One day training programme on 'Geographical Indications (GI) & Patents' was organized at Malda by Department of Food Processing Industries & Horticulture, Government of West Bengal, Malda. The objective was to create awareness for commercial exploiting of the existing GIs and scope for patenting from Malda Food Processing cluster.



### **New Studies**

Sl No.	Title of the Study	Knowledge Partner
1	Technology Gap Study for Sanganer Handmade Paper Cluster	Kumarappa National Handmade Paper Institute, Jaipur
2	Technology Gap Study for Rubber Industry cluster around Agartala, Tripura	National Institute of Technology, Agartala

### **Other Initiatives**

Efforts are being made to establish symbiotic relationship between more MSME Clusters around the country and academia/technical institutions. The identification process of such clusters and nearby academia/ R& D Institutes is on.

### 4.6.4 Miscellaneous Projects

'Demonstration of Solar Thermal Concentrators supplying steam for drying of Sodium Sulphate at HWP, Kota'

Implementing Agency: Heavy Water Board, Mumbai

The objective of this demonstration project is install and commission a complete solar concentrator for drying Sodium Sulphate at Heavy Water Plant (HWP), Kota. The project involved studies taking into account of the local site conditions, solar radiation levels, etc. at the site and other relevant parameters, to arrive at a system of optimum configuration. The installed system would also be evaluated for potential use in industrial effluent / chemical evaporation applications.

During the year, the design of an optimized integrated system was completed. Four dishes, named 'ARUN 160', each having a surface area of 169 sq. meters, along with the integration systems were installed. Trial runs were completed. Currently, the steam generated from the concentrator is being vented out to the atmosphere. Minor problems encountered during commissioning are being addressed.

Establishing the suitability of ARUN solar concentrator system for drying of industrial chemicals and effluents and developing specifications for a solar industrial effluent / chemical evaporation system using Arun160 are the secondary objectives of the project.





## **5** International Cooperation

### 5.1 India-International Institute for Applied System Analysis (IIASA) Programme

International Institute for Applied Systems Analysis (IIASA) is an independent nongovernmental interdisciplinary research institution headquartered in Austria. IIASA is sponsored by various scientific organizations from different member countries. India has been a member of IIASA since January 2007 for a period of five years and TIFAC has been designated as the National Member Organization (NMO) of India. TIFAC implements the Indian membership with IIASA as an 'India-IIASA Programme'. The Programme activities are guided by an Indian National Committee, Chaired by Dr Kirit Parikh who is a former member of the Planning Commission.

### **Activity Highlights**

- Participation of Young Indian Researchers in IIASA Programmes: Two young Indian researchers have successfully participated in the Young Scientists Summer Programme (YSSP) with joint support from IIASA and TIFAC. Also, one Indian researcher has been selected for participation in IIASA funded Post Doctoral Program.
- Participation of Senior Researchers in IIASA activities: IIASA along with a number of international partners is undertaking the Global Energy

Assessment, a major initiative seeking to redefine the global energy policy agenda. This multi-stakeholder activity aims to help decision makers address the challenges of providing energy services for sustainable development throughout the world. Several senior Indian researchers/ stakeholders are participating in planning, steering and contributing as lead authors and co-authors in this major IIASA initiative

- **TIFAC-IIASA Studies**: A new TIFAC supported initiative 'TIFAC-IIASA Studies' was launched with a view to promote Indian collaborative studies with IIASA. These studies are expected bring out of scholarly outputs of policy significance by facilitating synergies of insights of Indian researchers with IIASA's analytical strengths.
- An IIASA mini library has been set up in TIFAC wherein several IIASA publications are made available for interested researchers.

### **Ongoing Study**

### Indian Perspectives on Global Energy Scenarios Till 2050

TIFAC-IIASA study on '**Indian Perspectives** on Global Energy Scenarios till 2050' was launched with Integrated Research and Action for Development (IRADe), New Delhi. The study aims to identify India's long term energy mix upto the year 2050, future energy technology options and investments in the context of climate change. Issues of future energy



technological transitions to maintain sustainable development would also be addressed in the study. This long term comprehensive study will help analyze India's position with respect to that of other regions and hence would be useful to policy makers.

### **Other Activities**

### Workshop on Ecological Modelling at Indian Institute of Forest Management, Bhopal

- The two-day workshop on Ecological Modelling was organized jointly by TIFAC, IIFM & IIASA during January 28-29, 2010. The workshop was primarily planned & designed to draw upon the expertise of IIASA researchers towards imparting specialized skills in Ecological Modelling for Indian participants viz. practicing Indian foresters, forest policy planners, senior forestry researchers and others. The workshops also deliberated on the approach for reducing greenhouse gas emissions and enhance the role of ecological modelling in decision making process.
- An IIPS-IIASA-TIFAC joint Seminar on • 'Demography: International Perspective and Challenges for India' was held during February 12 – 13, 2010 at International **Institute for Population Sciences (IIPS)** Mumbai. Two IIASA researchers and 25 eminent Indian experts on demography & population sciences made presentations during the seminar. Topics included mortality and morbidity, demographic dividend, demographic models, data and measurement, issues related to HIV/AIDS and some infectious diseases as well as urbanization. development and

environment. Major emerging research issues for future research were discussed.

- A joint workshop with the Institute for Economic Growth (IEG), Delhi & IIASA on 'Microsimulation modeling with special reference to health as part of a proposed ongoing collaborative relationship with India in the area of 'health research' has been planned.
- An Indian delegation participated in the meeting of the IIASA Council in June 2009 & NMO Day. Contributions were made to the discussions on development of IIASA's new 'Strategic Plan'. Discussions were held with several IIASA researchers regarding development of Indian collaborative work with IIASA & joint workshops in India.
- Dr Kirit S. Parikh, participated in the meeting of the IIASA Council meeting in November 2009. Detailed discussions were held regarding IIASA's new strategic plan (2011 to 2020) on research focus of IIASA in the areas of Energy & Climate Change, Food & Water and Poverty & Equity.
- Dr Kanchan Chopra, former Director-IEG, Delhi participated in the meeting of the Scientific Advisory Committee to the IIASA Council in March 2010.

# Presentations made in Institutions on the India-IIASA Programme

In order to reach out to larger network of researchers in targeted Indian institutions and broadening the scope of participation of Indian researchers in the programme, detailed presentations were made in various institutions in different parts of the country towards apprising them on windows of opportunities available in the India- IIASA Programme. These included the following institutions:

- 1. The Energy Research Institute (TERI), New Delhi
- 2. Indian Institute of Management (IIM) Bangalore
- 3. Madras School of Economics (MSE), Chennai
- 4. International Institute for Population Sciences (IIPS), Mumbai
- 5. Indian Institute of Management (IIM) Calcutta
- 6. Indian Institute of Forest Management (IIFM), Bhopal
- 7. National Environmental Engineering and Research Institute (NEERI), Nagpur
- 8. Indian Institute of Technology (IIT) Madras

- 9. Delhi School of Economics (DSE), Delhi
- 10. Indira Gandhi Institute of Development and Research (IGIDR) Mumbai,
- 11. Indian Council for Research on International Economic Relations (ICRIER)
- 12. Institute of Rural Management (IRMA), Anand
- 13. National Council of Applied Economic Research (NCAER), Delhi
- 14. XLRI, Jamshedpur

### 5.2 S & T Cooperation with ASEAN

TIFAC continued to put efforts towards strengthening the S&T Cooperation among the ASEAN countries through the ASEAN Secretariat.



## Human Resources & Infrastructure Development

### 6.1 Training

- Dr. D. Majumder, Scientist D and Shri Vipin C. Shukla. Scinetist D, attended a two-week training programme on 'Science & Rural Societies' held from April 20 – May 1, 2009 at Lal Bhadur Sashtri National Academy of Administration, Mussoorie.
- (ii) Shri Mukesh Mathur, Scientist D, attended a two-week training programme on 'Technology Commercialization Programme for Senior Scientists' held from June 1–12, 2009 at Administrative Staff College of India, Hyderabad.
- (iii) Shri P.R Basak, Scientist E, attended a week-long programme on 'Fossil Economy to Biomass Economy' held from August 19-21, 2009 at Indian Institute of Petroleum, Dehradun.
- (iv) Dr. Ankkur Goel, Scientist B, attended three-day programme on "Business Incubation' held from August 6-8, 2009 at STEP, PSG College of Technology Coimbatore.
- (v) Shri T. Chandersekhar, Scientist attended one-week training programme on 'Orientation workshop/training for vigilance officers of subordinate officers and aided institutions of DST' held from November 30 – December 4, 2009 at CBI Academy, Ghaziabad.

- (vi) Smt. Indu Vermani, Information Assistant (Database), attended a week long training programme on 'Cyber laws, Information Security and Computer for Scientists and Technologists' held from September 7-13, 2009 at Indian Institution of Planning Administration.
- (vii) Smt. Kiran A Zacharia, Scientist D, attended a training programme on 'General Management Programme for Senior Woman Scientists' held from November 23 – December 4, 2009 at Centre for Economics and Finance Administrative Staff College of India.
- (viii) Dr. Gautam Goswami, Scientist E, attended a programme on 'Soil Sciences in meeting the challenges of Food Security & Environment Quality' held from December 22-25, 2009 at Indian Agriculture Research Institute, New Delhi.
- (ix) Shri A. Parida, Director, attended a programme on 'Energy Security & Management' held from February 8-12, 2010 at National Institute of Advanced Studies, Bangalore.
- (x) Dr. P.K. Anil Kumar attended a programme on 'Leadership Development Programme for Junior and Middle level Scientists' held from February 1-5, 2010 at Lal Bahadur Sashtri National Academy of Administration, Mussoorie



### 6.2. Participation in International Conference, Training and Seminar

 Dr. Neeraj Saxena, Scientist D, attended conference on 'University, Industry and Government Linkages' held from 17-19 June, 2009 at Glasgow, UK

> (ii) Smt. Kiran A Zacharia Scientist D and Shri S. Biswas, Advisor, attended 'IIASA Governing Council Meeting' held from June 8-12, 2009 at Austria.

- (iii) Shri Deepak Bhatnagar, Consultant, attended programme on 'Knowledge Networks in Action – New Paradigms from India' held from July 13-14, 2009 at ICTPI Porto, Portugal.
- (iv) Dr. Gautam Goswami, Scientist E, attended programme on 'Human Rights and Communications' held from July 21-24, 2009 at International Association for Media and Communication Research (IAMCR), Mexico City, Mexico
- (v) TIFAC participated in the Technology Exhibition/Fair held at at Thessalonki, Greece from September 4-15, 2009.
- (vi) TIFAC participated in the India Show 2009 held at at St. Petersburg, Russia, from September 30 - October 3, 2009.
- (vii) Shri Sanjay Singh, Advisor, participated in a symposium on 'Marbles Wastes' held at Diyarbakir, Chambers of Commerce & Industry at Istanbul, Turkey, from October 15-18, 2009.

- (viii) Shri Suresh Kumar K, Scientist D, attended a two week programme on 'IPR & Technology Transfer among developing countries' held from October 16-24, 2009 at Michigan State University, Lansing, USA
- (ix) Smt. Sangeeta Nagar, Scientist D, attended a conference on 'EPO Patent Information Conference' held from November 1-6, 2009 at European Patent Office, Biarritz, France.
- (x) Shri Arghya Sardar, Scientist D, attended a programme on 'Offline and Real-time Simulator for Electric and Hybrid Electric Vehicles' held from February 2-4, 2010 at Erlangen and Nuremberg, Germany.

### **6.3 Publications**

Details of publications may be seen in Annexure-I

### 6.4. E-Resources

TIFAC decided to join the DST-CSIR consortium to have access to a wider range of ejournals and databases of scientific and technical papers and documents. Through the new consortium, TIFAC has directly subscribed to eight different E-databases and indirectly to more E-resources, through which we have access to substantial number of scientific and technical journals.

### 6.5 Implementation of Official Language Policy

TIFAC continued efforts towards implementation of Official Language Policy



under the guidance of in-house Official Language Implementation Committee. Training programmes and workshops on the language were organized regularly. Hindi Day and Hindi Week were also celebrated in association with DST, during which language proficiency competitions such as quiz, essay writing, elocution. poetry recitation in Hindi were organized. An incentive scheme was introduced to promote usage of Hindi while preparing notes and /drafts.

### 6.6 TIFAC Library

In order to facilitate and foster the flow of the

Scientific/Technical information, TIFAC Library continued to strengthen its holdings. The requirements, as per the changing needs of TIFAC scientists and users, were met by procuring scientific books/ reports and journals/ serials.

During the year, a total of 56 new scientific, technical books and reports, including publications in Hindi language, were procured, raising the total holding of TIFAC Library to 2,294. In addition, 36 new scientific and technical journals and other magazines have been subscribed.



## **National Mission on Bamboo Applications**

The NMBA continued to support projects for promoting and facilitating bamboo technologies and products for various end-uses and applications. The following is an account of major achievements during the year.

#### 1. Chattisgarh - Schools - An update

A total of 276 classroom units were fabricated making use of engineered prefabricated structures for residential schools at 18 different locations in the District of Dantewada, Chattisgarh. The structures are built as a part of the Rajeev Gandhi Shiksha Mission of the State Government of Chattisgarh. The project aim was to demonstrate and commercialize the use of engineered bamboo material as an alternative to conventional brick, cement and steel. Apart from being durable and weather resistant, such structures have provided for a cost effective as well as speedy alternative to conventional brick and mortar construction.

The project has been completed successfully. The fabricated structures accommodate about 25,000 students.

#### 2. Bamboo Based Polyhouse

Use of polyhouses, to ensure controlled environmental conditions for growing flowers and vegetables, is



on the rise during recent few years.

With its inherent structural strength as well as cost advantage over steel based polyhouses, bamboo as a structural material in polyhouses has immense potential. A number of such structures of various sizes have been commissioned for institutional as well as demonstration purposes throughout India. The prominent one among these is a 2,000 sq. meters polyhouse constructed at the G.B. Pant University of Agriculture & Technology, Pantnagar, Uttarakhand.

#### 3. **Promoting Eco-Tourism**

### 3.1 High End Bamboo Cottage – ITDC, Puducherry

Venturing into high-end bamboo structures, a project for construction of Bamboo cottages at ITDC supported Hotel Puducherry, Puducherry was commissioned in 2009. The sea front structure measuring 40'x36' including water closet and a viewing deck serves as one of the premium offerings of the hotel. Such structures highlight the versatile use of bamboo in construction where bamboo can be used for niche segment like hotels and resorts.





### 3.2. Tourist Cottages at Bodh Gaya

In its efforts to promote the usage of pre fabricated b a m b o o structures



by various government bodies and institutions, NMBA in partnership with Bihar State Tourism Development Corporation has set up cottages at Bodh Gaya. Numbering 20 and covering 5000 square feet in total, the cottages offer an altogether different experience for the guests. Each cottage has a living room and is served with water closet and basic amenities. The said venture serves as a good demonstration project for using pre fabricated engineered bamboo structures in tourism sector.

### 4. National Institute of Fashion Technology (NIFT), Kangra

NMBA has facilitated the construction of NIFT centre at Kangra, Himachal Pradesh. The project entails



construction of classrooms based on engineered prefabricated material. With an area of approximately 10,000 square feet, such projects lead to validation, acceptance and genuine demand for bamboo based structures. Efforts are being made to link such initiatives to public housing and infrastructure development programme, whereby they meet the immediate needs of the people at large.

#### 5. Green Room And Sculptural Centre

In quest for using bamboo for innovative structures, N M B A supported a



project for commissioning of a green room and sculptural centre at the IFCI Tower, Nehru Place, New Delhi. Situated at a prominent landmark, such construction serve as an excellent demonstration project for extending the usage of bamboo based structures for aesthetic purposes. The structure utilizes whole bamboo as well as engineered bamboo.

### 6. Amalgamating Bamboo with Technology

Bamboo could find novel green alternate applications to replace plastic, metal and wooden components in several electronic and other devices. To demonstrate such applications, product prototypes of bamboo microscope, bamboo kaleidoscope, bamboo solar garden light, bamboo speakers were developed. The project was implemented by SDR Technologies, Delhi.





# 7. Value addition to bamboo shoot through processing

The Central Food Technological Research Institute has been supported to develop new products from bamboo shoots such as candies, chutneys, pickles, soup mix, dehydrated bamboo shoots, etc. Developed products will be standardized for the conditions of preparation, storage and packaging conditions. The project in turn will be useful for promoting the usage of bamboo shoots as edible product.

### 8. Development of Split Bamboo based Solar Flat Plate Collector Water Heater and Grain Drier

NMBA has developed a solar water heater and grain drier prototype using green materials as a major component. The



main objective of the project is to develop a cost effective and efficient model for household and domestic application.

### 9. Decentralized Small Power Pack Cycling Device from Bamboo for energy production

A prototype of the device has been developed. About 45 minutes of cycle pedaling generates electricity that could light a 40 watt bulb for four hours. With the device, inhabitants in remote corners could have some electricity for few hours on a daily basis.

# 10. Development of Hydroponic Unit of Bamboo

Hydroponic is a method of growing plants using mineral nutrient solutions in water, without soil, using PVC pipes mounted on aluminum frame. M/s World Kids Inc, Mumbai is developing Hydroponic unit made of bamboo which will replace the plastic and aluminum version along with rooftop hydroponics demo garden.

### 11. Centre for Bamboo Training and Product Development

In order to support the skills training, entrepreneurship development, product development and related applications in the bamboo sector, NMBA has entered into an agreement for the setting up of Centre for and Bamboo Training Product Development, in the Public Private Partnership (PPP) mode or in joint collaboration with KONBAC-Maharastra, Bamboo Development Agency-Chhattisgarh, Orissa Bamboo Development Agency-Orissa, Tapini Bamboo Development Center-Ahmedabad & Society for Development of Composite, Bangalore. These centers will provide:

- (i) Skills training for workers in different areas of mat-weaving, sliver production, stick making, basic furniture, fabrication of board based and whole bamboo structures/housing, mechanized furniture, charcoal making & bamboo shoot production. Entrepreneurship Development Programmes in bamboo based applications and industry
- (ii) Development of training modules,



curriculum for both workers and entrepreneurs

- (iii) Technology research and market studies
- (iv) Product development and design development
- (v) Production of various bamboo products
- (vi) Undertaking projects for fabrication of structures and supply of bamboo products particularly, furniture, mats, sticks, etc.
- (vii) Business Incubation for Bamboo industry
- (viii) Promotion and marketing of bamboo based industrial applications
- (ix) Education, awareness and capacity building in the bamboo sector

#### 12. Delhi University, Delhi

Delhi University evinced keen interest for setting up the engineered bamboo prefabricated structures to be used as class rooms, faculty rooms and for the canteen or cafeteria, for various its colleges, on a payment





basis. Accordingly, NMBA supported a project for setting up of such infrastructure in 22 colleges. The structures were completed and would be used from the coming-up academic session onwards. While being eco-friendly, such structures are low cost, low maintenance, thermal resistant and short erection time.

#### 13. Bamboo Timber

Bamboo timber is a proven excellent substitute of wood and are available in the form of Reinforced compressed Bamboo Beam and Board. It is a 100% substitute of wood timber as it can be cut sawn, sanded and polished in any direction. It can be used for all other wood application such as doors, windows and furniture. NMBA is supporting for setting up of Bamboo Timber Manufacturing unit at Chichala, Distt Nagpur, Maharashtra.

#### 14. Bamboo Craft showroom

High-End Bamboo Craft showroom having 11 bamboo cubicles and one store room has



been constructed with NMBA support using whole bamboo and bamboo composite material. This facility at 9-Mahadev Road, New Delhi will be used for exclusively exhibiting Crafts of India and was opened by the Secretary, Dept. of Science & Technology, Government of India. Technology Information, Forecasting & Assessment Council प्रौद्योगिकी सूचना, पूर्वानुमान एवं मूल्यांकन परिषद्



### 15. India Bamboo Portal Launched

The Web based marketing portal has been launched by Hon' ble Secretary Dept. of Science &



Technology, Government of India on 07th April, 2010. The objective of the portal is to provide a web based platform for enterprises, organizations, cooperatives or communities anywhere in the country engaged in production of bamboo goods and bamboo applications to showcase their products to the worldwide markets so that they are able to expand their business opportunities. Bamboo manufacturers/ processors could get registered and avail the benefits. The link for the portal is <u>http://www.indiabambooallinall.org</u>

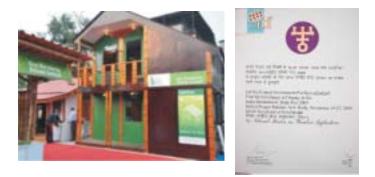
#### 16. India International Trade Fair November 14-27, 2009, New Delhi

India International Trade Fair is a premier

event organized by India Trade Promotion Organization (ITPO) at Pragati Maidan, New Delhi from 14 – 27



November. NMBA participated with its supported entrepreneurs. The NMBA pavilion was inaugurated by Hon' ble Minister of State (I/C) for Science & Technology, Government of India. NMBA received Gold Medal in the Central Government Pavilion adjudged First for Excellence in Display at IITF 2009. Displayed products range included whole bamboo houses, engineered bamboo prefab shelters, disaster relief housing, flooring, thermoplastics, furniture, charcoal, blinds, incense sticks, etc. Bamboo bicycle, microscope, lamps, innovative bamboo chairs, bamboo timber are to be seen to understand the extent of application areas of bamboo. NMBA takes pride in being associated with the global effort towards environment friendly, biodegradable products and for greener solutions.



During the Trade Fair, NMBA presented for the first time ever, a festival BAMBOOSTIC 2009 focused on bamboo, Nature's Miracle Grass with over 1500 uses. The goal of the festival was to influence young hearts and minds to use bamboo which is an easily renewable resource for a cleaner, greener India.







## **Mission for Geospatial Applications**

The Mission Mode project was started during 2007 as 'Reinvigorating Indian Agriculture through S&T' at a total cost of 4.90 crore for the 11<sup>th</sup> Plan. The project has now been expanded and renamed as "Mission for Geospatial Applications" and the outlay for 11<sup>th</sup> Plan has been revised to Rs.24.50 crore.

#### **Brief activities of the Mission:**

#### I Agricultural Assessment

The project was initially started with the objective of tracking impact of severe weather events such as hailstorm, floods and drought. The objective is to provide data on crop coverage, crop health, output, etc up to village level on real time basis to Central/State Governments and other users. Information on the above parameters is being provided to different sugar mills, state governments and other government agencies.

### **II Flood Modeling and Forecast**

As a necessary corollary to tracking extreme weather conditions like floods, the Mission undertook flood modeling and monitoring of the river basins vulnerable to river basins with the objective to provide a warning system and build a flood index with probabilities before the actual flood event occurs. The capabilities developed include (a) area of inundation up to village level, (b) flood inundation maps up to village level, (c) volume of inundated water, (d) depth of inundation, (e) flood forecasting up to village level (based on rainfall and river discharges), (f) rainfall recharge to rivers, (g) approximate time of flooding after release of discharges from various dams and reservoirs, (h) submergence period of a particular area/village, (i) left bank/right bank inundation, etc. On the request of Gujarat State Disaster Management Authority, flood modeling of Sabarmati River basin was undertaken and the State Government has successfully validated the inundation maps produced by the Mission. With this success the activities have been expended to other river basins vulnerable to floods in other parts of the country. During the monsoon season 2009-10 real time flood modelling was an important highlight. Data from Gujrat irrigation Department was analyzed through the numerical model and output provided to Gujarat Disaster Management Authority for one river Tapi. This has been extended to Bagmati and Admara river basin in Bihar and Mahanadi & Baitarani in Orissa. In future all the major river systems of India will be covered. The Mission has also developed new sensors to monitor water levels at critical levels using new communication techniques.

### **III Internal Security**

**1. 3-D Terrain Models:** The experiments made under agricultural assessment and flood modeling led to experimentation in the field of security. Using the capability developed under above projects the Mission



has been successful in preparing 3-D models integrating high-resolution satellite imagery and digital topo maps. The models prepared under the project could be used in Control Rooms of MHA and other Government agencies dealing with internal security. High-resolution satellite images are integrated in to digital topo sheet in a GIS platform to produce 3-D models showing difficult terrains and slopes with other attributes to help navigation and operational planning. Terrain Models are being provided to MHA, Govt. of Jharkhand, Chhatisgarh, N.E states, BSF, CRPF etc.

2. Tactical Radio Sets: Under the Pilot Project, the Mission is developing on R&D basis Tactical Radio Sets [for HF, Low-VHF and VHF] for communication and field operations of Central and State Police and Para-military forces. Presentations were given to officers of SSB, ITBP, BSF, CRPF, CISF, MHA and different State Governments on the technological edge of communications systems and field applications of 3-D terrain models developed by this Mission. Recently MHA has given a Report in which they have given their suggestions and have recommended induction of these technologies in to the police in phased manner. Border Security Force (BSF) and CRPF using above noted are communications systems and terrain models developed by the Mission for their police operations.

3. **Disaster Management and Monitoring** of Developmental Activities: Besides the above activities recently the Mission has embarked upon new areas of Disaster Management and Monitoring of Developmental Activities. Govt. of Manipur has requested this Mission to monitor their developmental activities like road construction, rural housing, etc. Similarly Uttarakhand Govt. has also approached this Mission for their landslide monitoring.

#### Annexure – I



## **List of Publications**

- 1. Composites The Wonder Material, Sangeeta Baksi & S Biswas, published in the proceedings of International Conference & Expo on corrosion viz. WORLD CORCON 2009, organized by National Association of Corrosion Engineers (NACE) International, Mumbai, September 29-October 01, 2009
- Composites Applications in Marine Sector-Indian Scenario, Sangeeta Baksi & S Biswas, presented & published in the proceedings of International Conference, Workshop & Expo on Marine Applications (IWCEM 2010), organized by Defense Institute of Advanced Technology, Pune, January 14-16, 2010
- 'Bioprocess technologies TIFAC initiatives' - PR Basak, Nirmala Kaushik, Soumitra Biswas presented at TIFAC-IIChE seminar on Bioprocess Technologies – Emerging Opportunities at TIFAC, New Delhi in October 2009 and published in the seminar proceedings
- 'R&D Efforts in India towards Gainful Utilization of Marble Slurry' – Sanjay Singh, presented and published in the proceedings of a symposium on 'Marble

Wastes' organized by the Diyarbakir Chamber of Commerce and Industry, Istanbul, Turkey from October 15-16, 2009

- 5. 'Bio-resources to bio-products technology trends & opportunities' – PR Basak, Nirmala Kaushik, Soumitra Biswas, published in the proceedings of the International Conference on Trends in Bioprocess Engineering, MICOTriBE 2009, Kuala Lumpur, Malaysia, December 12-13, 2009
- 'Biofuels & Bioproducts Technology Imperatives' - PR Basak, presented at the training programme organized by National Power Training Institute (NPTI) at NTPC, Badarpur in January 2010
- 7. 'Methanol as energy carrier', PR Basak, Nirmala Kaushik, Soumitra Biswas, SEARCH (Vol.13, no. 02), February 2010
- 8. New Generation Biofuels Technology & Economic Perspectives, Nirmala Kaushik, Soumitra Biswas & PR Basak, presented at the conference on 'Frontier Issues in Technology, Development and Environment' held at Madras School of Economics, Chennai, March 19 -21, 2010



The Members, Governing Body Technology Information, Forecasting & Assessment Council, New Delhi – 110 016

We have audited the attached Balance Sheet of TECHNOLOGY INFORMATION, FORECASTING AND ASSESSMENT COUNCIL (TIFAC), NEW DELHI as on 31<sup>st</sup> March 2010 and also the attached Income & Expenditure Accounts for the year ended on that date.

These financial statements are the responsibility of the management of the TIFAC. Our responsibility is to express an opinion on these financial statements based on our audit.

We conducted our audit in accordance with auditing standards generally accepted in India. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by the management, as well as evaluating the overall presentations of the financial statements. We believe that our audit provides a reasonable basis for our opinion.

Subject to our Audit objections as per Annexure AR-1, comments given in the following Notes on accounts as per schedule -39 & 40, Note No B-1-> Non – Accounting of Stock of Publication of TIFAC, Note No. B-2 -> Non-receipt of utilization statements in respect of grant utilized from the implementing agency in some cases, we report that :-

- 1) We have obtained all the information and explanation which to the best of our knowledge and belief were necessary for the purposes of our Audit.
- 2) In our opinion proper books of account as required by law have been kept by TIFAC.
- 3) The Balance sheet and Income and Expenditure Accounts dealt with by this report are in agreement with the books of account.
- 4) In our opinion and to the best of our information and according to the explanations given to us, the said accounts read with the schedules and notes thereto given the information required by Society Registration Act, in the manner so required and given a true and fair view :
  - a) In case of Balance Sheet , of the state of affair of the TIFAC as at 31st March 2010.
  - b) In case of Income & Expenditure Account, of the excess of expenditure over income for the accounting year ended on that date.

For Chandiwala Virmani & Associates (formerly, Chandiwala Gupta & Associates)

Date : 23.09.2010 Place : New Delhi Sd/-(**Bharat Bhushan**) (Partner) M.No-87365



### TECHNOLOGY INFORMATION FORECASTING AND ASSESSMENT COUNCIL STATUTORY AUDIT FOR F/Y 2009-2010

#### AUDIT OBJECTIONS

#### (A) TIFAC

- 1. The Income Tax Department has raised a demand u/s 226 of Income Tax Act, 1961 for A/Y 2005-06 amounting Rs 8,28,14,300/-. The TIFAC has not admitted this liability and contested the same before the appropriate Appellate Authority. The appeal is still pending. There is a contingent liability on account of Income Tax upto the extent of Rs. 8,28,14,300/-. The TIFAC has deposited a sum of Rs. 50 lacs under protest against the said liability and this amount has been shown under the head Advance Recoverable.
- 2. Internal control with regard to recovery process including initiation of legal proceedings is weak especially in the cases of Home Grown Technology cases. There are cases where re-payment is re-scheduled more than once but recovery is very low. For example: In case of Hi-Tech Engineering, Mumbai, a Technology Development Assisstance of Rs. 20 lacs was sanctioned and PDCs worth Rs.30 lacs were obtained from the party as per agreement. The repayment was re-scheduled for more than once and finally the following re-payment schedule agreed by the party:-

S. No.	Cheque Date	Amount (Rs in lacs)
01	01-08-2003	2.00
02	01-02-2004	2.00
03	01-08-2004	2.00
04	01-02-2005	2.50
05	01-08-2005	2.50
06	01-02-2006	2.50
07	01-08-2006	2.50
08	01-02-2007	3.00
09	01-08-2007	4.00
10	01-02-2008	7.00
	<b>Total Repayment</b>	30.00

All the above cheques were bounced but no legal action was taken for years together.

We have also noticed following deficiencies in some of the cases:-

- 1. Audited financial statements of parties for the year ending March 2008 and March 2009 has not been obtained.
- 2. No Objection Certificate from other lenders has not been obtained since the assets hypothecated to them and TIFAC are enjoying pari-passu right.
- 3. The extent of liability of Guarantors is not there on the Deed of Guarantee.
- 4. No insurance of hypothecated assets is being obtained.
- 5. Copy of PAN Card of Company and Guarantors not on record.
- 6. No MOA and AOA of the companies has been obtained



- Cheque No.508135 dated 13.11.2009 amounting Rs.12,48,000/- is pending for realization. 3.
- TDS is deducted on payment basis but as per Income Tax Act TDS is to be deducted at "credit or payment basis 4. whichever is earlier"
- 5. As per books "Total Short Term Deposits" as on 31.03.2010 is for Rs.3,16,66,342/- whereas against these deposits physical instruments exists for amounting Rs.3,02,67,745/- and the balance of Rs.13,98,597/-has been shown under Short term deposits suspense account. This needs to be reconciled and the appropriate adjustment is to be made accordingly after proper approval from the appropriate authority.
- It is observed in some cases that following current liabilities are still outstanding since long time. It should be 6. ascertained whether these liabilities are to be paid or not. If not, then these should be written-off after obtaining proper approval:

(1) GSLIS	-	Rs. 133/-
(2) Salary payable (Prof. Ganpathy)	-	Rs. 1,800/-

- 7. A sum of Rs.1,20,91,059/- has been paid and booked as expense during the year while these expense relates to previous year 2008-2009 for which no provision has been made in previous year. Hence the surplus for the year has been shown as deflated to the extent of Rs.1,20,91,059/-
- 8. A sum of Rs.50,55,194/- has been paid in financial year 2010-2011 while these expense relates to current financial year i.e. 2009-2010 for which no provision has been made in current year. Hence the surplus for the year has been shown as inflated to the extent of Rs.50,55,194/-
- 9. TDS Returns for the assessment year 2010-2011 are filed after due date as mentioned below:

Quarter	Due date	Date of filing
First	15-07-2009	07-09-2009
Second	15-10-2009	13-11-2009
Third	15-01-2010	02-03-2010

#### 10. Following balances are o/s for the last 2 to 3 years which have not been settled so far:-

#### **Debit balance.**

•

Sail NMPP

- Sundry Debtor MTNL Rs.. 5,357 •
- Rs. 19,736.55 Construction of Reception office(DST) Rs. 32,59,953 •
- Sundry Debtor DST Rs. 26,36,440



### **Replies to Audit queries "Annexure AR 1" TIFAC**

- 1. TIFAC had already filed an appeal with Commissioner of Income Tax Appeal XXI which was posted for 06<sup>th</sup> September 2010. The appeal has heard on 06<sup>th</sup> September 2010 in favour of TIFAC. Necessary orders disposing off the case are being issued. Refund of Rs. 50 lakhs with interest will be claimed from Income Tax department on receipt of the orders from CIT appeal XXI.
- 2. Legal notices in almost all the cases have been issued. In various projects court cases have been filed and are in progress. All efforts are being taken for speedy recovery of due amounts.
- 3. Union Bank of India, SDA Branch, New Delhi has issued last reminder to The State Bank of India, Mettur Dam branch, Tamil Nadu on 31.08.2010 for sending duplicate Demand Draft for Rs.12,48,000/-. Duplicate DD is under issue by State Bank of India.
- 4. The point has been noted for future compliance.
- 5. Out of Rs.13,98,597/- shown under Short Term Deposit Suspense account, Rs.11,91,860/- has been reconciled. During the financial year 2001-2002 while finalizing the audit the interest of short term deposit was credited in interest account on accrual basis and same amount was again inadvertently credited in the interest account while encashing the short term deposit in the financial year 2002-2003. Balance amount of Rs.2,06,737/- left out in the suspense account is being reconciled. The total amount will be adjusted in the current year with the approval of the competent authority.
- 6. The liabilities pointed out will be paid during the year 2010-2011.
- 7. The point has been noted for future compliance.
- 8. The point has been noted for future compliance.
- 9. The point has been noted for future compliance.
- 10. Matter has already been taken up with the concerned department/agency for reimbursement of due amount.

## Technology Information Forecasting And Assessment Council, (TIFAC) Balance Sheet as on 31.03.2010

	Schedule	Current Year	Previous Year
CARPUS / CAPITAL FUND AND LIABILITIES			
Corpus / Capital Fund	1	200,517,116.19	180,558,601.63
Reserves and Surplus	2	0.00	0.00
Earmarked / Endowment Funds	3	0.00	0.00
Secured Loans and Borrowings	4	0.00	0.00
Unsecurred Loans and Borrowings	5	0.00	0.00
Deferred Credit Liabilites	6	0.00	0.00
Current Liabilites and Provisions	7	43,607,481.99	49,256,504.99
Total		244,124,598.18	229,815,106.62
Assets			
Fixed Assets (Net)	8	110,637,513.35	119,087,252.12
Investments-From Earmarked / Endowment Funds	9	0.00	0.00
Investments-Others	10	0.00	0.00
Current Assets, Loans, Advances etc.	11	133,487,084.83	110,727,854.50
Miscellaneous Expenditure (to the extent not written off or adjusted)			
Total		244,124,598.18	229,815,106.62
Significant Accounting Policies	39		
Contingent Liabilities and Notes on Accounts	40		

As per our report of even date Annexed herewith

For Chandiwala Virmani & Associates (Formerly Chandiwala Gupta & Associates) Chartered Accountants

Sd/- (Bharat Bhushan) Partner M. No: 087365	Sd/- Accounts Officer	Sd/- Registrar	Sd/- Scientist-in-charge
Date : 23.9.2010 Place : New Delhi			



### Technology Information Forecasting And Assessment Council, (TIFAC) Income & Expenditure Account for the Year Ended 31.03.2010

(Amount Rs.)

	1		
Income	Schedule / Annexure	Current Year	Previous Year
Income from Sales / Services	Schedule 12	0.00	0.00
Grants / Subsidies	Schedule 13	172,800,000.00	26,820,000.00
Fees / Subscriptions	Schedule 14	16,065.00	3,570.00
Income from Investments	Schedule 15	0.00	0.00
Income from Royalty, Publication etc	Schedule 16	413,308.00	125,951.00
Interest Earned	Scheduel 17	3,282,793.00	2,425,538.00
Other Income	Schedule 18	350,952.00	83,666.00
Increased/(Decrease) in stock of Finished Goods and Works-in-Progress	Schedule 19	0.00	0.00
Refund from Projects	Schedule 20	67,421,021.00	42,075,961.00
Total (A)		244,284,139.00	71,534,686.00
Expenditure			
Establishment Expenses	Schedule 21	40,546,407.00	40,183,458.40
Other Administrative Expenses etc	Schedule 22	22,021,208.91	46,339,904.83
Expenditure on Grant, Subsidies etc	Schedule 23	15,162,223.00	30,731,613.00
Interest	Schedule 24	0.00	0.00
Depreciation (Net Total at the Year end)	Schedule 8	12,824,522.77	14,055,453.71
Total (B)		90,554,361.68	131,310,429.94
Balance being excess of Income over Expenditure (A-B)		153,729,777.32	
Balance being excess of Expenditure over Income (A-B)		0.00	59,775,743.94
Transfer to Special Reserve (Specity each)			
Transfer to / from General Reserve			
Balance Being Surplus (Deficit) carried to			
Corpus/Capital Fund		153,729,777.32	59,775,743.94
Significant Accounting Policies & Notes on Accounts Contingent Liabilities			

As per our report of even date Annexed herewith

For Chandiwala Virmani & Associates (Formerly Chandiwala Gupta & Associates) Chartered Accountants

Sd/-Sd/-Sd/-(Bharat Bhushan)AccountsRegistrarScientist-in-chargePartnerOfficerM. No: 087365Date : 23.9.2010Place : New Delhi

### Technology Information Forecasting And Assessment Council, (TIFAC) Technology Vision 2020 Income & Expenditure for the year Ended 31.03.2010

			(Amount Rs.
Income	Schedule / Annexure	Current Year	Previous Year
Grants / Subsidies	Schedule 25	0.00	0.00
Interest Earned	Schedule 26	0.00	8,878,344.00
Refund from Projects	Schedule 27	13,093,753.24	17,254,109.58
Total (A)		13,093,753.24	26,132,453.58
Expenditure			
Establishment Expenditure / Administrative Expenditure	Schedule 28	13,144,601.00	10,296,608.00
Project Expenditure	Schedule 29	135,217,399.00	321,983,713.00
Total (B)		148,362,000.00	332,280,321.00
Balance being excess of Income over Expenditure (A-B)		0.00	0.00
Balance being excess of Expenditure over Income (A-B)		135,268,246.76	306,147,867.42
Balance being Deficit transferred to Corpus / Capital Fund		0.00	130,368,290.61
Balance being Deficit transferred to TIFAC Corpus / Capital Fund		135,268,246.76	175,779,576.81

As per our report of even date Annexed herewith

For Chandiwala Virmani & Associates (Formerly Chandiwala Gupta & Associates) Chartered Accountants

Sd/-(Bharat Bhushan) Partner M. No: 087365

Date : 23.9.2010 Place : New Delhi Sd/-Accounts Officer Sd/-Registrar Sd/-Scientist-in-charge



### Technology Information Forecasting And Assessment Council, (TIFAC) Patent Facilitating Centre Income & Expenditure for the year Ended 31.03.2010

(Amount Rs.)

Income	Schedule / Annexure	Current Year	Previous Year
Grants / Subsidies	Schedule 30	15,000,000.00	14,000,000.00
Interest Earned	Schedule 31	0.00	0.00
Other Income	Schedule 32	163,149.00	120,144.00
Refund from Projects			
Total (A)		15,163,149.00	14,120,144.00
Establishment Expenditure / Administrative Expenditure	Schedule 33	10,548,229.00	7,955,505.00
Project Expenditure	Schedule 34	3,916,309.00	12,528,812.00
Total (B)		14,464,538.00	20,484,317.00
Balance being excess of Income over Expenditure (A-B)		698,611.00	
Balance being excess of Expenditure over Income (A-B)		0.00	6,364,173.00
Balance being Surplus/Deficit transferred to Corpus / Capital Fund		698,611.00	6,364,173.00

As per our report of even date Annexed herewith

For Chandiwala Virmani & Associates (Formerly Chandiwala Gupta & Associates) Chartered Accountants

Sd/-(Bharat Bhushan) Partner M. No: 087365

Date : 23.9.2010 Place : New Delhi Sd/-Accounts Officer Sd/-Registrar Sd/-Scientist-in-charge

### Technology Information Forecasting And Assessment Council, (TIFAC) Scholarship for Women Scientists Income & Expenditure for the year Ended 31.03.2010

			(Amount Rs.)
Income	Schedule / Annexure	Current Year	Previous Year
Grants / Subsidies	Schedule 35	15,496,000.00	10,900,000.00
Interest Earned	Schedule 36	0.00	0.00
Other Income	Schedule 37	0.00	0.00
Refund from Projects			
Total (A)		15,496,000.00	10,900,000.00
Expenditure			
Expenditure	Schedule 38	14,685,955.00	13,742,015.00
Total (B)		14,685,955.00	13,742,015.00
Balance being excess of Income over Expenditure (A-B)		810,045.00	
Balance being excess of Expenditure over Income (A-B)			2,842,015.00
Balance being Surplus/Deficit transferred to Corpus / Capital Fund		810,045.00	2,842,015.00

As per our report of even date Annexed herewith

For Chandiwala Virmani & Associates (Formerly Chandiwala Gupta & Associates) Chartered Accountants

Sd/-(Bharat Bhushan) Partner M. No: 087365

Date : 23.9.2010 Place : New Delhi Sd/-Accounts Officer Sd/-Registrar Sd/-Scientist-in-charge



## Schedule 1 - Corpus / Capital Fund

	TIFAC	Vision 2020	Patent Facilitating Centre	Scholarship for Women Scientists	Current Year as on 31.03.2010	Previous Year as on 31.03.2009
Opening Balance	181,679,678.31	0.00	569,155.32	-1,690,232.00	180,558,601.63	474,265,176.53
Transferred from STM & Fly Ash	0.00	0.00	0.00	0.00	0.00	81,423,224.46
Excess of Income over Expenditure	153,729,777.32	0.00	698,611.00	810,045.00	155,238,433.32	0.00
Amount Transferred to TIFAC						
Capital Fund	0.00	0.00	0.00	0.00	0.00	8,582,002.00
Total	335,409,455.63	0.00	1,267,766.32	-880,187.00	335,797,034.95	564,270,402.99
Excess of Expenditure over Income	0.00	0.00	0.00	0.00	0.00	199,350,222.55
Previous Year Adjustments	11,672.00	0.00	0.00	0.00	11,672.00	
Amount Shown as Deficit in Car Capital fund opening balance is now transferred to TIFAC Capital Fund	0.00	0.00	0.00	0.00	0.00	8,582,002.00
Balance of Excess Expenditure incurred in Vision 2020 is transferred to TIFAC Capital Fund	135,268,246.76	0.00	0.00	0.00	135,268,246.76	175,779,576.81
Total	135,279,918.76	0.00	0.00	0.00	135,279,918.76	383,711,801.36
Closing Balance	200,129,536.87	0.00	1,267,766.32	-880,187.00	200,517,116.19	180,558,601.63

## **Schedule 2 - Reserve and Surplus**

		Current Year	Previous Year
1.	Capital Reserves :		
	As Per Last Account	0.00	0.00
	Addition during the year	0.00	0.00
	Less : Deductions during the year	0.00	0.00
2.	Revaluation Reserves :		
	As Per Last Account	0.00	0.00
	Addition during the year	0.00	0.00
	Less : Deductions during the year	0.00	0.00
3.	Special Reserve :		
	As Per Last Account	0.00	0.00
	Addition during the year	0.00	0.00
	Less : Deductions during the year	0.00	0.00
4.	General Reserve :		
	As Per Last Account	0.00	0.00
	Addition during the year	0.00	0.00
	Less : Deductions during the year	0.00	0.00
	Total	0.00	0.00



## **Schedule 3 - Reserve and Surplus**

(Amount Rs.)

	Current Year	Previous Year
a) Opeing Balance of the Funds	0.00	0.00
<ul><li><b>b)</b> Additions to the funds</li><li>i) Donations / Grants</li></ul>	0.00	0.00
ii) Income from Investments made on account of Funds	0.00	0.00
iii) Other Additions (Specify)	0.00	0.00
Total (a+b)	0.00	0.00
c) Utilization / Expenditure towards objectives of funds		
i) Capital Expenditure	0.00	0.00
Fixed Assets	0.00	0.00
Other Additions (Specify)	0.00	0.00
ii) Revenue Expenditure		
Salary, Wages and allowance etc	0.00	0.00
Rent	0.00	0.00
Other Administrative Expenditure	0.00	0.00
Total c)	0.00	0.00
Net Balance as at the year end (a+b+c)	0.00	0.00

Note : 1 Disclosures shall be made under relevant heads based on conditions attached to the Grants

Note : 2) Plan Funds received from Central / State Governments are to be shown as separate Funds and not to be mixed up with any other funds

## **Schedule 4** - Secured Loans and Borrowings

(Amount Rs.)

	Current Year	Previous Year
1. Central Government	0.00	0.00
2. State Government (Specify)	0.00	0.00
3. Financial Institutions		
a) Term Loans	0.00	0.00
b) Interest accrued and dues	0.00	0.00
4. Banks :		
a) Term Loans	0.00	0.00
Interest accrued and due	0.00	0.00
b) Other Loans (Specify)	0.00	0.00
Interest accrued and due	0.00	0.00
5. Other Institutions and Agencies	0.00	0.00
6. Debentures and Bonds	0.00	0.00
7. Others (Specify)	0.00	0.00
Total	0.00	0.00

Note : Amounts due within one year



## **Schedule 5 - Secured Loans and Borrowings**

(Amount Rs.)

	Current Year	Previous Year
1. Central Government	0.00	0.00
2. State Government (Specify)	0.00	0.00
3. Financial Institutions		
4. Banks :		
a) Term Loans	0.00	0.00
b) Other Loans (Specify)	0.00	0.00
5. Other Institutions and Agencies	0.00	0.00
6. Debentures and Bonds	0.00	0.00
7. Fixed Deposites		
8. Others (Specify)	0.00	0.00
Total	0.00	0.00

Note : Amounts due within one year

## Schedule 6 - Reserve and Surplus

(Amount Rs.)

	Current Year	Previous Year
a) Acceptances secured by Hypothecation of Capital Equipment and other assets	0.00	0.00
b) Others	0.00	0.00
Total	0.00	0.00

Note : Amounts due within one year

## **Schedule 7 - Current Liabilities And Provisions**

(Amount Rs.)

IFA

		Current Year	Previous Year
A) Cu	rrent Liabilities	0.00	0.00
1.	Acceptances	0.00	0.0
2.	Sundry Creditors		
	For Goods	0.00	0.0
	Others	0.00	0.0
3.	Advances Received		
	Development of Project for High Purity Magnesia	0.00	0.0
4.	Interest accrued but not due on :	0.00	0.0
	Secured Loans / Borrowings	0.00	0.0
	UnSecured Loans / Borrowings	0.00	0.0
5.	Statutory Liabilities	0.00	0.0
	Over Due	0.00	0.0
	Others	0.00	0.0
6.	Other Current Liabilities		
	Salary Payable (Prof. Ganapathy)	1,800.00	1,800.0
7.	Security Deposit		
	Stale Cheque	1,681,285.06	766,955.0
	Expenses Payable (As per Annexure - 9)	4,103,187.00	3,904,421.0
	Project ICOSER (As per Annexure -10)	19,107,292.00	19,107,292.0
	Indian Myanmar S&T Friendship library in yangon (Annex-11)	959,659.00	959,659.0
	Indian Copper Market Focus in Recyclable (Annex -12)	0.00	0.0
	FAM Large Scale Stowing of HWP Pond Ash into the Underground Mines of SCCL (M) Manugure (Annex-14)	8,294,830.00	8,294,830.0
	MSEB-Ash Utilization / Management (Annex-13) Earth Quake Serving Nature's Fury (Annex-15)	600,094.00 165,157.00	3,578,194.0 142,557.0
		20,000.00	20,000.0
	Earnest Money : M/s Nimbus Harbour Pvt Ltd Fly Ash Sponsorship for National Seminar-cum-Business meet	285,268.00	285,268.0
	DRDO-PFC (Annex-16)	0.00	
		100,000.00	17,291.0 100,000.0
	Earnest Money: Sakthi Gugars Ltd Earnest Money : Pratappur Sugar Industry Ltd	100,000.00	100,000.0
	Earnest Money : Pratappur Sugar Industry Ltd Earnest Money : RBN Sugar Mills		
	Earnest Money : KBN Sugar Mills Earnest Money : L.H.Sugar	100,000.00	
	Larnest money . L.A.Sugar	100,000.00	100,000.0
		35,618,572.06	37,478,267.



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	Current Year	Previous Year
Earnest Money : Riga Sugar	100,000.00	100,000.00
Earnest Money : Jind Coop-Sugar	100,000.00	100,000.00
Earnest Money : Vishnu Sugar	100,000.00	100,000.00
Earnest Money : DSM Sugar	100,000.00	100,000.00
Earnest Money : Valsad Sugar	100,000.00	100,000.00
Earnest Money : Budhewal Co	100,000.00	100,000.00
Earnest Money : Palwal Sugar Ltd	100,000.00	100,000.00
Earnest Money : Godawari Sugar Mill	100,000.00	100,000.00
Earnest Money : Padamashri Dr.Vithalrao Vikho Patil SSK Ltd	100,000.00	100,000.00
Earnest Money : Mawana Sugar	100,000.00	100,000.00
Earnest Money:EID Parry, Pugalur	100,000.00	100,000.00
Earnest Money : Vishwas Rau Naik SSK Ltd	100,000.00	100,000.00
Earnest Money : M/s Terna SSK Ltd	100,000.00	100,000.00
Earnest Money : Shakumbani Sugar Ltd	100,000.00	100,000.00
Earnest Money : Shri Talabu Taluka SKM	100,000.00	100,000.00
Earnest Money : Bileshwar Khurd Udyog Khedut Sahakari Mandal Ltd	100,000.00	100,000.00
Earnest Money : Sanjavani SSK Ltd	100,000.00	100,000.00
Earnest Money : Rahuri S.S.K Ltd	100,000.00	100,000.00
Earnest Money : Ashok SSK Ltd	100,000.00	100,000.00
Earnest Money : Simbhaoli Sugar	300,000.00	300,000.00
Earnes Money : Jagadamba SSK	100,000.00	100,000.00
Earnest Money : Rana Sugar Ltd	100,000.00	100,000.00
Earnest Money : Dharani Sugar & Chemical Ltd	100,000.00	100,000.00
Earnest Money : Triveni Engg. Industries Ltd	200,000.00	200,000.00
Earnest Money : Uttam Sugar Ltd	100,000.00	100,000.00
Earnest Money : Chamundeswari Sugar Mill	200,000.00	200,000.00
Earnest Money : Mansurpur Sugar	100,000.00	100,000.00
Earnest Money : Bharat Sugar Ltd	100,000.00	100,000.00
Earnest Money : M/s Sansanwal Travels	10,000.00	0.00
Earnest Money : M/s Yatrika Travels	10,000.00	0.00
	3,220,000.00	3,200,000.00



(Amount	Rs.)
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	Current Year	Previous Yea
Earnest Money : M/s Omni Teck Systems	10,000.00	0.0
Earnest Money : M/s Bhagwati International	30,000.00	0.0
GSLIS	133.00	133.
MPSEB use of Fly Ash in Agriculture Development Thermal Power Plants, Sarni (Annex-17)	356,825.00	1,023,250.
BASIC (Buildig and Strenthening Institutional Capacity for Climate Change (Annex-18)	0.00	0.
INDO-ISRAELI Workshop (Annex-19)	0.00	0.
DST-BMBF (Germany) (Annex-20)	0.00	0.
Medical Scheme	284,822.00	214,737.
Security Deposit : Bhagwati International	18,451.00	0.
International Congress Seminal Expenses	2,725,412.00	5,783,613.
IIASA TIFAC Joint Study	3,519.00	3,519.
Implementation Programme :Fiji Sugar Industries	0.00	293.
Sundry Creditor : M/s Subramaniam, Natraj and Associates	0.00	212,945.
TIFAC-World Bank Project (Annex-21)	1,339,747.93	1,339,747.
Total (A)	4,768,909.93	8,578,237.
Total (a+b)	43,607,481.99	49,256,504.
B. Provision	0.00	0.
For Taxation	0.00	0.
Gratuity	0.00	0.
Superannuation / Pension	0.00	0.
Accumulated Leave Encashment	0.00	0.
Trade Warranties / Claims	0.00	0.
Others (Specify)	0.00	0.
Total (B)	0.00	0.
	43,607,481.99	49,256,504.



GROSS BLOCK

DEPRECIATION

## **Schedule 8-Fixed Assets**

3.

4.

5.

6.

7.

8.

Cost of Assets on hire purchase basis included above

Additions Transfer at during the the end of Total upto the year end Cost / valuation On during Deductions Cost / As at the 0 n As at the As at the Deductions during the year year end during the valuation beginning of the year current previous year the year from Fly Ash & STM As at beginning of the year at the the year during year end year end the year A. FIXED ASSETS 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 1. a) Freehold 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 b) Leasehold 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 2. BUILDING 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 a) On Freehold Land 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 b) On Leasehold Land 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 c) Ownership Flats/Premises 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 d) Superstructures on Land not belonging to the entity 117850000.00 0.00 0.00 0.00 117850000.00 48260753 50 6958924 65 0.00 55219678.15 62630321 8569589246 50 e) Interior work of TIFAC Building 48691182.00 2481708.00 51172890.00 4817220.10 4560424.44 9377644.54 41795245.4643873961.90 0.00 0.00 0.00 PLANT MACHINERY & EQUIPMENT : Fire Alarm System at TIFAC Building 0.00 1004583.00 0.00 0.00 1004583.00 0.00 113128.80 0.00 113128.80 891454.20 0.00 VEHICLES 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 FURNITURE & FIXTURES 1657397.60 155072.00 1812469.60 1184806.11 57177.95 0.00 1241984.06 **570485.54** 472591.49 OFFICE EQUIPMENT 20947121.77 581478.00 0.00 0.00 21528599.77 16261693.36 779736.14 0.00 17041429.50 4487170.27 4685428.41 COMPUTER/PERIPHERALS 4875666.28 140976.00 5016642.28 4438753.96 315609.79 0.00 4754363.75 262278.53 436912.32 0.00 0.00 ELECTRIC INSTALLATIONS 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 9. LIBRARY BOOKS 5443726.55 10967.00 0.00 0.00 5454693.55 5414615.05 39521.00 0.00 5454136.05 557.50 29111.50 10. TUBEWELL & W.SUPPLY 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 11. OTHER FIXED ASSETS 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 0.00 TOTAL OF CURRENT YEAR 199465094.20 4374784.00 0.00 203839878.20 0.00 93202364.85 0.00 80377842.08 12824522.77 110637513.35 119087252.12 PREVIOUS YEAR 149272517.21 49902261.00 364765.99 74450.00 199465094.20 66322388.37 14055453.71 0.00 80377842.08 119087252.12 82950128.84 B. CAPITAL WORK IN PROGRESS

Amount - Rs)

NET BLOCK

**Schedule 9 - Investments from Earmarked/Endowment Funds** 

(Amount Rs.)

	Current Year	Previous Year
1. In Government Securities	0.00	0.00
2. Other approved Securities	0.00	0.00
3. Shares	0.00	0.00
4. Debentures and Bonds	0.00	0.00
5. Subsidiaries and Joint Ventures	0.00	0.00
6. Others (to be Specified)	0.00	0.00
Total	0.00	0.00

## **Schedule 10 - Investments - Others**

	Current Year	Previous Year
1. In Government Securities	0.00	0.00
2. Other approved Securities	0.00	0.00
3. Shares	0.00	0.00
4. Debentures and Bonds	0.00	0.00
5. Subsidiaries and Joint Ventures	0.00	0.00
6. Others (to be Specified)	0.00	0.00
Total	0.00	0.00



### Schedule 11 - Current Assets, Loans, Advances Etc

	Curre	ent Year	Pre	vious Year
A) Current Assets				
1. Inventories:				
Stores and Spares		0.00		0.0
Loose Tools		0.00		0.0
Stock-in-Trade		0.00		0.0
Finished Goods		0.00		0.0
Work-in-Progress		0.00		0.0
2. Sundry Debtors :				
Sundry Debtor - DST	2,636,440.00		2,639,680.00	
Sundry Debtors - MTNL	5,357.00		5,357.00	
Sundry Debtors - Honorarium	0.00		0.00	
Sundry Debtors - STM	0.00	2,641,797.00	0.00	2,645,037.0
3. Cash Balances in Hand (including Cheques / Drafts and Imprest)		3,524.00		8,587.0
4. Bank Balances :				
With Scheduled Banks : (Union Bank of India)				
On Current Accounts	0.00		0.00	
On Deposite Accounts (Short Term Deposites) (Annex-7)	30,267,745.00		51,442,454.00	
On Savings Accounts	86,705,099.28		36,074,546.95	
Short Term Deposite (Suspence Account)	1,398,597.00		0.00	
UBI, SDA, New Delhi	0.00		0.00	
On Interest Receivable	0.00	118,371,441.28	0.00	87,517,000.9
With non-Scheduled Banks :				
On Current Accounts	0.00		0.00	
On Deposite Accounts	0.00		0.00	
On Savings Accounts	0.00	0.00	0.00	0.0



		Currei	nt Year	Pre	vious Year
5.	Post Office - Savings Accounts		0.00		0.00
	Loans, Advancees and Other Assets :- 1) Loans				
	Sta ( ( A		9 470 794 00		1 000 5 40 00
	Staff (Annex-1)		2,479,734.00		1,962,542.00
	Advance and other amounts recoverable in cash or in kind or for value to be received.				
	On capital Account				
	Advane for Projects materials				
	IIM Bangalore	0.00		0.00	
	SAIL NMPP	19,736.55	19,736.55	19,736.55	19,736.55
	Prepayments				
	Others		0.00		0.00
	Advance : Franking Machine	9,422.00		5,251.00	
	Security Deposit Lease Accommodation (Sh.G.Srinivas)	9,500.00		9,500.00	
	Security Deposit MTNL	67,500.00	86,422.00	67,500.00	82,251.00
	Advance to BISR (Haldwani)	76,173.00		76,173.00	
	Construction of Reception Office (DST)	3,259,953.00		3,259,953.00	
	Security Deposite : S.R.Enterprises	2,700.00		2,700.00	
	Secruity Deposite Tata Teleservices Ltd	16,000.00		16,000.00	
	Security Deposite : M/s Mannu Lal & Sons		3,354,826.00		3,354,826.00
In	come Accrude :-				
	On Invesments from Earmarked / Endowment Funds	0.00		0.00	
	One Investment - Other	0.00		0.00	
	On Loans and Advances	0.00		0.00	
	Others (includes income due unrealized Rs)	0.00		0.00	
	Claims Receivable				
	Advance : Ashok Hotel	0.00		200,000.00	
	CPF	732.00		732.00	
	Advance : Iridium Interactive Ltd	0.00		178,900.00	



	Curre	nt Year	Pre	vious Year
Advance : DAVP	0.00		219,797.00	
Sundry Debtor : DBT	15,620.00		0.00	
Advance : Director, IIPS, Mumbai	500,000.00		0.00	
Sundry Debtor : Central Institure of Road Transportation	10,936.00		10,936.00	
Advance : TIFAC CORE in Wireless Technology	0.00		13,000,000.00	
Advance : Agro And Industiral Bio Technology, TIET, Patiala	0.00		717,434.00	
Advance : Dr.Sharma's Nursing Home	0.00		73,800.00	
Advance : Hotel Janpath	599.00		599.00	
Advance : IIT Kharagpur	0.00		250,000.00	
Advance : SINE-TEPP Fund	0.00	527,887.00	22,700.00	14,674,898.00
DROD- PFC (Annex-16)	323,411.00		0.00	
Asia India Workshop	66,974.00		66,974.00	
Security Deposite :Rent Ms. Ititka Singal	40,000.00		40,000.00	
Security Deposite : Mrs. Prem Lata Vyas	105,000.00		105,000.00	
Sundry Debtor : Anand Patwardhan	0.00		29,427.00	
Sundry Debtor : Geo Spatial Applications	208,450.00		208,450.00	
Advance : M/s Daikin Airconditioning India Pvt Ltd	200,382.00		0.00	
Advance : IIT-Delhi	57,500.00		0.00	
Income Tax for the F.Y 2004-2005	5,000,000.00		0.00	
TDS(on Consultancy)	0.00	6,001,717.00	13,125.00	462,976.00
Total	1	33,487,084.83	1	110,727,854.50

### Schedule 12 - Income From Sales / Services

(Amount Rs.)

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	Current Year	Previous Year
1. Income from Sales		
a) Sale of finished Goods	0.00	0.00
b) Sale of Row Material	0.00	0.00
c) Sale of Scraps	0.00	0.00
2. Income from Services		
a) Labour and Processing Charges	0.00	0.00
b) Professional / Consultancy Services	0.00	0.00
c) Agency Commissions and Brokerages	0.00	0.00
d) Maintenance Services (Equipment/Property)	0.00	0.00
e) Others (Specify)	0.00	0.00
Total	0.00	0.00

## Scheudel 13 - Grants / Subsidies (TIFAC Regular)

	Current Year	Previous Year
1. From Central Government		
A) TIFAC Grant		
a) Grants in Aid (Plan)	172,000,000.00	26100000.00
b) Grant in Aid (Non-Plan)	800,000.00	720000.00
2. State Governmetn(s)	0.00	0.00
3. Governmetn Agencies	0.00	0.00
4. Institutions Organisatins	0.00	0.00
5. International Organisations	0.00	0.00
6. Other (Specify)	0.00	0.00
Total	172,800,000.00	26820000.00



## Schedule 14 - Fees / Subscriptions

(Amount Rs.)

	Current Year	Previous Year
1. Entrance Fees	0.00	0.00
2. Annual Fees / Subscriptions	0.00	0.00
3. Seminar / Program Fees	0.00	0.00
4. Consultancy Fee	0.00	0.00
5. Others (Specify)	0.00	0.00
Tender Forms for Disposal of Old Items		
Tender for Car Hiring Accounts	0.00	3,000.00
RTIA Questions	565.00	70.00
Tender for Fire Alarm	6,000.00	0.00
Tender for Stationary	0.00	500.00
Tender for Housekeeping at TIFAC	9,500.00	0.00
Total	16,065.00	3,570.00

## Schedule 15 - Income From Investments (Income on Invest. From Earmarked/Endowment Funds transferred to Funds) (Amount Rs.)

	Particulars	Investmen Earmarked		Investmen Earmarked	
		Current	Year	Previous	Year
1.	Interest				
	a) On Govt. Securities	0.00	0.00	0.00	0.00
	b) Other Bonds/Debentures	0.00	0.00	0.00	0.00
2.	Dividends				
	a) On shares	0.00	0.00	0.00	0.00
	b) On Mutual Fund Securities	0.00	0.00	0.00	0.00
3.	Rents				
4.	Others (Specify)	0.00	0.00	0.00	0.00
	Total	0.00	0.00	0.00	0.00

Schedule 16 - Income from Reyolty, Publication Etc.	(Amount Rs.)
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	Current Year	Previous Year
1. Income from Publications	413308.00	125951.00
Total	413308.00	125951.00

## **Schedule 17 - Interest Earned (Regular)**

**Current Year Previous Year** 1. On Term Deposits With Scheduled Banks 835,825.00 1,286,184.00 With Non-Scheduled Banks 0.00 0.00 With Institutions 0.00 0.00 Others 2. On Savings Accounts With Scheduled Banks 2,379,442.00 856,394.00 With Non-Scheduled Banks 0.00 0.00 With Institutions 0.00 0.00 1,582.00 0.00 **Others (Project Interest)** 3. On Loans : Employees / Staff (LTA, Scooter & Car) 36,045.00 117,332.00 Others H.B.A : Sh.N.S.Nair 0.00 120,628.00 H.B.A : Dr.D.N. Singh 29.899.00 45.000.00 4. Interest on Debtors and Other Receivables 3,282,793.00 2,425,538.00 Total Note : Tax deducted at source to be indicated

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### **Schedule 18** - Other Income

(Amount Rs.)

	Current Year	Previous Year
1. Profit on sale / disposal of Assets		
Owned assets	0.00	0.00
Assets acquired out of grants, or received free of cost	0.00	0.00
Export Incentives realized	0.00	0.00
Fees for Miscellaneous Services	0.00	0.00
Miscellaneous Income		
Other Receipts (Computers)	7,500.00	10,200.00
Other Receipts	272,618.00	61,650.00
Leave Salary & Pension Contribution	0.00	11,816.00
Gratuity	70,834.00	0.00
Total	350,952.00	83,666.00

## Schedule 19 - Increase / (Decrease) in stock of Finished Goods & Work in Progress

		Current Year	Previous Year
a)	Closing Stock		
	Finished Goods	0.00	0.00
	Work-in-Progress	0.00	0.00
b)	Less : Opening Stock		
	Finished Goods	0.00	0.00
	Work-in-Progress	0.00	0.00
То	tal	0.00	0.00

Schedule 20 - Refund from Projects, (TIFAC Regu	(Amount Rs	
	Current Year	Previous Year
Home Grown Technology (Annex-5)	17,478,500.00	19,477,000.00
Advanced Composites Programme (Annex-5)	20,537,600.00	12,270,080.00
Sugar Technology Mission (Annex-5)	29,100,000.00	9,700,000.00
TePP Project (Annex-5)	254,921.00	628,881.00
Fly Ash Utilisation Programme (Annex-5)	50,000.00	0.00
Total	67,421,021.00	42,075,961.00

## **Schedule 21 - Establishment Expenses (TIFAC Regular)**

(Amount Rs.)

		Current Year	<b>Previous Year</b>
a)	Salaries	27,892,260.00	23,924,250.00
	Salary - Consolidated	3,378,305.00	1,335,930.00
	Salary (6th Pay Commission)	6,214,926.00	6,106,794.00
	Salary -Agency	0.00	149,775.00
b)	TIFAC Contribution to Provident Fund	0.00	2,373,179.00
<b>c</b> )	Others (Specify)		
	Consultancy Charges	50,578.00	98,755.40
	Honorarium	121,700.00	204,480.00
	Medical Expenses	1,632,021.00	3,163,335.00
	Leave Travel Concession	497,763.00	316,404.00
	Gratuity	0.00	1,566,366.00
	Leave Encashment	146,407.00	749,821.00
	Children Education Allowance	360,005.00	191,369.00
	Honorarium (Incentive Scheme for Hindi Language)	0.00	3,000.00
	Leave Salary and Pension Contribution	252,442.00	0.00
	Total	40,546,407.00	40,183,458.40

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## Schedule 22 - Administrative Expenses Etc

	Current Year	Previous Year
Repair and Maintenance	479,126.00	1,526,503.00
Rent, Rates and Taxes	690,972.00	609,930.00
Car hire Charges	1,755,166.00	1,947,053.00
Postage, Telephone and Communication Charges	2,596,194.00	2,304,655.00
Printing, Stationary & Printing of Publications	1,197,641.00	1,188,418.00
Travelling and Conveyance Expenses	196,581.00	164,872.00
Subscription Expenses	305,364.00	349,286.00
Expenses on Fees (Tution fee)	42,000.00	9,480.00
Auditors Remuneration	35,596.00	71,449.00
Advertisement and Publicity	144,599.00	168,334.00
Others (Specify)		
Bank Charges	33,334.91	5,874.15
Misc. Office Expenses	1,457,539.00	1,095,292.00
Membership Fee	35,646.00	22,106.00
Maintenance of Vishwakarma Bhavan	9,003,033.00	4,179,479.00
Leagal Charges	114,025.00	670,110.00
WAITRO Membership	23,518.00	43,500.00
Rajabhasha Committee Meeting	2,700.00	0.00
Travel Abroad	1,099,157.00	756,994.68
Data Subscription	0.00	0.00
IIASA TIFAC Joint Workshop (TIFAC)	1,124,931.00	1,495,491.00
India-IIASA Membership Fee	0.00	28,300,185.00
Interest (Civil & Interior)	0.00	615,000.00
TIFAC Software Development	1,162,850.00	0.00
Housekeeping of TIFAC Building	521,236.00	815,893.00
Total	22,021,208.91	46,339,904.83

### Schedule 23 - Expenditure on Grants, Subsidies Etc.

(Amount Rs.)

	Current Year	Previous Year
Grants given to Institutions/Organisations		
Project Expenditure (Annex - 4)	15162223.00	30731613.00
Total	15162223.00	30731613.00

## **Schedule 24** - Interest

Current YearPrevious YearOn Fixed Loans (Including Bank Charges)0.00On Other Loans (Including Bank Charges)0.00c) Others (Specify)0.00Total000.00



# Technology Information Forecasting And Assessment Council, (TIFAC) Technology Vision 2020

## Schedules Forming Part of Income & Expenditure for the year ended 31.03.2010

## Schedule 25 - Grants / Subsidies (Vision 2020) (Irrevocable Grants & Subsidies Received)

(Amount Rs.)

	Current Year	Previous Year
From Central Government		
Technology Vision 2020 Grants		
Grants in Aid (Plan)	0.00	0.00
Grant in Aid (Non-Plan)	0.00	0.00
State Governmetn(s)	0.00	0.00
Governmetn Agencies	0.00	0.00
Institutions Organisatins	0.00	0.00
International Organisations	0.00	0.00
Other (Specify)	0.00	0.00
Total	0.00	0.00

## **Schedule 26 - Interest Earned (Vision 2020)**

	Current Year	Previous Year
On Term Deposits		
With Scheduled Banks (Annex-2)	0.00	8,875,017.00
With Non-Scheduled Banks	0.00	0.00
With Institutions	0.00	0.00
Others	0.00	3,327.00
Total	0.00	8,878,344.00
Note : Tax Deducted at Source to be indicated		

## Technology Information Forecasting And Assessment Council, (TIFAC) Technology Vision 2020 Schedules Forming Part of Income & Expenditure for the year ended 31.03.2010

## Schedule 27

(Amount Rs.)

	Current Year	Previous Year
Refund from Project (Technology Vision 2020) (Annex-8)	13,093,753.24	17,254,109.58
Total	13,093,753.24	17,254,109.58

## Schedule 28

(Amount Rs.)

	Current Year	Previous Year
Establishment & Administrative Expenditure (Annex-6)	13,144,601.00	10,296,608.00
Total	13,144,601.00	10,296,608.00

## Schedule 29

	Current Year	Previous Year
Project Expenditure (Annex-6A)	135,217,399.00	321,983,713.00
Total	135,217,399.00	321,983,713.00



## Technology Information Forecasting And Assessment Council, (TIFAC) Patent Facilitating Centre

## Schedules Forming Part of Income & Expenditure for the year ended 31.03.2010

# Schedule 30 - Grants / Subsidies (Patent Facilitating Centre) (Irrevocable Grants & Subsidies Received)

(Amount Rs.)

	Current Year	Previous Year
From Central Government		
Patent Facilitating Centre Grants		
Grants in Aid (Plan)	15,000,000.00	14,000,000.00
Grant in Aid (Non-Plan)	0.00	0.00
State Governmetn(s)	0.00	0.00
Governmetn Agencies	0.00	0.00
Institutions Organisatins	0.00	0.00
International Organisations	0.00	0.00
Other (Specify)	0.00	0.00
Total	15,000,000.00	14,000,000.00

## **Schedule 31 - Interest Earned (Patent Facilitating Centre)**

	Current Year	Previous Year
On Term Deposits		
With Scheduled Banks	0.00	0.00
With Non-Scheduled Banks	0.00	0.00
With Institutions	0.00	0.00
Others (Interest : Scooter Adv)	0.00	0.00
Total	0.00	0.00
Note : Tax Deducted at Source to be indicated		

# Technology Information Forecasting And Assessment Council, (TIFAC) Patent Facilitating Centre

# Schedules Forming Part of Income & Expenditure for the year ended 31.03.2010

## Schedule 32

(Amount Rs.)

	Current Year	Previous Year
Other Income (Annex-3)	163149.00	120144.00
Total	163149.00	120144.00

## Schedule 33

(Amount Rs.)

	Current Year	Previous Year
Establishment & Administrative Expenditure (Annex-3A)	10548229.00	7955505.00
Total	10548229.00	7955505.00

## Schedule 34

	Current Year	Previous Year
Project Expenditure (Annex-3B)	3916309.00	12528812.00
Total	3916309.00	12528812.00



## Technology Information Forecasting And Assessment Council, (TIFAC) Scholarship For Women Scientists

## Schedules Forming Part of Income & Expenditure for the year ended 31.03.2010

# Schedule 35 - Grants / Subsidies (Scholarship for Women Scientists) (Irrevocable Grants & Subsidies Received)

		(initiation in the initiation in the initiatin the initiation in the initiation in the initiation in t
	Current Year	Previous Year
From Central Government		
Scholarship for Women Scientists Grants		
Grants in Aid (Plan)	15,496,000.00	10,900,000.00
Grant in Aid (Non-Plan)	0.00	0.00
State Governmetn(s)	0.00	0.00
Governmetn Agencies	0.00	0.00
Institutions Organisatins	0.00	0.00
International Organisations	0.00	0.00
Other (Specify)	0.00	0.00
Total	15,496,000.00	10,900,000.00

## **Schedule 36 - Interest Earned (Scholarship for Women Scientists**

(Amount Rs.)

	Current Year	Previous Year
On Term Deposits	0.00	0.00
With Scheduled Banks	0.00	0.00
With Non-Scheduled Banks	0.00	0.00
With Institutions	0.00	0.00
Others	0.00	0.00
Total	0.00	0.00
Note : Tax Deducted at Source to be indicated		

# Technology Information Forecasting And Assessment Council, (TIFAC) Scholarship For Women Scientists

## Schedules Forming Part of Income & Expenditure for the year ended 31.03.2010

## Schedule 37

(Amount Rs.)

	Current Year	Previous Year
Other Income	0.00	0.00
Total	0.00	0.00

## Schedule 38

	Current Year	Previous Year
Expenditure (Stipend to Women Scientist including Exam Expenses)	14,685,955.00	13742015.00
Total	14,685,955.00	13742015.00



## Technology Information, Forecasting & Assessment Council Schedules Forming Part of Accounts for the period ended 31.03.2010

### Schedule - 39

### ACCOUNTING POLICIES AND NOTES TO THE ACCOUNTS FOR THE YEAR ENDING 31<sup>st</sup> MARCH, 2010

### A) ACCOUNTING POLICIES

- 1 The Council has adopted Mercantile System of the Accounting.
- 2 Fixed Assets are shown at cost Less Depreciation.
- **3** Prior period and extra ordinary items and changes in accounting policies having material impact on the financial affairs of the Council are disclosed.
- **4** Depreciation has been calculated as per Income Tax Act, 1961. deviation are as per note B(1) below.
- 5 Amounts released under various projects are accounted as expenditure for the year in which the same are released, irrespective of the fact that the amounts so released may not have been fully utilised towards the projects during the accounting year.
- 6 Unspent amount of grant received during the year for specific purposes has transferred to Capital Account.
- 7 The repayment of grant / assistance to TIFAC by the beneficiaries, as per condition stated in agreements with them shall be accounted on receipt basis.
- 8 All disbursements for projects are treated as expenditure during the Financial Year and assets created, if any, out of the said disbursements to the project, are not accounted for as assets in the books.
- **9** Contingent liabilities in respect of on-going Projects / Studies etc. are neither provided nor determined.
- **10** Total expenditure is not bifurcated in plan and non plan expenditures in financial statements.

### **B) NOTES TO THE ACCOUNTS**

- 1. TIFAC has been recognized as a Scientific and Industrial Research Organization by Department of Scientific and Industrial Research (DSIR) upto 31.03.2012. TIFAC has been declared "SCIENTIFIC INSTITUTION by the prescribed authority under Rule-6 of the Income Tax Rules for the purpose of Clause (ii) of Sub-section (I) of Section 35 of the Income Tax Act, 1961 vide Notification No.951 (F.No. DG/IT(E)/ND-116/35(i)(ii)/93-IT(E) dated 30<sup>th</sup> November 1993 upto 31.03.2006. The TIFAC has been granted registration u/s 12A of Income Tax Act, 1961 w.e.f. 01-04-2005 and approval u/s 10(23C) of Income Tax Act has also been granted w.e.f. A/Y 2009-2010.
- 2 Stock of Publications and Studies, which are published and printed by the Council and distributed at a cost are not accounted for as Stock in hand at the end of the year.
- **3** Audited financial statements / utilization statements duly certified by Chartered Accountants in respect of grant utilized / released during the year has not yet been received in some cases from the implementing agencies.



- **5** Previous year figures have been regrouped wherever necessary, to make them comparable with current year figures.
- **6** Accounts have been prepared as per New format provided by CAG for Non-profit organization. Previous year's figures have also been re-arranged as per new format. The format for Income & Expenditure A/cs has been changed in order to reflect all types of grants received by TIFAC in the account. The previous year's figures have been regrouped accordingly in the Income & Expenditure Account.
- 7 Liability towards gratuity payable on death / retirement of employees is not provided for.
- 8 Provision for accumulated leave encashment benefit to employees is not provided for.
- **9** Expenses for Purchase of Capital Goods debited to grants utilized and not shown as fixed assets in the final statements are as below.

Capital Expenditure of Vision 2020	Current Year (Rs.)	Previous Year (Rs.)
Computer/Periperials	0.00	31,980.00
Office Equipment	0.00	45,624.00

**10** Expenses for Purchase of Capital Goods debited to grants utilized and not shown as fixed assets in the final statements are as below.

Capital Expenditure of Patent Facilitating Centre.	Current Year (Rs.)	Previous Year (Rs.)
Computer/Periperials	1,08,588.00	0.00
Office Equipment	0.00	0.00

**11** Financial Statements of National Mission for Bamboo Application and Mission for GEO Spatial Application form part for TIFAC but the same has not been consolidated with the financial statements of TIFAC.

As per our report of even date Annexed herewith

For Chandiwala Virmani & Associates (Formerly Chandiwala Gupta & Associates) Chartered Accountants

Sd/-(Bharat Bhushan) Partner M. No: 087365

Date : 23.9.2010 Place : New Delhi Sd/-Accounts Officer Sd/-Registrar Sd/-Scientist-in-charge



## Technology Information, Forecasting & Assessment Council Schedules Forming Part of Accounts for the period ended 31.03.2010

### SCHEDULE 40 - CONTINGENT LIABILITIES AND NOTES ON ACCOUNTS (Illustrative)

### 1. CONTINGENT LIABILITIES

- 1.1 Claims against the Entity not acknowledged as debts Rs. \_\_\_NIL\_\_\_\_ (Previous year Rs. \_\_\_\_NIL\_\_\_\_)
- 1.2 In respect of
  - Bank guarantees given by/on behalf of the Entity Rs. \_\_\_NIL\_\_\_ (Previous year Rs. \_\_\_NIL\_\_\_)
  - Letters of Credit opened by Bank on behalf of the Entity Rs. \_\_\_\_NIL\_\_\_ (Previous year Rs. \_\_\_\_NIL\_\_)
  - Bills discounted with banks Rs. \_\_\_\_NIL\_\_\_ (Previous year Rs. \_\_\_\_NIL\_\_\_ )

Disputed demands in respect of :

Income-tax Rs. \_\_\_\_NIL\_\_\_ (Previous year Rs. \_\_\_\_NIL\_\_\_ )

Sales-tax Rs. \_\_\_\_NIL\_\_\_ (Previous year Rs. \_\_\_\_NIL\_\_\_\_)

Municipal Taxes Rs. \_\_\_NIL\_\_\_\_ (Previous year Rs. \_\_\_NIL\_\_\_\_)

In respect of claims from parties for non-execution of orders, but contested y the Entity - Rs. \_\_NIL\_

(Previous year Rs. \_\_\_NIL\_\_)

### 2. CAPITAL COMMITMENTS

Estimated value of contracts remaining to be executed on capital account and not provided for (net of advances) Rs. \_\_\_\_NIL\_\_\_ (Previous year Rs. \_\_\_\_NIL\_\_\_ )

### 3. LEASE OBLIGATIONS

Future obligations for rentals under finance lease arrangements for plant and machinery amount to Rs. \_NIL (Previous year Rs. NIL)

### 4. CURRENT ASSETS, LOANS AND ADVANCES

In the opinion of the Management, the current assets, loans and advances have a value on realization in the ordinary course of business, equal at least to the aggregate amount shown in the Balance Sheet.

### 5. TAXATION

In view of there being no taxable income under Income-tax Act 1961, no provision for Income Tax has been considered necessary.

## Technology Information, Forecasting & Assessment Council Schedules Forming Part of Accounts for the period ended 31.03.2010

## SCHEDULE 40 - CONTINGENT LIABILITIES AND NOTES ON ACCOUNTS (Illustrative) - Contd.

#### 6. FOREIGN CURRENCY TRANSACTIONS

			<b>Current Year</b>	<b>Previous Year</b>
6.1.	Val	ue of Imports Calculated on C.I.F. Basis:		
	-	Purchase of finished Goods	N.A.	N.A.
	-	Raw Materials & Components (Including in transit)	N.A.	N.A.
	-	Capital Goods	N.A.	N.A.
	-	Stores, Spares and Consumables	N.A.	N.A.
6.2.	Exp	enditure in foreign currency:		
	a)	Travel	N.A.	N.A.
	b)	Remittances and Interest payment to Financial Institutions/ Banks in Foreign Currency	N.A.	N.A.
	c)	Other expenditure:		
		- Commission on Sale	N.A.	N.A.
		- Legal and Professional Expenses	N.A.	N.A.
		- Miscellaneous Expenses	N.A.	N.A.
6.3.	Ear	nings:		
	Valu	ue of Exports on FO basis	N.A.	N.A.
6.4.	Ren	nuneration to auditors:		
	As	Auditors	19413.00	19775.00
	- T	axation matters	0.00	0.00
	- Fe	or Management services	0.00	0.00
	- F	or certificate	0.00	0.00

Others

7. Corresponding figures for the previous year have been regrouped/rearranged, wherever necessary.

8. Schedules 1 to 40 are annexed to and form an integral part of the Balance Sheet as at 31.03.2010 and the Income and Expenditure Account for the year ended on that date.



### Annexure - 1

# **Staff Advances**

A) Advances	Current Year	Previous Year
Staff Advances		
Sh.Ravi Dutt	1500.00	8000.00
Sh. Bipin Kumar	9500.00	0.00
Sh. Uma Shankar Mahto	8000.00	0.00
Sh.Surender Kumar	0.00	2500.00
Sh.Sushil Kumar Jha	0.00	500.00
Sh.Rajan Sharma	0.00	9000.00
Ms.Uma Daral	9000.00	0.00
Sh.Aneesh S	7000.00	2000.00
Ms.Poonam Nagpal	0.00	2500.00
Sh. Bishram Bhakta	8000.00	0.00
Sh.Ujjwal Kumar	1500.00	7500.00
Sh.Sanjay Sundriyal	500.00	6500.00
Sh.Mahipal Singh Rawat	1000.00	7000.00
Sh.Vipain Chandra Shukla	0.00	5500.00
Sh.Deep Prakash	8500.00	5500.00
Sh.Samson George	0.00	5000.00
Ms.Sreedevi N.	0.00	1500.00
Sh.Pankaj Sundriyal	10000.00	8000.00
Ms.Asha Kumari	0.00	5000.00
Ms.Kunwar Singh	9000.00	9000.00
Sh.Ravinder Kumar Sundriyal	3000.00	0.00
Sh.Sh.Suresh Babu	0.00	4000.00
B) HBA Advance		
Sh.A.K.Ahuja	430000.00	550000.00
Ms. Sangeeta Baksi	295800.00	0.00
Sh.P.R.Basak	501000.00	573000.00
	1303300.00	1212000.00



	Current Year	Previous Year
C) Car Advance		
Sh.M. Thamaraiselvan	172500.00	0.00
Sh.Suresh Kumar K	84600.00	106200.00
Dr.Gautam Goswami	102000.00	120000.00
Sh.Deep Prakash	125000.00	0.00
Dr.S.K.Goel	133200.00	176400.00
Sh.T.Chandrasekhar	169200.00	180000.00
Ms.Sangeeta Baksi	160000.00	0.00
D) Leave Travel Concessation		
Sh.N.S.Nair	31878.00	0.00
Sh.P.R.Basak	19314.00	0.00
Mrs. Geeta Nair	15200.00	0.00
Dr. D.N.Singh	0.00	19000.00
E) Tour Advance		
Sh.Sajid Mubashir	81042.00	81042.00
Ms.Sangeeta Baksi	0.00	32400.00
Sh.Sanjay Singh	6000.00	0.00
Deepak Kumar	5000.00	0.00
F) Scooter Advance		
Sh.Shambhu Kumar	25500.00	0.00
Sh.Samson George	500.00	6500.00
Sh.Aneesh S	28500.00	0.00
Sh.Sanjay Sundriyal	17000.00	29000.00
	1176434.00	750542.00
Total (A+B)	2479734.00	1962542.00



### Annexure - 2

# **Interest Earned (Technology Vision 2020)**

	Current Year	Previous Year
1. On Term Deposits		
Vision 2020	0.00	8875017.00
Total	0.00	8875017.00

### Annexure - 3

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# **Patent Facilitating Centre**

(Amount Rs.)

	Current Year	Previous Year
Other Income		
Other Receipts	71950.00	0.00
Patent Search Charges	3000.00	644.00
CD ROM Ekaswa A & B	88199.00	119500.00
Total	163149.00	120144.00

### Annexure - 3A

## **Patent Facilitating Centre**

	Current Year	Previous Year
Establishment & Administrative Expenditure		
Salary	2991808.00	2109359.00
Salary Consolidated	932243.00	29677.00
Salary (6th Pay Commission)	501185.00	0.00
Medical Reimbursment	62363.00	67409.00
Advertisement Expenses	194215.00	37725.00
Honorarium	7500.00	2900.00
Children Education Allowance	98153.00	18618.00
Leave Travel Consession	119414.00	4281.00
Tution Fee	0.00	480.00
Printing Charges	28875.00	96610.00
Miscellaneous Office Expenses	348983.00	143112.00
Conveyance	8463.00	5953.00
Computer/Peripherals	108588.00	0.00
Telephone & Telex	66395.00	94016.00
Leave Encashment	26822.00	0.00
Postage & Courier	0.00	45180.00
Filing of Patent	4893758.00	4851184.00
Ekaswa A&B CD ROM	8570.00	48490.00
TIFAC Contributory Provident Fund	0.00	163566.00
Car Hire Charges, Annual Subscription, Periodicals & Magazines Stationery,		
Meeting Expenses, Traveling Expenses, Membership Etc	146794.00	10507.00
Repair & Maintenance	4100.00	7396.00
Patent Search Charges	0.00	219042.00
Total	10548229.00	7955505.00



### Annexure - 3B

# **Patent Facilitating Centre**

	Current Year	Previous Year
Project Expenditure		
Patent Information Centre TSCST	618000.00	0.00
Patent Information Centre Kolkata	0.00	1177000.00
Patent Information Centre G.B	0.00	718952.00
Patent Information Centre Tripura	0.00	877000.00
Patent Information Centre (ASTEC)	0.00	762500.00
Patent Information Centre MP Council S & T	0.00	762000.00
Patent Infromation Centre (PSCST)	117000.00	1197500.00
Patent Infromation Centre (KSCST)	332000.00	691532.00
Patent Infromation Centre (Shimla)	701047.00	70000.00
Patent Infromation Centre (Raipur)	0.00	743592.00
Patent Infromation Centre (Jaipur)	0.00	256000.00
Patent Infromation Centre (Lucknow)	0.00	835000.00
Patent Infromation Centre (HSCST)	725365.00	80940.00
Patent Infromation Centre (Imphal)	80000.00	300000.00
Patent Infromation Centre (Thiruvandram)	315000.00	671814.00
Patent Infromation Centre (Gandhinagar)	100500.00	1142224.00
Intellectual Property Facilitation	0.00	500000.00
Project related Expenditure (including patent workshop expenses)	927397.00	1742758.00
Total	3916309.00	12528812.00

#### Annexure-4

IFAC

# **PROJECT EXPENSES (TIFAC Regular Account)**

PARTICULARS	Current Year	Previous Year
Follow-Up Action/Special Initiatives		
Pesticide Encyclopedia	1367500.00	2620500.00
Optimum Utilization for Large Scale Turmeric Cultivation as a commercial Crop in Mizoram State	0.00	150000.00
Impact of FDI in R&D on Indian Production and R&S System	0.00	1025000.00
Study on Indian Chemical Industry Technology Imperatives & Business Opportunities covering Knowledge	463260.00	0.00
Centre for Global or Local for Global?an examination of FDI in R&D Centre	0.00	197100.00
TIFAC-IIASA Study on Indian Perspectives on Global Engergy Scenarios till 2050	400000.00	0.00
Demonstration of Four Arun 160 Solar Thermal Concentrators of 165 M2 Each Supplying Steam for drying of Sod	2937500.00	0.00
Determinants and Impact of FDI in R&D in creation & Diffusion of Knowledge in Automobile Industry	500000.00	0.00
Sub Schedule Total	5668260.00	3992600.00
HOME GROWN TECHNOLOGIES		
Project related expenses	0.00	54769.00
Sub Schedule Total	0.00	54769.00
TePP PROJECTS		
Project related expenses	21150.00	89769.00
Desingn & Development of Rubber Type Tube Protection Device	44164.00	0.00
Design and Development of Indigenous Drug on Diabetes - II	70000.00	0.00
Safely Valve in Stove	0.00	10000.00
Powdered Biomass Fired Burner	120000.00	30000.00
Desingning a Low Cost Yoghurt Making Equipment	0.00	91024.00
TePP Outreach Centre (TUC) (CGCRI)	0.00	452756.00
Sketching Device for use bya visually challenged Person	165000.00	0.00
In Vivo Dielectric Measuring Instrument for Detection of Cancer	175000.00	0.00
Wound Healing in Animals	100000.00	0.00
Retention of Placenta in Animals with SRISTI	100000.00	0.00
Treatement of Pests in Cotton	100000.00	0.00
Treatment of Bloat & Flatulence in Animal	100000.00	0.00
Treatement of Blood Pressure, Arthritis and Heart Problems	100000.00	0.00
	1095314.00	673549.00



# Annual Report- वार्षिक रिपोर्ट 2009 - 2010

(Amount Rs.) PARTICULARS **Current Year Previous Year** Treatement of Diarrhoea in Animals 100000.00 0.00 Trolly with Jack for Disabled Persons 80000.00 0.00 196604.00 0.00 Human Powered Mobile Charger Synthesis of Laser Grade Rhodamine-6G Dye (99.9% Pure, Absorption Mazimum 530 NM & the Lasing Max 0.00 198000.00 Single Degree of Freedom Rated Table 220000.00 0.00 326311.00 Novel Internal Combustion Engine 0.00 **Development of Pulse Thresher** 25575.00 0.00 Autonomous Mini UAV for Aerial Survellance 0.00 220000.00 136400.00 Development of Process Technology for Production of Photographic Film 0.00 Indian Innovation Summit 2007 0.00 100000.00 Improved Grining Machine for Paste & Powder making in wet & Dry Condition of Soft Material 0.00 110000.00 0.00 24960.00 Training-cum-Orientation for TePP outreach Centre **Development of Thermal Conductivity Measuring Apparatus** 0.00 49500.00 **Development of Commercial Prototype of Plant Oil Stove** 48357.00 0.00 New Process of Palleting Poultry Feed in Mini Plant 0.00 317500.00 Whole stail Paddy Thresher 0.00 77000.00 Resq-eye (Viction Location system) 0.00 165000.00 0.00 **Development of Pulse Thresher** 25575.00 **Complete Fluorescent Lamp** 0.00 48800.00 0.00 Reconfigurable Autonomous Air Vehicle 550000.00 Bearing Mounting and Demounting device for four wheeler Vehicle 0.00 41250.00 Development of Low Cost wide field digital camera for fundus Photography 0.00 99150.00 Design Refinement of Js Milker Manual Milking Machine 0.00 100000.00 **Sub Schedule Total** 2092161.00 2936684.00 **Advanced Composite Programme** High Speed Planing Type Composite Boats 0.00 2820000.00 **Development of Multi-Purpose Modular Housing System** 0.00 640000.00 Development of Filament Wound Venture Scrubber along with the Accessories 0.00 2150000.00 **Development of Filament Wound Composite Road Tanker** 0.00 2080000.00 2560000.00 Development of Filament Wound pipes and pipe-fittings for oil & Gas Sector 0.00 6670000.00 Bamboo Composite Laminates And Accessories 0.00 Sub schedule Total 0.00 16920000.00



## Technology Information, Forecasting & Assessment Council प्रौद्योगिकी सूचना, पूर्वानुमान एवं मूल्यांकन परिषद्

PARTICULARS	Current Year	Previous Year
Technology Refinment Marketing Programme (TREMAP)		
TREMAP Expenditure	62734.00	26745.00
TREMAP TCFA at VIT-TBI, Vellore	400000.00	0.00
TREMAP TCFA at APTDC, Hyderabad	400000.00	0.00
TREMAP TCFA at MSRSAS, Bangalore	400000.00	0.00
TREMAP TCFA at FITT, IIT Delhi	400000.00	0.00
TREMAP at IT-BHU, Varanasi	400000.00	0.00
TREMAP at TCFA at IIT-Kharagpur	400000.00	0.00
Novel Fluorescent Reagent for Detecting Fingerprints	56000.00	0.00
Side view mirror adjustment and protection system	80000.00	0.00
Sub schedule Total	2598734.00	26745.00
Sugar Technology Unit		
Preparation of Project Report (STM)	440628.00	0.00
Sub Scheduled Total	440628.00	0.00
Project Related Expenditure	4362440.00	6800815.00
Sub schedule Total	4362440.00	6800815.00
Total	15162223.00	30731613.00



# **REFUND FROM PROJECTS (TIFAC REGULAR ACCOUNT)**

(Amount F		(Amount Rs.)
PARTICULARS	Current Year	Previous Year
(A) Home Grown Technology :		
Establishment of Detonation Spray Coating Job Shop for coating of various components.	400000.00	0.00
Manufacture of Bio-Adhesive ISO AMYL 2 Cyano Acrylate	0.00	600000.00
Development & Production of Indigenously Developed Flammable Gas Sensors & Other Monitoring Instruments	0.00	800000.00
Manufacture of Wiper Intermittent Module	0.00	183000.00
A Noval method for the Preparation of Low molecular weight heparin	1010000.00	670000.00
Technology Development & Commercilization of Haemoconentrators for open Heart Srugical Applications	450000.00	450000.00
Cortico Steroid Project Beclamethas one Deproprionate	2100000.00	6000000.00
Commercially Attractive Hydrogen Generator Based on reforming of Natural Gas/mathanol in small and Medium capacity range.	0.00	440000.00
Setting up of Semi-commercial Demonstration Facility for Manufacture of Organic Chemicals by high temperature vapour phase catalylic reaction	0.00	860000.00
Development of Wett Type Synthetic Friction Material for 2/3 Wheeler Chutch Application	600000.00	0.00
Pilot Plant for Production of Omega 3 Fish oil	1100000.00	2200000.00
Eco-Friendly Lac Dye From Shellac Waste Water Effluent	500000.00	200000.00
Componentization of Human Blood towards optimization of Its utilization & Exploitation Bio Medic	0.00	4000000.00
Isolation and Characterazation of Probiotics & Formulation of Symbiotic Preparation	2000000.00	2000000.00
Establishing A D-Gum Job Shop	162500.00	0.00
Clinical Decision Support System	2160000.00	720000.00
Manufacture of Nutan Himveer Bukhari	796000.00	354000.00
Commercialisation of Pelletisation Technology for Biomass & Combustible Waste	250000.00	0.00
Compeonentization of Human Blood & Its Derivatives for Biomadical Applications	2100000.00	0.00
Manufacture of Red Mud/Fly Ash Polymer Door Shutters	100000.00	0.00
Pilot Scale Manufacture of Bio-Reactors	600000.00	0.00
Estraction of Flacouring compounds from Hops using Lequid CO2 under High Pressure	3125000.00	0.00
Manufactur eof Unsaturated Polyster Resin	25000.00	0.00
SubTotal (A)	17478500.00	19477000.00



		(Amount Rs
PARTICULARS	Current Year	Previous Year
(b) Advanced Composites Programme		
Composite Interiors for Drivers Cabin in Diesel Locomotive	859280.00	1318560.00
Development of Composite Modular Acoustic Enclosure	1100000.00	600000.00
Development of Composite House Boats	1728000.00	0.00
High Speed Planing Type Composite Boats	1804800.00	0.00
Development of Composite Artificial Limbs	0.00	30000.00
Development of Composite Filament Wound Pressure Vessel	1500000.00	2300000.00
Development of GRP Grid and Gratings by Compression Moulding	612000.00	612000.00
Development of Composite House Boats	0.00	1728000.00
Development of Composite Components for High End Passenger Buses	1361520.00	1361520.00
Development of Filament wound composite Road Tanker	1248000.00	2496000.00
Composites Interiors for Railways Passenger Coaches	4672000.00	1824000.00
Development of Filament Wound Pipes & Pipe Fitting for oil & Gas Sector	3072000.00	0.00
Development of Filament Wound Venturi Scrubber along with the Accessories	2580000.00	0.00
Sub Total (b)	20537600.00	12270080.00
(C) Sugar Technology Mission		
Ethyl Lactate Project	8300000.00	8300000.00
Automotion of Condensing & Cooling System at our Sakthi Nagar Unit	8400000.00	0.00
Ethandl from Secondary Juice	11000000.00	0.00
Distillary Effluent Treatement System	1400000.00	1400000.00
Sub Total (C)	29100000.00	9700000.00
(D) Tepp Project		
Personal Electric Transporter	0.00	437447.00
Membrane for ultra Sound and Colour Doppler Probes	0.00	832.00
Outreach Centre (TUC)	167447.00	190602.00
Temper Proff Seal for Disposable Bottels & Jars	75000.00	0.00
Sketching Device for use by a visually challenged Person	12474.00	0.00
Sub Total (D)	254921.00	628881.00
(F) Fly Ash Utilization Programme		
Bulk Production of Fly Ash Bricks	50000.00	0.00
Sub Total (F)	50000.00	0.00
Total	67421021.00	42075961.00



## **EXPENDITURE OF VISION 2020**

PARTICULARS	Current Year	Previous Year
Establihment & Administrative Expenditure		
Misc Office Expenses	79575.00	70003.00
Periodical & Magazine Charges	16409.00	15635.00
Printing of Publications	124300.00	0.00
Printing Charges	0.00	12591.00
Telephone / Internet Charges	123479.00	154990.00
Car Hire Charges/ Conveyance	304518.00	146216.00
Medical Reimbursement	842389.00	315566.00
Salary	7451883.00	5363309.00
Computer / Periferials	0.00	31980.00
Leave Travel Concession	70865.00	154094.00
Honorarium	408400.00	242000.00
Adverisement Expenses	0.00	353508.00
Workshop Expenses/Exhibition	1768420.00	2459545.00
Employee's Contribution CPF	0.00	301111.00
Tution Fee	0.00	480.00
Children Education Allowance	93580.00	40540.00
Encashment of Leave	0.00	80531.00
Gratuity	0.00	257773.00
Travel Abroad	289669.00	21309.00
Leave Encashment	13936.00	5707.00
Legal Charges	43250.00	209700.00
TIFAC Membership	0.00	1500.00
Office Equipment	0.00	45624.00
Stationery	3578.00	12896.00
Salary (6th Pay Commission)	1510350.00	0.00
Total	13144601.00	10296608.00



## **PROJECT EXPENDITURE OF VISION 2020**

(Amount Rs.) PARTICULARS **Current Year Previous Year Agriculture Sector** Study on Current Status of Potato production in parts of West Bangal & Suitability of Potatoes growing in parts of West Bangal for processing into different products 0.00 28280.00 Agriculture Project in Deoria Project 372830.00 12499.00 Agriculture Project in Uttaranchal, Chamoli 0.00 Promotion of Medicinal and Aromatic Plants in Paliganj Area, Patna 340892.00 58000.00 122000.00 Agriculture Project - Sikkim 0.00 Demonstration of Agriculture Diversification through Aromatic Plant Cultivatio at Deoria 346590.00 449184.00 Agricultural Deversification for Enhancing Productivity of Acidic upland of Eastern India 708470.00 0.00 Enhancing Water Productivity in Deep Water Rice Area 426407.00 1833000.00 Demonstration of system Approach in selected low Productivity Regions of Deoria. District 82206.00 362000.00 Strengthening Levelihoods of Small and Marginal Farmers in Organic Farming of Lower Palni Hills 610744.00 48000.00 Support t Training, Employment and Income Generation Programme for Farmer and Rural Women Processing & Value Addition of Agriculture Produce 370160.00 401995.00 Primary Processing & Packaging of Certified Organic Vegitables in Shimla District 0.00 388000.00 Agriculture, Quality Mode Production in Rice wheat Cropping System Through Farmers, BHU, Varanasi 752788.00 515000.00 On Farm Demonstration, Popularization, Commerciatization & Processing of Mentha Cultivation in Barabanki District of U.P 663176.00 750000.00 Enhancment of Farm Income of Farmers of Eastern Uttar Pradesh from Added Scented Rice (Kalanamak) 303746.00 790000.00 Improved seed Production and Multiplication at Paliganj, Patna 1134864.00 185000.00 On Farm Demonstration, Commercial Cultivation of Trichoderma as bio 1253000.00 295000.00 pesticide & growth Promoter Agriuclture Development Project at Pinder Valley 413197.00 0.00 Transfer of IPM Technology Package to Farmers fields through Training & Demonstration against insect pests, Wild Fungus & Root Knot Nematocle **Diseases Infecting tomato** 208773.00 344600.00 Value Additon of Low Value Marine Pelagic Fishes 855000.00 0.00 6995755.00 Sub Total 8429646.00



# Annual Report- वार्षिक रिपोर्ट 2009 - 2010

PARTICULARS	Current Year	Previous Year
Health Care Equipment		
Uttaranchal Project : Mobile Hospital and Research Centre in Uttaranchal.	0.00	5758961.00
Standardization & international commercialization of Bacopa Monnieri extract for its cognition enhancing activity	5750000.00	0.00
Sub Total	5750000.00	5758961.00
Targeted Programme in Other Important Area		
Technology Gap Study and Possible Remedial Measures for the select Sports Goods	38159.00	955000.00
Technology Gap Analysis Study for food Processing Industry Cluster	145026.00	0.00
Functional Test for Evaluating the performance of cricket bat	37500.00	0.00
Technology Gap Study for Agriculture Implements Industry Cluster (Karnal)	0.00	78375.00
Technology Gap Study for Agriculture Implements Industry Cluster (Ambala)	0.00	345000.00
Digital Pen & Paper Technology for Capturing the Information at the Police Station	0.00	545800.00
Installation of Ropeways at Uttaranchal	0.00	0.00
Temper proof & Secure Courtroom Digital Recording & Video Conferencing System	2557000.00	2310000.00
Normative DATA for Brain Electrical Activation Profiling	0.00	80000.00
Pottery Study	274179.00	0.00
Development of Tailor welded Blanks and Hydro Formed Parts	0.00	2300000.00
Development of the competence to Develop Automobile Components using Electro Magnetic Forming (EMF)	492000.00	0.00
Quality Assurance condition monitoring and Fault Diagnosis using Intelligent Control Methodologies	2105000.00	0.00
Technology Gap Analysis study for casting sector for Howrah Cluster	0.00	860200.00
Development & Optimization of Process for Alkali stable cellulare from alkalothermipihic Thermomonon	0.00	313500.00
Enzymatic Conversion of Racemic Molecules to obtain stereo specific active Pharmaceutical Ingredients	0.00	8750000.00
Interactive Virtual reality Simulator Software for crime scene training and proficiency testing	2405000.00	0.00
Selection of a panel of SNP markets for forensic analysis in Indian Population	2800000.00	0.00
Software standard for small car	2500000.00	0.00
Development of Enzymatic Process for producing Slevioside from Stevia Leaves & Lycopena from Tometoo	8000000.00	8000000.00
Bio Transfermation of Meso-Cycoopent-1, 4 Diacetate to 4-R-Hydro oxycyelopent Ene-1 (S)	5300000.00	2400000.00



# Technology Information, Forecasting & Assessment Council प्रौद्योगिकी सूचना, पूर्वानुमान एवं मूल्यांकन परिषद्

PARTICULARS	Current Year	Previous Year
Process Development in semisolid Forming & Squeeze Casting of Aluminium		
Alloy Components for Automobile	350000.00	19030000.00
Shared Transport Services :An attempt to reduce carbon foot prints	0.00	300000.00
Ultracapacitor for electric and Hybred Electric Vehicles	0.00	19306000.00
	27003864.00	65573875.00
Use of Straight Vegitable oils in IC Engines	0.00	33084000.00
Development of Pharmaceutical grade Chitosan & value added formulation	0.00	2100000.00
Technology Gap Study for Scientific instruments Industry Cluster (Ambala)	0.00	105600.00
Centre for Biofuels	1000000.00	15210000.00
Vehicle Tracking System and control system at Koyembedu Bus Ternmial, Chennai	4263000.00	4000000.00
E-Court Room Digital Recording & Retrieval System (E-DRRS)	0.00	5800000.00
E-Court Room Document Cum Evidence Management System (DEMS)	0.00	3900000.00
R&D Centre for Baruipur Surgical Instruments Industry Cluster	0.00	3652000.00
R&D Centre for Howrah Foundry Cluster	0.00	8982375.00
Low Cost Flexible Automation (LCFA) using Robotic Arm	14086000.00	0.00
Study on Biomass Derived Bioproducts Assessment of Technology Trends, Gaps & opportunities for India	856000.00	0.00
Establishing a Pulp Processing cum aseptic pulp packaging plant at food park, Malda	30000.00	0.00
Technology Gap Analysis Study for Handmade Paper Industry Cluster (Jaipur)	494040.00	0.00
Panal on IC Engine & Drivetration Study on NOZ control Technology	40000.00	0.00
Workshop on advance technologies for Baruipar surgical instruments cluster for meeting market requirements.	115616.00	0.00
Process Development for Production of L-arginine by Fermentation	900000.00	0.00
Sub Total	57788520.00	142407850.00
Upgradation of Engineering College		
TIFAC-CORE in Digital Image Processing	0.00	3886000.00
TIFAC-CORE in Advance Computing & Information Processing	0.00	3976239.00
TIFAC-CORE Automative Electronics	0.00	4000000.00
Designing Developing & Maintaining Mission REACH Website and Enabling Web Based Services	1941691.00	1150603.00
TIFAC-CORE in Diabetic Retinotathy	0.00	18600000.00
TIFAC-CORE in Wireless Technologies	1300000.00	15070324.00
TIFAC-CORE in Product Design and Optimization & Collaboration Product	1000000000	100,000,100
Commerce	0.00	5362500.00
TIFAC-CORE in Environmental Geomatics	0.00	4000000.00
	14941691.00	56045666.00



# Annual Report- वार्षिक रिपोर्ट 2009 - 2010

PARTICULARS **Current Year Previous Year TIFAC-CORE** in Interentional Radiology 3700000.00 0.00 **TIFAC-CORE** in Aircraft Maintenance 9300000.00 0.00 **TIFAC-CORE** in E-Outreach 1645000.00 0.00 **TIFAC-CORE** in the area of Pervasive Computing Technologies 500000.00 0.00 4446000.00 0.00 M.S University, Vadodara Debrugarh University Core TIFAC 0.00 700000.00 5991200.00 **TIFAC-CORE** in Industrial Biotechnology 717434.00 **TIFAC-CORE** in the area of Pharmacogenomics 4730000.00 100000.00 0.00 784000.00 **Training Programme TIFAC-Core in Green Pharmacy** 0.00 6500000.00 TIFAC-Core in the area of Industrial Safety 0.00 8750000.00 TIFAC-Core in the area of Food Processing Technology & Quality Control 0.00 9660000.00 TIFAC-Core in the area of Technical Textile 0.00 7500000.00 TIFAC-CORE in the area of E learning for Setting up the E-Learning **Content System** 0.00 1040000.00 460000.00 TIFAC-CORE in the area of Textile Technology & Machinery 2400000.00 **TIFAC-CORE** in the area of Power Transfermation Diagnostics 0.00 1060000.00 **TIFAC-CORE** in the area of Machine Vision 4250000.00 0.00 **TIFAC-CORE** in the area of Telematics 15600000.00 0.00 **Sub Total** 57985125.00 131275866.00 **Road Construction and Transportation** Intelligent and Interactive Telematics using Emerging Wireless Technologies for Transportation Systems 0.00 2500000.00 Car low cost Flexible Automation 0.00 26950000.00 **Sub Total** 0.00 29450000.00 **Textile Machinery** To Assess S&T Gaps in Textile and Assessment of Education institutional **Capacity Building** 274000.00 600000.00 **Sub Total** 274000.00 600000.00 **Project Related Expenditure** 4990108.00 5495281.00 Sub TotaL 4990108.00 5495281.00 TOTAL 321983713.00 135217399.00

# SHORT TERM DEPOSITS WITH BANKS

PARTICULARS	Current Year	Previous Year
Short Term Deposits		
TIFAC	30267745.00	5000000.00
Fly Ash Utilisation Programme	0.00	22970.00
Sugar Technology Mission	0.00	43857.00
Vision 2020	0.00	1375627.00
Total	30267745.00	51442454.00



## **REFUND FROM PROJECT TECHNOLOGY VISION 2020**

PARTICULARS	Current Year	Previous Year
Development of Rapier Shuttleless Loom (Weaving Machine) 4 Colour	378000.00	0.00
Processing & Export of Loin & Steak of Yellow Fin Tuna	1206192.24	0.00
Weft Accumulator	0.00	139583.00
Weft Set (Automatic Fabric straightening System) with data logging facilities	0.00	315018.00
Percentage Add on Per meter indicator and automatic controller.	0.00	40800.00
Cotton Contamination analyzer	0.00	88800.00
Technology Upgradation in manufacture of automatic cone winder	0.00	6266325.00
Design, Development and Manufacture of Continuous Bleaching Range	51280.00	2563994.58
Self Propelled Articulated Crane Madel F-15	0.00	1036200.00
Multi Purpose Loader Model M-1000	0.00	899400.00
Non Destructive Testing of zari in silk Fabrics	240000.00	0.00
Degin and Development of Shettlessweaving machines & ancillaries	856684.00	776667.00
Manufacture of Micro Encapsulated Omega 3 Powder	1939000.00	1939000.00
Dye Exhaust Rate Controller	0.00	140000.00
Primary Processing & Packageing of Certificed Vegitable in Shimla District	215250.00	0.00
Technology Gap Study for Karnal Agricultare Implements Industry Cluster	0.00	83854.00
Development & Demonstration of A Technology Package on Low Grade Raw Material & Biomass (Pottery)	2323952.00	0.00
Design & Development of Pilling Tester using Tigital image Processing Technology	276587.00	30000.00
A6.6 MW Power Plant & Generated Electrical From Processe Municipal Solid Waste	300000.00	600000.00
Estableshment of integrated clean milk production network at village leval for manuf.value add product	2088000.00	1044000.00
Development of Pharmaceutical Grade Chitosan & Value Added	2100000.00	0.00
Technology Gap Study for Ambala Scientific Instruments Industry Cluster	0.00	68129.00
Quality Assurance Condition Monitoring & Fault Diagnosis Using Intellignet Control Methodologies	1118808.00	0.00
Engin Management System for 4 Stroke Direct injection small petrol engine	0.00	1222339.00
Total	13093753.24	17254109.58



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# **EXPENSES PAYABLE**

(Amount Rs.)

PARTICULARS	Current Year	Previous Year
Salary Payable	3747013.00	3285325.00
M/s. Sansanwal Travels	107288.00	100974.00
M/s. MTNL	69461.00	69212.00
M/s Prime Sysem Technologies	0.00	12650.00
M/s Bhagwati International	40376.00	0.00
M/s Chandiwala Gupta & Associates	19413.00	19775.00
M/S Nimbus hARbor Facilities Management Pvt Ltd	0.00	53226.00
M/s ACE Travels Pvt Ltd	0.00	109747.00
M/s Uniexpress Pvt Ltd	0.00	235167.00
M/s Yash Tour & Travels	26379.00	18345.00
M/s Water Point	30371.00	0.00
M/s Omni Traders	19755.00	0.00
M/s JMD Tourist Transport Co.	28333.00	0.00
M/s Yatrika Travesl	14798.00	0.00
Total	4103187.00	3904421.00

#### Annexure -10

## **PROJECT ICOSER**

PARTICULARS	Current Year	Previous Year
A) Balance Brought Forward	19107292.00	10663154.00
B) Income	0.00	8444138.00
Sub total	0.00	8444138.00
Refund from Project	0.00	0.00
Sub total	0.00	0.00
Total A+B	19107292.00	19107292.00
C) Expenditure:		
i) Capital Expenditure: Fixed Assets	0.00	0.00
ii) Revenue Expenditure	0.00	0.00
Total (i+ii) 'C'	0.00	0.00
Balance carried forward to next year (A+B-C)	19107292.00	19107292.00



## **GRANT INDIAN-MYANMAR S&T FRIENDSHIP LIBRARY IN YANGON**

(Amount Rs.)

PARTICULARS	Current Year	Previous Year
A) Balance Brought Forward	959659.00	959659.00
B) Income	0.00	0.00
Sub total	0.00	0.00
Total A+B	959659.00	959659.00
C) Expenditure :		
i) Capital Expenditure : Fixed Assets	0.00	0.00
ii) Revenue Expenditure :		
Project Expenses	0.00	0.00
Total (I+ii) 'C'	0.00	0.00
Balance carried forward to next year (A+B-C)	959659.00	959659.00

#### Annexure -12

## **INDIAN COPPER MARKET FOCUS ON RECYCLABLES**

		(Amount Rs.)
PARTICULARS	Current Year	Previous Year
A) Balance Brought Forward	0.00	225916.00
B) Income :		
Interest Earned	0.00	0.00
Other Income	0.00	0.00
Sub total	0.00	0.00
Total A+B	0.00	225916.00
C) Expenditure :		
i) Capital Expenditure : Fixed Assets		0.00
ii) Revenue Expenditure :		0.00
iii) Project Expenditure	0.00	0.00
Total (i+ii+iii) 'C'	0.00	225916.00
Balance carried forward to next year (A+B-C)	0.00	0.00

FAC

# **MSEB - ASH Utilization / Management**

		(Amount Rs.)
PARTICULARS	Current Year	Previous Year
A) Balance Brought Forward	3578194.00	3578194.00
B) Income :		
Grant in Aid	0.00	0.00
Interest Earned	0.00	0.00
Other Income	0.00	0.00
Sub total	0.00	0.00
Total A+B	3578194.00	3578194.00
C) Expenditure :		
i) Capital Expenditure : Fixed Assets	0.00	0.00
ii) Revenue Expenditure :	0.00	0.00
iii) Project Expenditure	0.00	0.00
MSEB Fly Ash in Agriculture	2978100.00	0.00
MSEB Fly Ash In Brick Manufacture	0.00	0.00
Total (i+ii+iii) 'C'	2978100.00	0.00
Balance carried forward to next year (A+B-C)	600094.00	3578194.00

Annexure -14

## FAM Large Scale Stowing of HWP Pond Ash into the underground Mines of SCCL(Manuguru)

		(Amount Rs.)
PARTICULARS	Current Year	Previous Year
A) Balance Brought Forward	8294830.00	8294830.00
B) Income :		
Grant in Aid	0.00	0.00
Interest Earned	0.00	0.00
Other Income	0.00	0.00
Sub total	0.00	0.00
Total A+B	8294830.00	8294830.00
C) Expenditure :		
i) Capital Expenditure : Fixed Assets	0.00	0.00
ii) Revenue Expenditure :	0.00	0.00
iii) Project Expenditure	0.00	0.00
Total (i+ii+iii) 'C'	0.00	0.00
Balance carried forward to next year (A+B-C)	8294830.00	8294830.00



# Earthquake Serving Nature's Fury

(Amount Rs.)

PARTICULARS	Current Year	Previous Year
A) Balance Brought Forward	142557.00	142557.00
B) Income :		
Grant in Aid	72600.00	0.00
Interest Earned	0.00	0.00
Other Income	0.00	0.00
Sub total	72600.00	0.00
Total A+B	215157.00	142557.00
C) Expenditure :		
i) Capital Expenditure : Fixed Assets	0.00	0.00
ii) Revenue Expenditure :	0.00	0.00
iii) Project Expenditure :	50000.00	0.00
Production of Film on Earth Quake	0.00	0.00
Total (i+ii+iii) 'C'	50000.00	0.00
Balance carried forward to next year (A+B-C)	165157.00	142557.00

#### Annexure - 16

### **DRDO - PFC**

PARTICULARS	Current Year	Previous Year
A) Balance Brought Forward	17291.00	-490.00
B) Income :		
Grant in Aid	13634052.00	12335352.00
Interest Earned		0.00
Other Income		
Sub total	13634052.00	12335352.00
Total A+B	13651343.00	12334862.00
C) Expenditure :		
i) Capital Expenditure : Fixed Assets		0.00
ii) Revenue Expenditure :		0.00
iii) Project Expenditure :	13974754.00	12317571.00
Total (i+ii+iii) 'C'	13974754.00	12317571.00
Balance carried forward to next year (A+B-C)	-323411.00	17291.00

FA

## MPSEB – Use of Fly Ash in Agriculture Development Thermal Power Plant, Sarni

(Amount Rs.)

PARTICULARS	Current Year	Previous Year
A) Balance Brought Forward	1023250.00	1023250.00
B) Income :		
Grant in Aid		
Interest Earned		
Other Income		
Sub total	0.00	0.00
Total A+B	1023250.00	1023250.00
C) Expenditure :		
i) Capital Expenditure : Fixed Assets		
ii) Revenue Expenditure :		
iii) Project Expenditure	666425.00	
Total (i+ii+iii) 'C'	666425.00	0.00
Balance carried forward to next year (A+B-C)	356825.00	1023250.00

Annexure -18

## BASIC :Building and Strenthening Institutional Capacity for Climate Change

		(Amount Rs.)
PARTICULARS	Current Year	Previous Year
A) Balance Brought Forward	0.00	425895.00
B) Income :		
Grant in Aid		0.00
Interest Earned		0.00
Other Income		0.00
Sub total	0.00	0.00
Total A+B	0.00	425895.00
C) Expenditure :		
i) Capital Expenditure : Fixed Assets		0.00
ii) Revenue Expenditure :		0.00
iii) Project Expenditure		425895.00
Total (i+ii+iii) 'C'	0.00	425895.00
Balance carried forward to next year (A+B-C)	0.00	0.00



# **INDO-ISRAEL Workshop**

(Amount Rs.)

PARTICULARS Current Year		Previous Year
A) Balance Brought Forward	0.00	182637.00
B) Income :		
Grant in Aid		0.00
Interest Earned		0.00
Other Income		0.00
Sub total	0.00	0.00
Total A+B	0.00	182637.00
C) Expenditure :		
i) Capital Expenditure : Fixed Assets		0.00
ii) Revenue Expenditure :		0.00
iii) Project Expenditure		182637.00
Total (i+ii+iii) 'C'	0.00	182637.00
Balance carried forward to next year (A+B-C)	0.00	0.00

#### Annexure -20

# **DST-BMBF (Germany)**

PARTICULARS	Current Year	Previous Year
A) Balance Brought Forward	0.00	104586.00
B) Income :		
Grant in Aid		0.00
Interest Earned		0.00
Other Income		0.00
Sub total	0.00	0.00
Total A+B	0.00	104586.00
C) Expenditure :		
i) Capital Expenditure : Fixed Assets		
ii) Revenue Expenditure :		
iii) Project Expenditure		104586.00
Total (i+ii+iii) 'C'	0.00	104586.00
Balance carried forward to next year (A+B-C)	0.00	0.00

TIFA

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# **TIFAC-World Bank Project**

PARTICULARS	Current Year	Previous Year
A) Balance Brought Forward	1339747.93	12364422.00
B) Income :		
Grant in Aid	0.00	0.00
Interest Earned	0.00	0.00
Other Income	0.00	0.00
Sub total	0.00	0.00
Total A+B	1339747.93	12364422.00
C) Expenditure :		
i) Capital Expenditure : Fixed Assets	0.00	0.00
ii) Revenue Expenditure :	0.00	0.00
iii) Project Expenditure	0.00	11024674.07
Total (i+ii+iii) 'C'	0.00	11024674.07
Balance carried forward to next year (A+B-C)	1339747.93	1339747.93



## Technology Information Forecasting & Assessment Cuncil Receipts & Payments for the Period the Year Ended 31.03.2010

	Receipts	Current Year	Previous Year
1	Opening Balances		
	Cash in hand	8587.00	7468.00
	Bank balances	0.00	0.00
	In Current Accounts	0.00	0.00
	In Depost Accounts	36074546.95	328273280.00
	Savings Accounts	51442454.00	5847010.20
	Advance for Franking Machine	5251.00	26158.00
2	Grants Received		
	From Government of India - Plan (TIFAC)	172000000.00	26100000.00
	From Government of India - Non Plan (TIFAC)	800000.00	720000.00
	From State Government	0.00	0.00
	Scholorship for Womet Scientist	15496000.00	10900000.00
3	Income from Investments		
	Earmarked/Endow Funds	0.00	0.00
	Own Funds	0.00	0.00
4	Interest Received		
	On Bank Deposits (TIFAC)	835825.00	1286184.00
	On Bank Savings (TIFAC)	2381024.00	856394.00
	Loans Advances etc. (Staff advances)	65944.00	282960.00
	Interest from Vision 2020	0.00	8878344.00
5	Other Income (Specify)		
	Refund from HGT Project (Annexure 5)	17478500.00	19477000.00
	Refund from Advance Composite Programme	20537600.00	12270080.00
	Refund from Vision 2020	13093753.24	17254109.58
	Other Income (Annexure 18)	350952.00	83666.00
	Refund from Sugar Technology Mission		
	Refund from TePP Project	254921.00	628881.00
	Refund from Fly Ash Utilization Programme	50000.00	0.00
6	Receipts fro Patent Facilitating Centre		
	Grant in Aid	15000000.00	14000000.00
	Patent Search Charges	3000.00	644.00
	Ekaswa A&B CD RoM	88199.00	119500.00
	Other Receipts	71950.00	0.00

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Rec	eipts	Current Year	<b>Previous Year</b>
7	Amount Borrowed	0.00	0.00
8	Other Receits (Give Details)		
	Nominal Charges for Dissemination of TIFAC Reports	413308.00	125951.00
	Tender for Car Hiring Accounts	0.00	3000.00
	RTIA Questions	565.00	70.00
	Tender Form for Stationery Items	0.00	500.00
	Tender for Fire Alarm	6000.00	0.00
	Tender for Housekeeping at TIFAC	9500.00	0.00
	Stale Cheque Received	914330.00	589483.00
	DRDO - PFC	13634052.00	12335352.00
	Advance : Ashok Hotel	200000.00	0.00
	Advance : Iridium Interactive Ltd	178900.00	0.00
	Advance : DAVP	219797.00	0.00
	Advance : TIFAC Core in Wireless Technology	13000000.00	0.00
	Advance : Agro And Industrial Bio Technology, TIET, Patiala	717434.00	0.00
	Advance : Dr. Sharma's Nursing Home	73800.00	0.00
	Advance : IIT Kharagpur	250000.00	0.00
	Advance : SINE-TePP Fund	22700.00	0.00
	Sundry Debtor : Prof. Anand Patwardhan	29427.00	0.00
	International Congress Seminar Expenses	0.00	5783613.00
	Refund from Sugar Technology Mission	29100000.00	9700000.00
	Earth Quake Serving Nature's Fury	22600.00	0.00
	IIASA - TIFAC Joint Study	0.00	9111767.00
	Advance Mobilisation (HVAC)	0.00	986413.00
	Earnest Money : M/s Sansanwal Travels	10000.00	0.00
	Earnest Money : Yatrika Travels	10000.00	0.00
	Earnest Money : Omni Tech Systems	10000.00	0.00
	Earnest Money : M/s Bhagwati International	30000.00	0.00
	Security Deposite : Guest House (Sarupriya Vihar)	0.00	10000.00
	Sh.Samson George (LTA Loan & Scooter Loan)	0.00	6000.00
	Capital Fund	0.00	133892981.46
	Medical Scheme	70085.00	74246.00
	Sundry Debtor - DST	3240.00	0.00
	Security Deposit : Bhagwati International	18451.00	0.00
	Fixed Assets (Received during the year	0.00	74450.00



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Receipts	<b>Current Year</b>	<b>Previous Year</b>
Project ICOSER	0.00	8444138.00
IIASA TIFAC Joint Study	0.00	3519.00
Implementation Programme : Fiji Sugar Industries	0.00	293.00
Sundry Creditor : M/s Subramaniam, Natraj & Associates	0.00	212945.00
Sundry Debtors : Honorarium	0.00	5000.00
Sundry Debtors : STM	0.00	41058083.00
IIM Bangalore	0.00	2630.00
Security Deposit : Lease Accomodaton (G.Srinivas)	0.00	20000.00
Security Deposit : Hauz Khas P.O	0.00	17.00
Security Deposit : Guest House	0.00	46000.00
TDS (on Consultacy)	13125.00	0.00
Short Term Depoite : Fly Ash Mission	22970.00	0.00
Short Term Depoite : TIFAC	1375627.00	0.00
Security Depsoit : M/s Mannu Lal & Sons	0.00	47986.00
M/s Indian Internatioanl Centre (Prof. Anand Patwardhan)	0.00	5014.00
India - IIASA Joint Workshop	0.00	1242295.00
Advance : Kendriya Vidyalaya JNU	0.00	20380.00
Internatinal Congress seminar Expenses	0.00	2118686.00
Advance : India International Centre	0.00	41368.00
Advance : BAIF Development Research Foundation	0.00	50000.00
Security Deposit : Directorate of Estate	0.00	2400.00
Sundry Debtor : Fly Ash Consultancy Account	0.00	16842.00
Education Cess	0.00	54.00
Income Tax	0.00	1817.00
Earnest Money : Sugar Technology Mission Industries	0.00	3600000
	406394418.19	676644972.24

## Technology Information Forecasting & Assessment Cuncil Receipts & Payments for the Period the Year Ended 31.03.2010

	Payment		Current Year	Previous Year
1	Expenses			
a	Establishment Expenses (Corresponding to Schedule 21)	40546407.00		
	Add : Opening Expenses Payable	2535073.00		
	Less : Expenses Payable	2768059.00	40313421.00	39020712.40
b	Administrative Expenses (Corresponding to Schedule 22)	22021208.91		
	Add : Opening Expenses Payable	600751.00		
	Add : Loss of sale of Fixed Assets	0.00		
	Less : Payables	326375.00	22295584.91	46280840.83
	Less : Loss on Sale of Fixed Assets			
	(Previous year figure does not include obsolescence Expenses in it.)			
с	Expensditure on Grants, Subsidies etc. (As per Schedule 23)		15162223.00	30731613.00
2	Payments made against funds for various projects			
	Grant Utilisation - Patent Facilitating Centre	14464538.00		
	Add : Opening Expenses Payable	219946.00		
	Less : Expenses Payable	324971.00	14359513.00	20400351.00
	Grant Utilisation - Vision 2020	148362000.00		
	Add : Opening Expenses Payable	548651.00		
	Less : Expenses Payable	683782.00	148226869.00	332135671.00
	Grant Utilisation - Schalorship for Women Scientist		14685955.00	13742015.00
	Adddition in Fixed Assets			
	Office Equipment		581478.00	638711.00
	Furniture		155072.00	25408.00
	Library Book		10967.00	96782.00
	Computer & Peripherals		140976.00	375728.00
	Fire Alarm System at TIFAC Building		1004583.00	0.00



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Pay	ment	Current Year	Previous Year
	Rufund of Surples Money / Loans		
	Advance paid to staff	517192.00	471129.00
3	Other Payments (Specify)		
	Security Deposit : Eco Rel Multitech System	0.00	150.00
	Sh. Samson George (Scooter Advance)	0.00	19500.00
	TIFAC World Bank Project	0.00	11024674.07
	Sundry Creditor : M/s Subraminiam, Natraj & Associates	212945.00	0.00
	Internatinal Congress Seminar Expenses	3058201.00	7902299.00
	BASIC : Building & Strengtaning Institutional Capacity for Climit Change	0.00	425895.00
	Development of Project for High Purity Magnesia	0.00	78680.00
	Nominal Charges for Disseminatin of TIFAC Report	0.00	6183.00
	Earnest Money : Mannu Lal and Sons	0.00	500000.00
	INDO - ISREAL Workshop	0.00	182637.00
	DRDO - PFC	13974754.00	12317571.00
	MSEB-Ash Utilization / Management	2978100.00	0.00
	MPSEB - Use of fly ash in Agriculture Development Thermal Power Plant, Sarni	666425.00	0.00
	Advance : TIFAC CORE in Wireless Technology	0.00	11634150.00
	DST - BMBF (Germany)	0.00	104586.00
	Sundry Debtor : DBT	15620.00	0.00
	Sundry Debtor : Central Institute of Road Transportation	500000.00	0.00
	Capital Fund	0.00	52469757.00
	Security Deposite : Matrix Power Products	0.00	15741.00
	Security Deposite : Union Tech India Pvt Ltd	0.00	81017.00
	Security Deposit : Apex Peripherals India Pvt Ltd	0.00	1845.00
	Security Deposit : System Technology	0.00	1695.00
	Security Deposit : Mannu Lal & Sons (Electrical Works)	0.00	188564.00
	Security Deposit : Graphic Systems Pvt Ltd	0.00	89454.00
		278859878.91	580963359.30



# Technology Information, Forecasting & Assessment Council प्रौद्योगिकी सूचना, पूर्वानुमान एवं मूल्यांकन परिषद्

yment	Current Year	Previous Year
Security Deposit : Impressions Services Pvt Ltd	0.00	30000.00
Indian Copper Market Focus in Recyclable	0.00	225916.00
Earnest Money : M/s Geo-Hydromechs (India) Roorkee	0.00	17750.00
Earnest Money : M/s Crompton Greaves	0.00	15000.00
Earnest Money : M/s Impression Pvt Ltd	0.00	20000.00
Earnest Money : M/s Nimbus harbour Pvt Ltd	0.00	30000.00
Workshop on Bio Fuels	0.00	54039.00
Interest (Civil & Interiors) M/s Mannu Lal & Sons	0.00	615000.00
PM's Relief Fund (TSUNAMI)	0.00	18128.00
Security Deposit : Lease Accomodation	0.00	20000.00
Pending Work : M/s Mannu Lal & Sons	0.00	25000.00
Sundry Creditor : SH.Ramesh Kumar K	0.00	975.00
M/s Maheshwari Rice Miller	0.00	1062500.00
Interior Work of TIFAC Building	2481708.00	4674174.00
Advance : Iridium Interactive Ltd	0.00	178900.00
Advance : DAVP	0.00	11850.00
Advance : Dr.Sharma's Nursing Home	0.00	73800.00
Advance : IIT Kharagpur	0.00	250000.00
Asia India Workshop	0.00	66974.00
Security Deposit : Ms. Itika Singal	0.00	40000.00
Security Deposit : Mrs. Prem Lata Vyas	0.00	105000.00
Sundry Debtor : Prof. Anand Patwardhan	0.00	29427.00
Advance : M/s Daikin Airconditioning India Pvt Ltd	200382.00	0.00
Advance : IIT-Delhi	57500.00	0.00
Implemintation Programme : Fiji Sugar Industries	293.00	0.00
Income Tax for the F.Y 2004-2005	5000000.00	0.00
Sundry Debtor : Reinvigorating Indian Agriculture Through S&T	0.00	208450.00
Capital Fund	11672.00	0.00



Payment	Payment C		Previous Year
Short Term Deposite (Suspence Account)		1398597.00	0.00
Assets Transsferred from Fly Ash Consultancy Project & STM			
Computer / Periperals		0.00	10586.28
Furniture		0.00	21930.00
Office Equipment		0.00	332249.71
TDS (On Consultancy)		0.00	13125.00
Closing Balance			
Cash in Hand		3524.00	8587.00
Cash at Bank		86705099.28	36074546.95
Short Term Deposite		31666342.00	51442454.00
Franking Machine		9422.00	5251.00
		127534539.28	95681612.94
		406394418.19	676644972.24

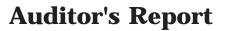
For Chandiwala Virmani & Associates (Formerly Chandiwala Gupta & Associates) Chartered Accountants

Sd/-(Bharat Bhushan) Partner M. No: 087365

Date : 23.9.2010

Place : New Delhi

Sd/-Accounts Officer Sd/-Registrar Sd/-Scientist-in-charge



The Trustee, TIFAC C.P. Fund Trust, New Delhi-110016

We have audited the attached Statements of Affairs of TIFAC C.P. Fund Trust as on 31<sup>st</sup> March 2010 with the books of accounts, maintained at New Delhi. The compliance of the provision of Provident Fund and Miscellaneous Provision Act, also been examined.

On the basis of such examination of the books of accounts, we state that subject to comments given as per notes on account as per point no 1.

- 1) The Statement of Affairs dealt with by this report are in agreement with the books of accounts of the Trust.
- 2) In our opinion and to the best of our information and according to explanation given to us, the said accounts give a true and fair view.
  - a) In the case of Statement of Affairs, the state of the affairs of the Trust as at 31<sup>st</sup> March 2010.

#### **For Chandiwala Virmani & Associates** (formerly, Chandiwala Gupta & Associates) **Chartered Accountants**

Sd/-(**Bharat Bhushan)** (Partner) M.No-87365

Date : 23.9.2010

Place : New Delhi



# **Contributory Provident Fund- TIFAC Trial Balance as on 31st March, 2010**

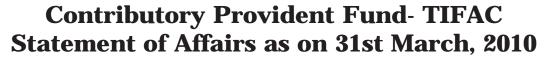
(Amount Rs.)

~ ~ ~ ~			(Amount Ks.)
S.NO.	PARTICULARS	DEBIT AMOUNT	CREDIT AMOUNT
1	EMPLOYEES SUBSCRIPTION A/C		12,658,016.70
2	EMPLOYER'S CONTRIBUTION A/C		11,707,901.00
3	INTEREST A/C		14,204,606.70
4	CPF ADV: SHRI ANIL KUMAR RAI	71,975.00	
5	CPF ADV: SHRI ARGHYA SARDAR	81,250.00	
6	CPF ADV: MS. MALA SARPAL	68,450.00	
7	CPF ADV: MS. PROMILA KHILANI	14,000.00	
8	CPF ADV: SHRI MAHIPAL SINGH RAWAT	21,430.00	
9	CPF ADV: DR. GAUTAM GOSWAMI	30,842.00	
10	CPF ADV. SH. SURENDER PRASAD	44,400.00	
11	CPF ADV: SHRI S.BASU	1,100.00	
12	CPF ADV: SHRI T. CHANDRASEKHAR	41,600.00	
13	CPF ADV: SHRI RANBIR SINGH	21,600.00	
14	CPF ADV: MS. POONAM NAGPAL	4,400.00	
15	CPF ADV: DEEPAK KUMAR	151,000.00	
16	CPF ADV.: ANEESH S.	24,000.00	
17	CPF ADV: RENU BALI	36,200.00	
18	CPF ADV.: UMA DARAL	22,000.00	
19	CPF ADV. SH. DEEP PRAKASH	69,200.00	
20	CPF ADV. RACHNA BHATT	40,200.00	
21	CPF ADV. SH. SUSHIL KUMAR JHA	66,600.00	
22	CPF ADV. P.R. BASAK	140,000.00	
23	CPF ADV. MR. MUKESH MATHUR	200,000.00	
24	CPF. ADV. MR. SURINDER KUMAR	100,000.00	
25	CPF ADV. SH. PANKAJ SUNDRIYAL	8,000.00	
26	BANK CHARGES	149,339.00	
27	FLEXI DEPOSIT-UBI	370,433.00	
28	SHORT TERM DEPOSIT (UBI)	26,836,108.00	
29	SPECIAL DEPOSIT (RBI) A/C	520,330.00	
30	CASH AT BANK	9,436,067.40	
	Total	38,570,524.40	38,570,524.40

For CHANDIWALA VIRMANI & ASSOCIATES (Formely Chandiwala Gupta & Associates) Chartered Accountants

Sd/-Bharat Bhushan Partner M.No. 87365

Date: 23.9.2010 Place: New Delhi



Previous Year	Particulars	Current Yea	r Previous Year	Particulars	Current Year
as 31.03.2009		31.03.201	As on 31.03.2009	as	As on 31.03.2010
	Interest Accrued		1121080.54	Balance with UBI	9436067.40
10673065.70	Last Balance 123753	346.70		Deposits	
	Add: Received during the year		520330.00	Special depsoit with RBI	520330.00
2310049.00	Accured during the year 18292	260.00	25386995.00	Short Term deposit with UBI	26836108.00
			256556.00	Flexi Deposit- UBI	370433.00
12983114.70	142046	606.70		Loan/ Advances to staff members	
607768.00	Less: Paid during the year	0.00 14204606.7	41295.00	Shri Anil Kumar Rai	71975.00
12375346.70			150000.00	Shri Arghya Sardar	81250.00
	<b>Employees Contribution</b>		128450.00	Ms. Mala Sarpal	68450.00
13657667.84	Last Balance 87124	93.84	38000.00	Ms. Promila Khilani	14000.00
4662717.00	Add: Received during the year 5960	92.86	41230.00	Sh. Mahipal Singh Rawat	21430.00
			60842.00	Dr. Gautam Goswami	30842.00
9607891.00	Less: Paid during the year 20146	12658016.7	11000.00	Sh. Ravi Dutt	0.00
8712493.84			1000.00	Dr. P. K. Anil Kumar	0.00
				Sh. Sundender Prasad	44400.00
			12000.00	Sh. Shambhu Kumar	0.00
	TIFAC Contribution		36700.00	Sh. Arbind Kumar Singh	0.00
6539442.00	Last Balance 71015	38.00	11300.00	Sh.S.Basu	1100.00
2788922.00	Add: Received during the year 46280	51.00	105200.00	Sh. T. Chandrasekhar	41600.00
			55200.00	Sh. Ranbir Singh	21600.00
2226826.00	Less: Paid during the year 216	88.00 11707901.0	11600.00	Ms. Poonam Nagpal	4400.00
7101538.00			43000.00	Sh. Deepak Kumar	151000.00
			31000.00	Sh. Suresh Kumar M	0.00
			36000.00	Sh. Aneesh S.	24000.00
			56600.00	Ms. Renu Bali	36200.00
			34000.00	Ms. Uma Daral	22000.00
			0.00	Sh. Deep Prakash	69200.00
			0.00	Ms. Rachna Bhatt	40200.00
			0.00	Sh. Sushil Kumar Jha	66600.00
			0.00	Mr. P.R. Basak	140000.00
			0.00	Mr. Mukesh Mathur	200000.00
			0.00	Sh. Surinder Kumar	100000.00
			0.00	Sh. Pankaj Sundriyal	8000.00
				Bank Charges	149339.00
28189378.54	Total	38570524.4	28189378.54	Total	38570524.40

For Chandiwala Virmani & Associates (Formerly Chandiwala Gupta & Associates) Chartered Accountants

Sd/-(Bharat Bhushan) Partner M. No: 087365

Date : 23.9.2010 Place : New Delhi Sd/-Chairman Sd/-Trustee



# **Contributory Provident Fund- TIFAC Statement of Affairs as on 31st March, 2010**

Pervious Year as 31.03.2009	PARTICULARS	Current Year As n 31.03.2010
1,121,080.54	Balance with UBI Deposit	9,436,067.40
520,330.00	Special deposit with RBI	520,330.00
25,386,995.00	Short Term deposit with (UBI)	26,836,108.00
256,556.00	Flexi Deposit -UBI	370,433.00
	Loan/ Advances to staff members	,
41295.00	Shri Anil Kumar Rai	71975.00
150000.00	Shri Arghya Sardar	81250.00
128450.00	Ms. Mala Sarpal	68450.00
38000.00	Ms. Promila Khilani	14000.00
41230.00	Sh. Mahipal Singh Rawat	21430.00
60842.00	Dr. Gautam Goswami	30842.00
11000.00	Sh. Ravi Dutt	0.00
1000.00	Dr. P. K. Anil Kumar	0.00
0.00	Sh. Surender Prasad	44400.00
12000.00	Sh. Shambhu Kumar	0.00
36700.00	Sh. Arbind Kumar Singh	0.00
11300.00	Sh.S.Basu	1100.00
105200.00	Sh. T. Chandrasekhar	41600.00
55200.00	Sh. Ranbir Singh	21600.00
11600.00	Ms. Poonam Nagpal	4400.00
43000.00	Sh. Deepak Kumar	151000.00
31000.00	Sh. Suresh Kumar M	0.00
36000.00	Sh. Aneesh S.	24000.00
56600.00	Ms. Renu Bali	36200.00
34000.00	Ms. Uma Daral	22000.00
0.00	Sh. Deep Prakash	69200.00
0.00	Ms. Rachna Bhatt	40200.00
0.00	Sh. Sushil Kumar Jha	66600.00
0.00	Mr. P.R. Basak	140000.00
0.00	Mr. Mukesh Mathur	200000.00
0.00	Mr. Surinder Kumar	100000.00
0.00	Mr. Pankaj Sundriyal	8000.00
0.00	Bank Charges	149339.00
28,189,378.54	Total	38,570,524.40

For CHANDIWALA VIRMANI & ASSOCIATES (Formely Chandiwala Gupta & Associates) Chartered Accountants

Sd/-Bharat Bhushan Partner M.No. 87365

Date: 23.9.2010 Place: New Delhi



# **Auditor's Report**

To, The Members, **Mission for Geo Spatial Applications** New Delhi – 110016

We have audited the attached Balance Sheet of **Mission for Geo Spatial Applications** Under TECHNOLOGY INFORMATION, FORECASTING & ASSESSMENT COUNCIL (TIFAC), NEW DELHI as on 31<sup>st</sup> March 2010 and also the attached Income & Expenditure Accounts for the year ended on that date.

These financial statements are the responsibility of the management of the **Mission for Geo Spatial Applications** -TIFAC. Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in India.

Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by the management, as well as evaluating the overall presentations of the financial statements. We believe that our audit provides a reasonable basis for our opinion.

Subject to our Audit objections as per Annexure AR-1, comments given in the following Notes on accounts as per schedule - 13, we report that :-

- 1. We have obtained all the information and explanation which to the best of our knowledge and belief were necessary for the purposes of our Audit.
- 2. In our opinion proper books of account as required by law have been kept by Mission for Geo Spatial Applications, TIFAC.
- 3. The Balance sheet and Income and Expenditure Accounts dealt with by this report are in agreement with the books of account.
- 4. In our opinion and to the best of our information and according to the explanations given to us, the said accounts read with the schedules and notes thereto given the information required and given a true and fair view:
  - i) In case of Balance Sheet , of the state of affair of the Mission for Geo Spatial Applications as at 31<sup>st</sup> March 2010.
  - ii) In case of Income & Expenditure Account, of the excess of income over expenditure for the accounting year ended on that date.

For Chandiwala Virmani & Associates Chartered Accountants

> Bharat Bhushan (Partner) | M. No. 087365

Date : 27.09.2010 Place : New Delhi



# Reply for the audit observation for the financial year 2009-10

#### 1. Reply to observation at serial no.1 :

In respect of non provision for expenses payable for the previous year , it may be mentioned that Mission for Geo Spatial Applications being a non-profit, technology development and research oriented organization and fully funded through Central Government, per accounting standards, it is not mandatory to make provision for previous period expenses except establishment expenditure like salary, tax etc.

# **Mission for Geo Spatial Applications** Statutory Audit for Financial Year 2009-2010

1. A sum of Rs.2,93,519/- has been paid and booked as expense during the year while these expense relates to previous year for which no provision has been made in previous year. Hence the surplus for the year has been shown as deflated to the extent of Rs. 2,93,519/-



## Mission for Geo Spatial Applications Technology Information, Forecasting & Assessment Council, (TIFAC) Balance Sheet as on 31.03.2010

(Amount Rs.)

			(Alloulit KS.)
CORPUS/CAPITAL FUND AND LIABILITIES	Schedule	Current Year	Previous Year
CORPUS /CAPITAL FUND	1	45050907.20	5886931.20
RESERVES AND SURPLUS		00.00	00.00
EARMARKED/ ENDOWMENT FUNDS		00.00	00.00
SECURED LOANS AND BORROWINGS		00.00	00.00
UNSECURED LOANS AND BORROWINGS		00.00	00.00
DEFERRED CREDIT LIABILITIES		00.00	00.00
CURRENT LIABILITIES AND PROVISIONS	2	9420614.00	244336.00
TOTAL		54471521.20	6131267.20
ASSETS			
FIXED ASSETS (NET)	3	12490455.00	5304615.00
INVESTMENTS – FROM EARMARKED/ENDOWMENT FUNDS		00.00	00.00
INVESTMENTS – OTHERS		00.00	00.00
CURRENT ASSETS, LOANS, ADVANCES ETC.	4	41981066.20	826652.20
CAPITAL WORK IN PROGRESS. MISCELLANEOUS EXPENDITURE (to the extent not written off or adjusted)		00.00 00.00	00.00 00.00
TOTAL		54471521.20	6131267.20
SIGNIFICANT ACCOUNTING POLICIES	13		
CONTINGENT LIABILITIES AND NOTES ON ACCOUNTS	14		

As per our report of even date

For Chandiwala Virmani & Associates (Formerly Chandiwala Gupta & Associates) Chartered Accountants

Sd/- (Bharat Bhushan) Partner M. No: 087365	Sd/- Account Officer NMBA/MG	Sd/- Sr. Adm. Officer (B.K. Manthan)	Sd/- Registrar (NMBA/MGA)	Sd/- Mission Director (MGA/DST)
Date:27.09.2010 Place:New Delhi				

## Mission for Geo Spatial Applications Technology Information Forecasting & Assessment Council, (TIFAC) Income & Expenditure Account as on 31.03.2010

(Amount Rs.)

			(Allount RS.
Income	Schedule / Annexure	Current Year	Previous Year
Income From Sales / Services	Schedule 5	00.00	00.00
Grants/Subsidies	Schedule 6	85000000.00	11096000.00
Income from Royalty, Publication Etc.	Schedule 7	00.00	00.00
Interest Earned	Schedule 8	582045.00	67399.00
Other Income	Schedule 9	250000.00	2205.00
Fees / Subscriptions		00.00	00.00
Income From Investment		00.00	00.00
Total (A)		85832045.00	11165604.00
Expenditure			
Expenditure on Grant / Subsidies Etc.	Schedule 10	30208067.00	00.00
Establishment Expenses	Schedule 11	4528589.00	1300939.00
Administrative Expenses etc.	Schedule 12	4305579.00	1706646.80
Depreciation on (Net Total at the Year end)	Schedule 03	7625834.00	2271087.00
Total (B)		46668069.00	5278672.80
Balance being excess of Income over Expenditure (A-B)		39163976.00	5886931.20
Balance being excess of Expenditure over Income (A-B)			

Balance being Surplus transferred to Corpus/Capital Fund

**Balance being Deficit transferred to Corpus/Capital** 

39163976.00

As per our report of even date

Fund

For Chandiwala Virmani & Associates (Formerly Chandiwala Gupta & Associates) Chartered Accountants

Sd/- (Bharat Bhushan) Partner M. No: 087365	Sd/- Account Officer NMBA/MG	Sd/- Sr. Adm. Officer (B.K. Manthan)	Sd/- Registrar (NMBA/MGA)	Sd/- Mission Director (MGA/DST)
Date : 27.09.2010 Place : New Delhi				



## Mission for Geo Spatial Applications Technology Information, Forecasting & Assessment Council, (TIFAC) Balance Sheet as on 31.03.2010

### Schedule 1 - Corpus / Capital Fund

	Mission for Geo Spatial Applications Current Year Balance	Reinvigorating Indian Agriculture through Science & Technology Previous Year Balance
Opening Balance	5886931.20	00.00
Amount of diff. in opening balance of fixed assets not taken from DST books of A/c in F/A schedule	00.00	00.00
Excess of Income Over Expenditure	39163976.00	5886931.20
Total	45050907.20	5886931.20
Excess of Expenditure over Income	00.00	00.00
Total	00.00	00.00
Closing Balance	45050907.20	5886931.20

## Mission for Geo Spatial Applications Technology Information, Forecasting & Assessment Council, (TIFAC) Balance Sheet as on 31.03.2010

### **Schedule 2** - Current Liabilities and Provisions

		Current Year	Previous Year
A.	CURRENT LIABILITIES		
1.	Acceptances		
2.	Sundry Creditors:		
	a) For Goods	00.00	00.00
	b) Others (Security Retain son Money)		
	M/s Sierra Atlantic Software's Ltd., Hyderabad	53,144.00	00.00
	M/s Leica Geosystem Geospatial Imagaging India P. Ltd.	3,64,817.00	00.00
3.	Advances Received		
	CRPF, New Delhi - Procurement of 10 workstations	78,51,318.00	00.00
4.	Interest accrued but not due on:		
	a) Secured Loans/borrowings	00.00	00.00
	b) Unsecured Loans /borrowings	00.00	00.00
5.	Statutory Liabilities:		
	a) Over dues	00.00	00.00
	b) Others	00.00	00.00
6.	Other Current Liabilities		
	a) Salary Payable	6,74,556.00	229375.00
	b) C.P.F. Payable	18,000.00	9100.00
	c) Group Insurance Payable	738.00	346.00
	d) Audit Fee Payable	16,545.00	5515.00
	e) Establishment Expenses Payable (others)	198699.00	00.00
	f) Administrative Expenses payable	242797.00	00.00
TOTAL ( Rs.)		94,20,614.00	244336.00



#### **Schedule 3-Fixed Assets**

Amount - Rs)

		GROSS	BLOCK			DEPR	RECIATION		NET E	LOCK
	Cost / valuation As at beginning of the year	Additions during the year	Deductions during the year year	Cost / valuation at the year end	Dept. Up to 31.03.09	On Opening Balance	On Additions during the year	Total upto the year end	As at the current year end	As at the previous year end
A. FIXED ASSETS										
1. a) Freehold	00.00	00.00	0.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00
b) Leasehold	00.00	00.00	0.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00
2. BUILDING										
a) On Freehold Land	00.00	00.00	0.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00
b) On Leasehold Land	00.00	00.00	0.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00
c) Ownership flat	00.00	00.00	0.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00
d) Superstructures on Land	00.00	00.00	0.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00
e) Interior Works	00.00	00.00	0.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00
3. Plant & Mach. & Eqpt.	00.00	00.00	0.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00
4. Vehicles	00.00	00.00	0.00	00.00	00.00	00.00	00.00	00.00	00.00	00.00
5. Furniture & Fixture – ISP	00.00	470784.00	0.00	470784.00	00.00	00.00	23539.00	23539.00	447245.00	00.00
6. Office Equipment – ISP	00.00	171481.00	0.00	171481.00	00.00	00.00	12861.00	12861.00	158620.00	00.00
7. Erdas Software, ISP	00.00	3648173.00	0.00	3648173.00	00.00	00.00	1094452.00	1094452.00	2553721.00	00.00
8. Computer peripherals-IPS	00.00	8439186.00	0.00	8439186.00	00.00	00.00	2531756.00	2531756.00	5907430.00	00.00
9.Computer & Peripherals - MGA	5332487.00	2300.00	0.00	5334787.00	1599746.00	2239645.00	690.00	2240335.00	1494706.00	3732741.00
10. Software for Comp. MGA	2236000.00	531440.00	0.00	2767440.00	670800.00	939120.00	318864.00	1257984.00	838656.00	1565200.00
11. Sky Line Software, ISP	00.00	1544400.00	0.00	1544400.00	00.00	00.00	463320.00	463320.00	1081080.00	00.00
12. Library Books , MGA	7215.00	3910.00	0.00	11125.00	541.00	1001.00	586.00	1587.00	8997.00	6674.00
13. Tube well & W. Supply	0.00	00.00	0.00	0.00	00.00	00.00	0.00	00.00	00.00	00.00
14. Other Fixed Assets	0.00	00.00	0.00	0.00	00.00	00.00	0.00	00.00	00.00	00.00
TOTAL OF CURRENT YEAR	7575702.00	14811674.00	0.00	22387376.00	2271087.00	3179766.00	4446068.00	7625834.00	12490455.00	5304615.00
PREVIOUS YEAR	00.00	7575702.00	0.00	7575702.00	00.00	00.00	2271087.00	2271087.00	5304615.00	00.00
B. CAPITAL WORK IN PROGRESS										

Note:- Erdas & Skyline software only for official used for the f.y.2009-10 .

### Schedule 4 -Current Assets, Loans, Advances etc.

		Current Year	Previous Year
А.	CURRENT ASSETS		
1.	Inventories:		
	a) Stores and Spares	00.00	00.00
	b) Loose Tools	00.00	00.00
	c) Stock-in-trade		
	-Finished Goods	00.00	00.00
	-Work-in-progress	00.00	00.00
	-Raw Materials	00.00	00.00
2.	Sundry Debtors:		
	Sundry Debtors	00.00	00.00
3.	<b>Cash balances in hand</b> (including cheques /drafts and imp rest)	5000.00	00.00
4.	Bank Balances:		
	a) With Scheduled Banks: (Union Bank of India)	00.00	00.00
	On Current Accounts	00.00	00.00
	On Deposit Accounts (Short term deposits)	00.00	00.00
	On Savings Accounts	41904916.20	826652.20
	On Interest Receivable	00.00	00.00
	b) With non-Scheduled Banks:		
	On Current Accounts	00.00	00.00
	On Deposit Accounts-	00.00	00.00
	On Savings Accounts	00.00	00.00
	On Interest Receivable	00.00	00.00
5.	Post Office-Savings Accounts	00.00	00.00
	TOTAL (A)	4,19,09,916.20	826652.20





	Current Year	Previous Year
B. LOANS, ADVANCES AND OTHER ASSETS		
1. Loans	00.00	00.00
2. Advance and other amounts recoverable in cash or in kind or for value to be received.		
a) On capital Account	00.00	00.00
3. Advance for projects materials	00.00	00.00
a) Prepayments	00.00	00.00
b) Others	00.00	00.00
4. Income Accrued:-		
a) On Investments from Earmarked/ Endowment Funds	00.00	00.00
b) On Investment – Others	00.00	00.00
c) On Loans and Advances		
Sh. Manish Kumar Tirka	10000.00	00.00
Tour Adv.: Major Gen. G.S. Chandela,	61150.00	00.00
d) Others (includes income due unrealized )	00.00	00.00
5. Claims Receivable	00.00	00.00
Total – B	71,150.00	00.00
Total (A + B)	4,19,81,066.20	826652.20

### Schedule 5 - Income From Sales / Services

(Amount Rs.)

		Current Year	Previous Year
1.	Income from Sales		
	a) Sale of finished Goods	0.00	0.00
	b) Sale of Row Material	0.00	0.00
	c) Sale of Scraps	0.00	0.00
2.	Income from Services		
	a) Labour and Processing Charges	0.00	0.00
	b) Professional / Consultancy Services	0.00	0.00
	c) Agency Commissions and Brokerages	0.00	0.00
	d) Maintenance Services (Equipment/Property)	0.00	0.00
	e) Others (Specify)	0.00	0.00
	Total	0.00	0.00

### **Scheudel 6** - **Grants** / **Subsidies (TIFAC)** (Irrevocable Grants & Subsidies Received)

	Current Year	Previous Year
1. From Central Government		
A. MGA GRANTS		
Grants in Aid (Plan for MGA )	15000000.00	11096000.00
Grant in Aid (Plan for Internal Security Project)	7000000.00	00.00
Grant in Aid (Non plan)	00.00	00.00
2. State Government(s)	00.00	00.00
3. Government Agencies	00.00	00.00
4. Institutions/Welfare Bodies	00.00	00.00
5. International Organizations	00.00	00.00
6. Others (Specify)	00.00	00.00
TOTAL	8,50,00,000.00	11096000.00



### **Schedule 7 - Income from Reyolty, Publication Etc.**

(Amount Rs.)

	Current Year	Previous Year
1. Income from Royalty	00.00	00.00
2. Income from Publications	00.00	00.00
3. Others (Specify)	00.00	00.00
4. Interest : Mobilization Advance (Civil)	00.00	00.00
Total	00.00	00.00

### **Schedule 8** - Interest Earned (Regular)

	Current Year	Previous Year
1. On Term Deposits:		
a) With Scheduled Banks	00.00	00.00
b) With Non-Scheduled Banks	00.00	00.00
c) With Institutions	00.00	00.00
d) Others	00.00	00.00
2. On Savings Accounts:		
a) With Scheduled Banks	582045.00	67399.00
b) With Non-Scheduled Banks	00.00	00.00
c) Post Office Savings Accounts	00.00	00.00
d) Others	00.00	00.00
3. On Loans:		
a) Employees/Staff	00.00	00.00
b) Others (Long term advances)	00.00	00.00
4. Interest on Debtors and Other Receivables	00.00	00.00
TOTAL	5,82,045.00	67399.00

Note - Tax deducted at source to be indicated

#### **Schedule 9** - Other Income

(Amount Rs.)

	Current Year	Previous Year
1. Profit on sale / disposal of Assets		
a) Owned assets	0.00	0.00
2. Assets acquired out of grants, or received free of cost	0.00	0.00
3. Export Incentives realized	0.00	0.00
4. Fees for Miscellaneous Services Consultancy Fee from Mabana Sugar Mills Ltd., U.P.	250000.00	0.00
5. Miscellaneous Income	0.00	2205.00
	250000.00	2205.00

### Schedule 10 - Expenditure on Grants, Subsidies etc.

(Amount Rs.)

		Current Year	Previous Year
a)	Grants given to Institutions/Organizations:-		
	Project Expenditure for Grant		
1)	Pilot project on MM-5 Mesco- Scale Weather Prediction Model (MGA)	50,000.00	00.00
2)	Pilot project for satellite Imagery for Internal Security (NRSC, Hyd. )	10,00,000.00	00.00
3)	Pilot project for Radio Software for Internal Security (SDR Technologies)	5,00,000.00	00.00
4)	SOI: 3-D High Resolution Satellite Imagery for J & K, for Internal Security Project .	2,22,23,067.00	00.00
5)	Pilot project :- 3-D Terrain Model , Seders, GPS in Nexal effected Area in State Govt. of Jharkhand and Madhya Pradesh (internal Security)	64,35,000.00	00.00
b)	Subsidies given to Institutions/Organizations	00.00	00.00
	TOTAL	3,02,08,067.00	00.00

Note - Name of the Entities, their Activities along with the amount of Grants/Subsidies are to be disclosed.



### **Schedule 11 - Establishment Expenses**

	Current Year	Previous Year
a) Salaries	42,47,731.00	1296139.00
b) O.T. Allowances and Bonus	3,407.00	00.00
c) TIFAC Employer Contribution for NPS	22992.00	00.00
d) Contribution of Provident Fund (Employees)	18000.00	00.00
e) NPS Employees Contributions	22760.00	00.00
f) Salary Arrear - 6 Pay Commission	138397.00	00.00
g) Expenses on Employees' Retirement and Terminal benefit (Gratuity)	00.00	00.00
h) Others (Specify)		
- Medical Expenses	75,302.00	4800.00
- Leave Travel Concession	00.00	00.00
- Leave Salary	00.00	00.00
- Transfer on Traveling Allowance	00.00	00.00
Previous Year		
TOTAL	45,28,589.00	1300939.00

## **Schedule 12 - Administrative Expenses Etc**

	Current Year	Previous Year
a) Repair and Maintenance	29,662.00	14064.00
b) Audit Fee	22060.00	5515.00
c) Car Hire Charges	11,55,630.00	344311.00
d) Postage, Telephone and Communication Charges	9,730.00	300875.00
e) Printing and Stationary	00.00	00.00
f) Traveling Expenses (Domestics)	9,630.00	69319.00
g) Expenses on Seminar/Workshops /Others Exp.(D)	00.00	00.00
h) Meeting Expenses	14,098.00	00.00
i) International Subscription for Data Card	1,90,537.00	120738.00
j) Stationery Exps.	41,979.00	00.00
k) Misc. Office Expenses	1,03,152.00	1625.00
l) Bank Charges	150.00	241.80
m) Internet Charges	8,87,074.00	206302.00
n) Travel Abroad	1,74,072.00	21000.00
o) Other Fixed Assets( balance payment for software at DST/DM Cell)	00.00	622656.00
p) Periodical & Magazine	748.00	00.00
q) Data Collection Charges	3,200.00	00.00
r) Advertisement Expenses	1,42,468.00	00.00
s) Telephone Expenses	62,500.00	00.00
t) Honorarium for project works	4,322.00	00.00
u) Others (Specify)	00.00	00.00
<u>Internal Security Project Administrative Exp.</u>		
1. Car Hiring Charges	3,61,811.00	00.00
2. Internet Charges	736.00	00.00
3. Meeting Expenses	12,500.00	00.00
4. Traveling Exp.(Domestic)	10,79,520.00	00.00
TOTAL	43,05,579.00	1706646.80



## Schedules Forming Part of Accounts for the period ended 31.03.2010

#### **SCHEDULE - 13**

#### ACCOUNTING POLICIES AND NOTES TO THE ACCOUNTS FOR THE YEAR ENDING 31<sup>st</sup> MARCH, 2010

#### A) ACCOUNTING POLICIES

- 1 The Council has adopted Mercantile System of the Accounting.
- **2** Fixed Assets are shown at cost Less Depreciation.
- **3** Depreciation has been calculated as per Income Tax Act, 1961.
- **4** The Grant / assistance to MGA by the beneficiaries, as per condition stated in EFC agreements with DST shall be accounted as income on receipt basis.
- 5 Contingent liabilities in respect of on-going Projects / Studies etc. are neither provided nor determined.

#### **B) NOTES TO THE ACCOUNTS**

- 1 No Stock of Publications and Studies, which are published and printed by the Council at the end of the year.
- 2 Previous year figures have been brought forwarded from 2008-09 of the MGA under Technology Information Forecasting and Assessment Council .
- **3.** There is no liability for gratuity on death / retirement of employees during the year, no provision for gratuity has been made.

As per our report of even date

#### For Chandiwala Virmani & Associates (Formerly Chandiwala Gupta & Associates) Chartered Accountants

Sd/- (Bharat Bhushan) Partner M. No: 087365	Sd/- Account Officer NMBA/MG	Sd/- Sr. Adm. Officer (B.K. Manthan)	Sd/- Registrar (NMBA/MGA)	Sd/- Mission Director (MGA/DST)
Date : 27.09.2010				

Date : 27.09.2010 Place : New Delhi

# Mission for Geo Spatial Applications Technology Information, Forecasting & Assessment Council (TIFAC) SCHEDULES FORMING PART OF ACCOUNTS FOR THE PERIOD ENDED 31.03.2010

#### SCHEDULE 14 - CONTINGENT LIABILITIES AND NOTES ON ACCOUNTS (Illustrative)

#### 1. CONTINGENT LIABILITIES

1.1. Claims against the Entity not acknowledged as debts – Rs. \_\_\_NIL\_\_\_ (Previous year Rs. \_\_\_NIL\_\_\_ )

#### 1.2. In respect of

- Bank guarantees given by/on behalf of the Entity Rs. \_\_\_NIL\_\_\_ (Previous year Rs. \_\_\_NIL\_\_\_)
- Letters of Credit opened by Bank on behalf of the Entity Rs. \_\_\_NIL\_\_ (Previous year Rs. \_\_\_NIL\_ )
- Bills discounted with banks Rs. \_\_\_\_NIL\_\_\_\_ (Previous year Rs. \_\_\_\_NIL\_\_\_\_)
- 1.3. Disputed demands in respect of :

Income-tax Rs. \_\_\_\_NIL\_\_\_ (Previous year Rs. \_\_\_\_NIL\_\_\_\_)

Sales-tax Rs. \_\_\_\_NIL\_\_\_ (Previous year Rs. \_\_\_\_NIL\_\_\_\_)

Municipal Taxes Rs. \_\_\_NIL\_\_\_\_ (Previous year Rs. \_\_\_NIL\_\_\_\_)

1.4. In respect of claims from parties for non-execution of orders, but contested by the Entity – Rs. \_\_NIL\_(Previous year Rs. \_\_NIL\_)

#### 2. <u>CAPITAL COMMITMENTS</u>

Estimated value of contracts remaining to be executed on capital account and not provided for (net of advances) Rs. \_\_\_\_NIL\_\_\_\_(Previous year Rs. \_\_\_\_NIL\_\_\_\_)

#### 3. LEASE OBLIGATIONS

Future obligations for rentals under finance lease arrangements for plant and machinery amount to Rs. \_NIL(Previous year Rs. NIL)

#### 4. CURRENT ASSETS, LOANS AND ADVANCES

In the opinion of the Management, the current assets, loans and advances have a value on realization in the ordinary course of business, equal at least to the aggregate amount shown in the Balance Sheet.

#### 5. TAXATION

In view of there being no taxable income under Income-tax Act 1961, no provision for Income Tax has been considered necessary.



#### (Amount-Rs.)

6.	FOF	REIGN CURRENCY TRANSACTIONS	<b>Current Year</b>	<b>Previous Year</b>
	6.1.	Value of Imports Calculated on C.I.F. Basis:		
		- Purchase of finished Goods	N.A.	N.A.
		- Raw Materials & Components (Including in transit)	N.A.	N.A.
		- Capital Goods	N.A.	N.A.
		- Stores, Spares and Consumables	N.A.	N.A.
	6.2	Expenditure in foreign currency:		
		a) Travel	N.A.	N.A.
		b) Remittances and Interest payment to Financial		
		Institutions/ Banks in Foreign Currency	N.A.	N.A.
		Other expenditure:		
		- Commission on Sale	N.A.	N.A.
		- Legal and Professional Expenses	N.A.	N.A.
		- Miscellaneous Expenses	N.A.	N.A.
	6.3	Earnings:		
		Value of Exports on FOV basis	N.A.	N.A.
	6.4	Remuneration to auditors:		
		- Taxation matters	0.00	0.00
		- For Management services	0.00	0.00
		- For certificate	0.00	0.00
		- Others	0.00	0.00

7. Corresponding figures for the previous year have been regrouped/rearranged, wherever necessary.

8. Schedules 1 to 14 are annexed to and form an integral part of the Balance Sheet as at 31.03.2010 and the Income and Expenditure Account for the year ended on that date.

As per our report of even date

#### For Chandiwala Virmani & Associates (Formerly Chandiwala Gupta & Associates) Chartered Accountants

Sd/- (Bharat Bhushan) Partner M. No: 087365	Sd/- Account Officer NMBA/MGA	Sd/- Sr. Adm. Officer (B.K. Manthan)	Sd/- Registrar (NMBA/MGA)	Sd/- Mission Director (MGA/DST)
Date : 27.09.2010 Place : New Delhi				

## Mission for Geo Spatial Applications Technology Information Forecasting & Assessment Cuncil (TIFAC) Receipts & Payments for the Year Ended 31.03.2010

	Receipts	Current Year	<b>Previous Year</b>
1)	OPENING BALANCES		
	a) Cash in hand	00.00	00.00
	b) Bank Balances		
	i) In current accounts	00.00	00.00
	<ul><li>ii) In Deposit accounts</li><li>iiii) Savings accounts(UBI)</li></ul>	00.00 826652.20	00.00 00.00
II)	GRANTS RECEIVED		
	a) From Government of India- Plan	85000000.00	11096000.00
	b) From Government-Non Plan	00.00	00.00
	c) From State Government	00.00	00.00
III)	INCOME FROM INVESTMENTS		
	a) Earmarked/Endow. Funds	00.00	00.00
	b) Own fund	00.00	00.00
IV)	INTEREST RECEIVED		
	a) On Bank Deposits (Schedule-) Less: Receivable on deposit	00.00	00.00
	b) Tour Advances	00.00	00.00
	c) Interest earned from S/B A/C (schedule-8)	582045.00	67399.00
	d) Security Deposit	00.00	00.00
<b>V</b> )	Other Income (specify) Schedule - 9 )	250000.00	2205.00
VI	AMOUNT BORROWED	00.00	00.00
VII	OTHER RECEIPTS		
Sund	lry Advance : CRPF Procurement of 10 workstations	7851318.00	00.00
	TOTAL (Rs.)	94510015.20	11165604.00



## **Mission for Geo Spatial Applications Technology Information Forecasting & Assessment Cuncil (TIFAC) Payments for Expenses**

(Amouts Rs.)

				-i	(Annouts KS.)
	Payment			Current Year	Previous Year
1)	Expenses				
	a) Establishment Expenses				
	Corresponding Schedule- 11	Rs.	4528589.00		
	Add: Opening Exp. Payable	Rs.	238821.00		
	Less Expenses Payable	Rs.	891993.00	3875417.00	1062118.00
	b) Administrative Expenses				
	(Corresponding to Schedule – 12	Rs.	4305579.00		
	Add:Opening Exp.Payable	Rs.	5515.00		
	Add : Loss on sale of F/Assets	Rs.	00.00		
	Less : Expenses Payables	Rs.	259342.00		
	Less : Loss on sale of F/Asets	Rs.	00.00		
	Less Provision for retainsion money				
	On fixed assets	Rs.	417961.00		
	(Previous year figure does not include				
	obsolescence expenses in it. )			3633791.00	1701131.80
	b) Expenditure on Grants, Subsidies etc. (A	As per S	Schedule 10)	30208067.00	00.00
2)	Addition in Fixed Assets				
	Library Book			3910.00	7215.00
	Computers and Peripherals			8441486.00	5332487.00
	Software for Computers			531440.00	2236000.00
	Erdas Software (I.S.)			3648173.00	00.00
	Furniture & Fixture (I.S.)			470784.00	00.00
	Office Equipment (I.S.)			171481.00	00.00
	Sky Line Software (I.S.)			1544400.00	00.00
3)	<b>Other Payments (Specify)</b>			00.00	00.00
	Contingent Advance: Sh. Manish Tirkha			10000.00	00.00
	Tour Advance : Major General G.S. Chand	ela		61150.00	00.00
	Petty Advance: Sh. B.K. Manthan			5000.00	00.00
4)	CLOSING BALANCE				
	Cash in Hand			00.00	00.00
	Cash at Bank (UBI)			14053598.20	826652.20
	Cash at Bank (BOB)			27851318.00	00.00
	Short Term Deposits			00.00	00.00
	Total			94510015.20	11165604.00

As per our report of even date

#### For Chandiwala Virmani & Associates (Formerly Chandiwala Gupta & Associates) **Chartered Accountants**

Sd/- (Bharat Bhushan) Partner M. No: 087365	Sd/- Account Officer NMBA/MGA	Sd/- Sr. Adm. Officer (B.K. Manthan)	Sd/- Registrar (NMBA/MGA)	Sd/- Mission Director (MGA/DST)
Date : 27.09.2010 Place : New Delhi				



# **Auditor's Report**

**Auditor's Report** 

To, The Members, National Mission on Bamboo Applications New Delhi – 110016

We have audited the attached Balance Sheet of National Mission on Bamboo Applications Under TECHNOLOGY INFORMATION, FORECASTING & ASSESSMENT COUNCIL (TIFAC), NEW DELHI as on 31<sup>st</sup> March 2010 and also the attached Income & Expenditure Accounts for the year ended on that date.

These financial statements are the responsibility of the management of the National Mission on Bamboo Applications-TIFAC. Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with auditing standards generally accepted in India.

Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by the management, as well as evaluating the overall presentations of the financial statements. We believe that our audit provides a reasonable basis for our opinion.

Subject to our Audit observations as per Annexure AR-1, comments given in the following Notes on accounts as per schedule -24 & 25, we report that:-

- 1) We have obtained all the information and explanation which to the best of our knowledge and belief were necessary for the purposes of our Audit.
- 2) In our opinion proper books of account as required by law have been kept by National Mission on Bamboo Applications-TIFAC.
- 3) The Balance sheet and Income and Expenditure Accounts dealt with by this report are in agreement with the books of account.
- 4) In our opinion and to the best of our information and according to the explanations given to us, the said accounts read with the schedules and notes thereto given the information required and given a true and fair view:
  - i) In case of Balance Sheet , of the state of affair of the NMBA as at  $31^{st}$  March 2010.
  - ii) In case of Income & Expenditure Account, of the excess of income over expenditure for the accounting year ended on that date.

#### For Chandiwala Virmani & Associates Chartered Accountants

Bharat Bhushan (Partner) M.No. 087365

Date : 27.09.2010 Place : New Delhi



# National Mission on Bamboo Applications Statutory Audit for Financial Year 2009-2010

- 1. A sum of Rs.2,28,965/- has been paid and booked as expenses in current year 2009-2010 while these expense relates to previous year 2008-09 for which no provision has been made in previous year.(Annex-1). Hence the surplus for the year has been shown as deflated to the extent of Rs. 2,28,965/-
- 2. A sum of Rs. 70,669/- has been paid in the financial year 2010-2011 while these expenses related to financial year 2009-2010 for which no provision has been made in current year. (Annexure-2). Hence the surplus for the year has been shown as inflated to the extent of Rs. 70,669/-
- 3. Internal control with regard to appraisal of the project, monitoring after disbursement and recovery process including initiation of legal process is weak which needs to be strengthened. **For example**:- In case of M/s Symbios Bamboo Products Pvt. Ltd., a Technology Development Assistance of Rs. 65 Lacs was sanctioned on 07-11-2007 and amount released is Rs. 15,27,311/-. Payment is made directly to supplier, machine have not been installed till date.

#### We have also noticed the following deficiencies in some cases:-

- a) Personal Guarantee has not been given by the owner/Director.
- b) Audited financial statement for the year ending March, 2008 and March, 2009 has not been obtained.
- c) Charge has not been registered with ROC.
- d) Copy of PAN Card of the Company and Guarantors not obtained.
- e) Utilization Certificate are not certified by C.A.
- f) Insurance has not been obtained for hypothecated assets.
- g) In spite of re-scheduling of re-payment the recovery is low. For example: In case of Konkan Speciality Poly Products Pvt. Ltd., the initial loan of Rs.413 lakh is re-scheduled in March,2009 and re-payment were to be started from 01.04.2009. Till date only Rs.32,00,000/- is recovered out of total due of Rs.58,41,000/-.

## Reply for the audit observations for the financial year 2009-10

#### 1. Reply to observation at serial no.1 and 2:

In respect of non provision for expenses payable for the F.Y. 2008-09 it may be mentioned that National Mission on Bamboo Applications being a non-profit, technology development and research oriented organization and fully funded through Central Government per accounting standards, it is not mandatory to make provision for previous period expenses except establishment expenditure like salary, tax etc.

#### 2. Reply to observation 3:

Adequate controls and measures with regular follow-up is being done in all cases. Visits of officers are being done to monitor implementation of projects. In respect of the instant case quoted of M/s Symbios Bamboo Products P Ltd., Nagaland, it may be mentioned that the balance sanctioned funds have not been released. The entire approved machinery in respect of the unit had reached the site but because of the transformer coil getting stolen, these machines could not be put to test run and performance of the same could not be verified by the monitoring committee formed for each project. So a conscious decision was taken by the management of National Mission on Bamboo Applications to withhold balance release of funds. Installation of a new transformer is to be done by the state electricity department over which the company or NMBA has no control.

In respect of the deficiencies (a) to (g) pointed out in some cases, it needs to be mentioned at the outset that bamboo is a Greenfield sector. National Mission on Bamboo Applications is engaged in research, development of products, process and technologies related to bamboo. Most of the bamboo as raw material is available in the north-east part of the country and for each and every technical, financial, commercial, legal and statutory requirements, National Mission on Bamboo Applications has to provide guidance, support and hand-holding of the entrepreneur. As per the approval, while extending Technology Development Assistance, National Mission on Bamboo Applications, being a part of TIFAC, is following the legal documentation practice of TIFAC. Utilization certificate obtained from the agencies is invariably certified by the Chartered Accountant in cases of Technology Development Assistance (TDA). (Regarding Charge registration with Registrar of Companies, Audited Financial Statements, Insurance of hypothecated assets NMBA keeps pursuing with the companies. In most of the cases necessary formalities have been complied with by the companies). The entrepreneur delays in submission of documents due to lack of knowledge and infrastructure at the places of registered offices of the companies. It may be mentioned in the instant case of M/s Konkan Speciality Poly Products Pvt Ltd that the project has not been fully implemented. Despite the TDA having been rescheduled, the unit is repaying not from the operations of the project approved by NMBA but from other sources.

3. As per agreement of various projects the financial assistance given by TIFAC/NMBA is to be refunded in instt. as per the specified period as mentioned in the agreement but it is analyzed that there are some companies have not repaid their installments according to the agreements. The details are as under:-

Out of which the following amount are over dues as on 31st March,2010.

Over dues Upto 6 month	Over dues more than 6 month to 1 year	Over dues more than 1 year upto 3 year	Total (Rs)
13904849/-	15227949/-	15833039/-	42725837/-



## National Mission on Bamboo Applications Technology Information, Forecasting & Assessment Council (TIFAC) BALANCE SHEET AS ON 31.03.2010

(Amount Rs.)

	ī		(Alliount KS.)
<b>CORPUS/CAPITAL FUND AND LIABILITIES</b>	Schedule	Current Year	Previous Year
CORPUS /CAPITAL FUND	1	244710229.29	150366027.29
RESERVES AND SURPLUS	2	00.00	00.00
EARMARKED/ ENDOWMENT FUNDS	3	00.00	00.00
SECURED LOANS AND BORROWINGS	4	00.00	00.00
UNSECURED LOANS AND BORROWINGS	5	00.00	00.00
DEFERRED CREDIT LIABILITIES	6	00.00	00.00
CURRENT LIABILITIES AND PROVISIONS	7	2224421.00	515986.00
TOTAL		246934650.29	150882013.29
ASSETS			
FIXED ASSETS (NET)	8	3513063.00	3295753.00
INVESTMENTS – FROM EARMARKED/ENDOWMENT FUNDS	9	00.00	00.00
INVESTMENTS – OTHERS	10	00.00	00.00
CURRENT ASSETS, LOANS, ADVANCES ETC.	11	243421587.29	147586260.29
CAPITAL WORK IN PROGRESS.		00.00	00.00
MISCELLANEOUS EXPENDITURE (to the extent not written off or adjusted)		00.00	00.00
TOTAL		246934650.29	150882013.29
SIGNIFICANT ACCOUNTING POLICIES	24		
CONTINGENT LIABILITIES AND NOTES ON ACCOUNTS	25		

As per our report of even date

For Chandiwala Virmani & Associates (Formerly Chandiwala Gupta & Associates) Chartered Accountants

Sd/-	Sd/-	<b>Sd</b> /-	Sd/-
(Bharat Bhushan)	Accounts Officer	Registrar	<b>Mission Director</b>
Partner	NMBA	NMBA	NMBA
M. No: 087365			

Date : 27.09.2010 Place : New Delhi

## National Mission on Bamboo Applications Technology Information, Forecasting & Assessment Council (TIFAC) Income & Expenditure Account for the year Ended as on 31.03.2010

(Amount Rs.)

			(Amount RS.
Income	Schedule / Annexure	Current Year	Previous Year
Income From Sales / Services	Schedule 12	0.00	0.00
Grants/Subsidies	Schedule 13	30000000.00	200000000.00
Fees / Subscriptions	Schedule 14	0.00	0.00
Income From Investment	Schedule 15	0.00	0.00
Income from Royalty, Publication Etc.	Schedule 16	102347.00	479193.00
Interest Earned	Schedule 17	6072655.00	5779020.00
Other Income	Schedule 18	65403123.00	35411704.00
Increase /Decrease in Stock of Finished Goods & Work in Progress	Schedule 19	0.00	0.00
Refund from Projects & Others			
Total (A)		371578125.00	241669917.00
EXPENDITURE			
Establishment Expenses	Schedule 20	9624417.00	6433791.00
Other Administrative Expenses etc.	Schedule 21	17983125.00	16213978.92
Expenditure on Grant ,Subsidies Etc.(Project Expenditures)	Schedule 22	249215527.00	188853854.00
Interest	Schedule 23	00.0	00.00
Depreciation on (Net Total at the Year end)	Schedule 08	410854.00	369392.00
Total (B)		277233923.00	211871015.92
Balance being excess of Income over Expenditure (A-B)		94344202.00	29798901.08
Balance being excess of Expenditure over Income (A-B)			
Balance being Surplus transferred to Corpus/Capital Fu	nd	94344202.00	

**Balance being Deficit transferred to Corpus/Capital Fund** 

As per our report of even date

For Chandiwala Virmani & Associates (Formerly Chandiwala Gupta & Associates) Chartered Accountants

Sd/-	Sd/-	<b>Sd</b> /-	Sd/-
(Bharat Bhushan)	Accounts Officer	Registrar	<b>Mission Director</b>
Partner	NMBA	NMBA	NMBA
M. No: 087365			

Date : 19.8.2009 Place : New Delhi



## Schedule 1 - Corpus / Capital Fund

(Amount Rs.)

	National Mission on Bamboo Applications Current Year Balance	National Mission on Bamboo Applications Previous Year Balance
Opening Balance	150366027.29	120567126.21
Amount of diff. in opening balance of fixed assets not taken from Tifac books of A/c in NMBA Fixed Assets schedule	00.00	00.00
Excess of Income Over Expenditure	94344202.00	29798901.08
Total	244710229.29	150366027.29
Excess of Expenditure over Income	00.00	00.00
Total	00.00	00.00
Closing Balance	244710229.29	150366027.29

#### Schedule 2 - Reserve and Surplus :

		Current Year	Previous Year
1.	Capital Reserve :		
	As per last Account	0.00	0.00
	Addition during the year	0.00	0.00
	Less : Deductions during the year	0.00	0.00
2.	Revaluation Reserves :		
	As per last Account	0.00	0.00
	Addition during the year	0.00	0.00
	Less : Deductions during the year	0.00	0.00
3.	Special Reserve :		
	As per last Account	0.00	0.00
	Addition during the year	0.00	0.00
	Less : Deductions during the year	0.00	0.00
4.	General Reserve :		
	As per last Account	0.00	0.00
	Addition during the year	0.00	0.00
	Less : Deductions during the year	0.00	0.00
То	tal	0.00	0.00

### Schedule 3 - Earmarked/Endowment Funds

(Amount Rs.)

	Current Year	Previous Year
a) Opeing Balance of the Funds	0.00	0.00
b) Additions to the funds		
i) Donations / Grants	0.00	0.00
ii) Income from Investments made on account of Funds	0.00	0.00
iii) Other Additions (Specify)	0.00	0.00
Total (a+b)	0.00	0.00
c) Utilization / Expenditure towards objectives of funds		
i) Capital Expenditure		
Fixed Assets	0.00	0.00
Other	0.00	0.00
ii) Revenue Expenditure		
Salary, Wages and allowance etc	0.00	0.00
Rent	0.00	0.00
Other Administrative Expenses	0.00	0.00
Total (c)	0.00	0.00
Net Balance as at the year end (a+b-c)	0.00	0.00

Note : 1 Disclosures shall be made under relevant heads based on conditions attached to the Grants.

2) Plan Funds received from Central / State Governments are to be shown as separate Funds and not to be mixed up with any other funds



### **Schedule 4** - Secured Loans and Borrowings

(Amount Rs.)

	Current Year	Previous Year
1. Central Government	0.00	0.00
2. State Government (Specify)	0.00	0.00
3. Financial Institutions		
a) Term Loans	0.00	0.00
b) Interest accrued and dues	0.00	0.00
4. Banks :		
a) Term Loans		
- Interest accrued and due	0.00	0.00
- Other Loans (Specify)	0.00	0.00
- Interest accrued and due	0.00	0.00
5. Other Institutions and Agencies	0.00	0.00
6. Debentures and Bonds	0.00	0.00
7. Others (Specify)	0.00	0.00
Total	0.00	0.00

Note : Amounts due within one year

### **Schedule 5 - Unsecured Loans and Borrowings**

(Amount Rs.)

	Current Year	Previous Year
1. Central Government	0.00	0.00
2. State Government (Specify)	0.00	0.00
3. Financial Institutions	0.00	0.00
4. Banks :		
- Term Loans	0.00	0.00
- Other Loans (Specify)	0.00	0.00
5. Other Institutions and Agencies	0.00	0.00
6. Debentures and Bonds	0.00	0.00
7. Fixed Deposites	0.00	0.00
8. Others (Specify)	0.00	0.00
Total	0.00	0.00

Note : Amounts due within one year

### **Schedule 6 - Deferred Credit Liabilities**

(Amount Rs.)

	Current Year	Previous Year
a) Acceptances secured by Hypothication of Capital Equipment and other assets	0.00	0.00
b) Others	0.00	0.00
Total	0.00	0.00

Note : Amounts due within one year



### **Schedule 7 - Current Liabilities and Provisions**

		Current Year	Previous Year
A) Cu	rrent Liabilities		
1.	Acceptances	00.00	00.00
2.	Sundry Creditors		
	a) For Goods	00.00	00.00
	b) Others	00.00	00.00
3.	Advances Received		
	Earnest Money Deposit : Anil Enterprises, Dewas	100000.00	00.00
	Earnest Money Deposit : Garnet Tools , Dewas	100000.00	00.00
	Earnest Money Deposit : OVN Bio Energy P.Ltd. ,Gurgaon	100000.00	00.00
	Earnest Money Deposit : Sree Engineers, Hyderabad	100000.00	00.00
	Earnest Money Deposit : Deva Bamboo & Allied Ind., Imphal Earnest Money Deposit : Dhanjal Mechanical Works P. Ltd.	5000.00 100000.00	00.00
	Earnest Money Deposit : Dranjar Mechanical Works F. Ltd. Earnest Money Deposit : Prince Carbon & Charcoal Ind.	5000.00	00.00
	Earnest Money Deposit : R.D. industries Corp., Kolkatta	100000.00	00.00
4.	Interest accrued but not due on :		
	a) Secured Loans / Borrowings	00.00	0.00
	b) Unsecured Loans / Borrowings	00.00	0.00
5.	Statutory Liabilities		
	a) Over Due	00.00	0.00
	b) Others	00.00	0.00
6.	Other Current Liabilities		
	a) Salary Payable	579214.00	494986.00
	b) Aduti Fee Payable	33090.00	20000.00
	c) Conveyance Advance payable	1000.00	1000.00
	d) Administrative Expenses Payable	389675.00	00.00
Total	(A)	1612979.00	515986.00
B) Pr	ovision		
1.	For Taxation	00.00	00.00
2.	Gratuity	00.00	00.00
3.	Superannuation / Pension	408472.00	00.00
4.	Accumulated Leave Encashment	202970.00	00.00
5.	Trade Warranties / Claims	00.00	00.00
6.	Others (Specify)	00.00	00.00
Total	(B)	611442.00	00.00
Total	(A+B)	2224421.00	515986.00

### **Schedule 8-Fixed Assets**

Amount - Rs)

			GROSS BLOCK		DEPRECIATION		NET	BLOCK			
		Cost / valuation As at beginning of the year	Additions during the year	Deductions during the year	Cost / valuation at the year end	Dep. upto 31.03.09	On Opening Balance	On Addition during the year	Total upto the year end	As at the current year end	As at the previous year end
A.	FIXED ASSETS										
1.	a) Freehold	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	b) Leasehold	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2.	BUILDING										
	a) On Freehold Land	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	b) On Leasehold Land	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	c) Ownership Flats/ premises	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	d) Superstructures on Land	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	e) Interior Works	3319566.00	0.00	0.00	3319566.00	456690.00	143144.00	0.00	599834.00	2719732.00	2862876.00
3.	Plant Machinery & Equipment	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4.	VEHICLES	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5.	FURNITURE & FIXTURES	103527.00	0.00	0.00	103527.00	25093.00	7843.00	0.00	32936.00	70591.00	78434.00
6.	OFFICE EQUIPMENT	200828.00	163770.00	0.00	364598.00	50684.00	22522.00	23646.00	96852.00	267746.00	150144.00
7.	COMPUTER/ PERIPHERALS	937104.00	316220.00	0.00	1253324.00	784949.00	91293.00	103431.00	979673.00	273651.00	152155.00
8.	Electric Installations	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
9.	LIBRARY BOOKS	77913.00	525.00	0.00	78438.00	25769.00	7822.00	79.00	33670.00	44768.00	52144.00
10.	TUBEWELL & W. Supply	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
11.	Fire Alarm Systems	0.00	147649.00	0.00	147649.00	0.00	0.00	11074.00	11074.00	136575.00	0.00
12.	OTHER FIXED ASSETS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	TAL OF CURRENT	4638938.00	628164.00	0.00	5267102.00	1343185.00	272624.00	138230.00	1754039.00	3513063.00	3295753.00
PF	EVIOUS YEAR	4366774.00	272164.00	0.00	4638938.00	973793.00	281060.00	88332.00	1343185.00	3295753.00	3392981.00
В.	CAPITAL WORK IN PROGRESS										



## Schedule 9 - Investments from Earmarked/Endowment Funds

(Amount Rs.)

	Current Year	Previous Year
1. In Government Securities	0.00	0.00
2. Other approved Securities	0.00	0.00
3. Shares	0.00	0.00
4. Debentures and Bonds	0.00	0.00
5. Subsidiaries and Joint Ventures	0.00	0.00
6. Others (to be Specified)	0.00	0.00
Total	0.00	0.00

#### **Schedule 10 - Investments - Others**

		Current Year	Previous Year
1.	In Government Securities	0.00	0.00
2.	Other approved Securities	0.00	0.00
3.	Shares	0.00	0.00
4.	Debentures and Bonds	0.00	0.00
5.	Subsidiaries and Joint Ventures	0.00	0.00
6.	Others (to be Specified)	0.00	0.00
	Total	0.00	0.00

### Schedule 11 - Current Assets, Loans, Advances Etc.

	Current Year	Previous Year
A. CURRENT ASSETS		
1. Inventories:		
a) Stores and Spares	0.00	0.00
b) Loose Tools	0.00	0.00
c) Stock-in-trade		
i) Finished Goods	0.00	0.00
ii) Work-in-progress	0.00	0.00
iii) Raw Materials	0.00	0.00
2. Sundry Debtors:		
3. Cash balances in hand (including cheques / drafts and imprest)	156094.00	0.00
4. Bank Balances:		
a) With Scheduled Banks: (Union Bank of India)		
On Current Accounts	0.00	0.00
On Deposit Accounts (Short term deposits)	0.00	0.00
On Savings Accounts	243033671.29	147547815.29
On Interest Receivable	0.00	0.00
5. With non-Scheduled Banks:		
On Current Accounts	0.00	0.00
On Deposit Accounts	0.00	0.00
On Savings Accounts	0.00	0.00
On Interest Receivable	0.00	0.00
6. Post Office-Savings Accounts	0.00	0.00
TOTAL (A)	243189765.29	147547815.29



	Current Year	Previous Year
B. LOANS, ADVANCES AND OTHER ASSETS		
1. Loans	00.00	00.00
<ol><li>Advance and other amounts recoverable in cash or in kind or for value to be received.</li></ol>		
a) On capital Account	00.00	00.00
b) Advance for project materials	00.00	00.00
c) Prepayments	00.00	00.00
d) Others		
- Security Deposit :Tata Indicom	200.00	200.00
- Security Deposit: Sh. Harish C. Gaur	00.00	25000.00
- Tour Advance : Ms. Tajinder Kaur	00.00	3000.00
- Tour Advance : Sh. Sudhir Pande	8000.00	8000.00
- Petty Cash Advance : Ms. Suja S. George	00.00	2000.00
- Petty Cash Advance : Sh. Baljit singh Bansal	5000.00	00.00
- Tour Advance : Sh. Deepak Chauhan	3000.00	00.00
3. Income Accrued:-		
a) On Investments from Earmarked/Endowment Fund	s 00.00	00.00
b) On Investment – Others	00.00	00.00
c) On Loans and Advances	00.00	00.00
d) Others (includes income due unrealized		
- Lease Accommodation :Sh. Aseem Narain	00.00	245.00
4. Claims Receivable TDS (A.Y2010-11)	215622.00	00.00
Total – B	231822.00	38445.00
Total (A + B)	243421587.29	147586260.29

#### Schedule 12 - Income from Sales / Services

(Amount Rs.)

	Current Year	Previous Year
1. Income from Sales		
a) Sale of finished Goods	0.00	0.00
b) Sale of Row Material	0.00	0.00
c) Sale of Scraps	0.00	0.00
2. Income from Services		
a) Labour and Processing Charges	0.00	0.00
b) Professional / Consultancy Services	0.00	0.00
c) Agency Commissions and Brokerages	0.00	0.00
d) Maintenance Services (Equipment/Property)	0.00	0.00
e) Others (Specify)	0.00	0.00
Total	0.00	0.00

## Scheudel 13 - Grants / Subsidies (TIFAC) (Irrevocable Grants & Subsidies Received)

	Current Year	Previous Year
1. From Central Government		
A) NMBA Grant		
Grants in Aid (Plan)	30000000.00	200000000.00
Grant in Aid (Non-Plan)	0.00	0.00
2. State Government(s)	0.00	0.00
3. Government Agencies	0.00	0.00
4. Institutions Welfare Bodies	0.00	0.00
5. International Organisations	0.00	0.00
6. Other (Specify)	0.00	0.00
Total	30000000.00	20000000.00



#### **Schedule 14 - Fees / Subscriptions**

(Amount Rs.)

	Current Year	Previous Year
1. Entrance Fees	0.00	0.00
2. Annual Fees / Subscriptions	0.00	0.00
3. Seminar / Program Fees	0.00	0.00
4. Consultancy Fee	0.00	0.00
5. Others (Specify)	0.00	0.00
Total	0.00	0.00

### Schedule 15 - Income from Investments (Income on Invest. From Earmarked/Endowment Funds transferred to Funds)

(Amount Rs.)

Particulars		Investment from Earmarked Funds		<b>Investment Others</b>	
	Current Year	Previous Year	Current Year	Previous Year	
1. Interest					
a) On Govt. Securities	0.00	0.00	0.00	0.00	
b) Other Bonds/Debentures	0.00	0.00	0.00	0.00	
2. Dividends					
a) On shares	0.00	0.00	0.00	0.00	
b) On Mutual Fund Securities	0.00	0.00	0.00	0.00	
3. Rents	0.00	0.00	0.00	0.00	
4. Others (Specify)	0.00	0.00	0.00	0.00	
Total	0.00	0.00	0.00	0.00	

Transferred to Earmarked/Endowment funds.

#### Schedule 16 - Income from Royalty, Publication Etc.

(Amount Rs.)

	Current Year	Previous Year
1. Income from Royalty	00.00	00.00
2. Income from Publications	102347.00	479193.00
3. Others (Specify)	00.00	00.00
4. Interest : Mobilisation Advance. (Civil)	00.00	00.00
TOTAL	102347.00	479193.00

#### **Schedule 17 - Interest Earned (Regular)**

	Current Year	Previous Year	
1. On Term Deposits			
a) With Scheduled Banks	0.00	0.00	
b) With Non-Scheduled Banks	0.00	0.00	
c) With Institutions	0.00	0.00	
d) Others	0.00	0.00	
2. On Savings Accounts			
a) With Scheduled Banks	6072655.00	5779020.00	
b) With Non-Scheduled Banks	0.00	0.00	
c) Post Office Saving Accounts	0.00	0.00	
d) Others	0.00	0.00	
3. On Loans :			
a) Employees / Staff	0.00	0.00	
b) Others (Long term advances)	0.00	0.00	
4. Interest on Debtors and Other Receivables	0.00	0.00	
Total	6072655.00	5779020.00	
Note : Tax deducted at source to be indicated			



### **Schedule 18** - Other Income

		Current Year	Previous Year
1.	Profit on Sale/ disposal of Assets		
	a) owned assets	0.00	0.00
2.	Assets acquired out grants, of received free of cost	0.00	0.00
3.	Export Incentives realized	0.00	0.00
4.	Fees for Miscellaneous Services	0.00	0.00
5.	Miscellaneous Income		
	- Other receipts (Documentary Film)	00.00	28000.00
	- Other Receipt (Lease Accommodation/ License Fee )	1225.00	2940.00
	- Other Receipt (Tender for Machine Suppliers for training centre)	16000.00	00.00
	- Other Income (supply of machine to Embee Project/TIFAC)	00.00	3175540.00
	- Others Receipts ( Short term TDA & Misc. Income)	2027924.00	00.00
-	Project Grant Unspent Balance Refund		
	AFRI-Jodhpur (Unspent balance for Multi Locational Project)	00.00	40802.00
	UBKV, West Bengal (Unspent balance for project of Multi Locational)	00.00	126484.00
	SDC: Unspent balance as supply of prefab structure advance-RV-TIFAC	187894.00	00.00
	TERI, New Delhi (Unspent balance for bamboo setum project	00.00	560783.00
-	Project Refund		
	Refund: NFPL, Nagaland 1800TPA Bamboo Shoot project	30000.00	15000.00
	Refund: SPF Bongaigaon-sliver making	00.00	10000.00
	Refund: Deva, Imphal Sliver & Furniture unit at Imphal (NEDFI)	169212.00	247892.00
	Refund: Basera Building Centre, Bhopal	159000.00	238500.00
	Refund: Kosons Forest Products Pvt. Ltd., Guwahati	147787.00	80000.00
	Refund: Prince Charcoal & Carbon Ind. Najibabad	00.00	150000.00
	Refund: Erose Way Pvt. Ltd., Nagpur	23250.00	30000.00
	Refund: SMWPL, Bangalore	2772000.00	2772000.00
	Refund: Suta Bamboo Ind. Namsai	70000.00	83500.00
	Refund: SVM Expension-EF Bamboo Ply Unit	00.00	546100.00

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## Schedule 18 - Other Income (Contd.)

	Current Year	Previous Year
Refund: GT, Dewas mach. Instrument for better Qty.	680000.00	680000.00
Refund: HPC, Nagon Paper Mills Ltd. For Bamboo Dust Gassifire	7000000.00	00.00
Refund: Wmpil, Ludhiana for Adv. Machine Mfg. Unit	340000.00	562615.00
Refund: ZBI Bamboo Processing Flattended bamboo Unit at Lohit	69700.00	139400.00
Refund: Vedha Machanized unit at Nagpur	82000.00	245000.00
Refund: DMWPL, Secondary bamboo Industries, Kolkata	528720.00	571280.00
Refund: Massing Product P. Ltd., Bamboo Board Unit at Guwahati	200000.00	277700.00
Refund: TBI, Est. of Bamboo Mat Unit at Tezu	100000.00	40000.00
Refund: ABCPL, Est. of Bamboo Durosam/Eglu Unit, Kolkata	2750000.00	2750000.00
Refund: Barak Bamboo Cane & Craft P. Ltd,Bamboo Cane Unit, Silchar	57000.00	85000.00
Refund: Marboh Bamboo Product P. Ltd.,Bamboo Board unit at Meghalaya	40000.00	102500.00
Refund: Patkai Bamboo P. Ltd., Est. of Bamboo Board unit at Chongkham	850000.00	1000000.00
Refund: Rahino Bamboo Industries, Est. of Bamboo Unit at Guwahati	12884.00	100000.00
Refund: Swaranga Agrotech P. Ltd.: Est. of Bamboo Board Unit-Tinsukia	50000.00	50000.00
Refund: Sree Govind Industries, Est. of Bamboo mat unit, Sindhudurg	00.00	60000.00
Refund: Shailesh Nursery Farm, Est. of plantation Farm unit-Kolhapur	336000.00	336000.00
Refund: Zonun Mat Ply P.Ltd., Est. of Stick making unit at Mizoram	1000000.00	250800.00
Refund: Banik Agro Forest Products P. Ltd., Agartala	200000.00	00.00
Refund: Ceeke Bamboo & Wood Products P.Ltd., Aizwal	825000.00	00.00
Refund: Excel Bamboo Enterprises, Kohima	100000.00	00.00
Refund: Grace RTP Bamboo P. Ltd., Mizoram	2400000.00	00.00
Refund: HPC, Kolkatta for Tissu Cultur Laboratory	1500000.00	00.00
Refund: Kerla State Bamboo Corp. Ltd., Angamaliya	100000.00	00.00
Refund: Konkan Specialities for thermo plastic unit at Mangalore	2000000.00	00.00
Refund: Luit Valley Food processing P.Ltd., Jorhat	63200.00	00.00
Refund: Mizoram Joss Stick Industries,	15000.00	00.00
Refund: P.S. Green Gold Bamboo Industries, Tripura	20000.00	00.00
Refund: Rity Foods Processing P.Ltd.,Guwahati	15000.00	00.00
Refund: Sri Dharamsthala Siri Gramudhyoge Samiti, Karnataka	1100000.00	00.00
Refund: St. Xavier's for Gassifire Unit at Bisram Ganj	20000.00	00.00
Refund: Vighnraj Bamboo Products P. Ltd., Guwahati	167500.00	00.00
Refund: Zocraft Bamboo P. Ltd., Aizwal	5000.00	00.00
		1



## Schedule 18 - Other Income (Contd.)

	<b>Current Year</b>	Previous Year
Project Contribution/subsides for demonstration of Structure		
- Prefab Partner Contribution from 56 Engg. Regt.	645000.00	3284000.00
<ul> <li>Prefab Partner Cont. from CEO, C.G. State Medicinal Plant Board, Raipur</li> </ul>	443520.00	00.0
- Prefab Partner cont. from College of Vocational Studies, N. Delhi	1419264.00	00.0
- Partner Contributions of prefab structure from ITDC, Pondichery	00.00	2400000.0
- Partner Contributions of prefab Structure from Delhi University	2335413.00	2775868.0
- Partner Contribution of prefab Structure from Govt. of Nagaland	00.00	3300000.0
- Partner Contribution of prefab Structure from Rajasthan Council	00.00	6000000.0
- Partner Contribution of prefab Structure from Jammu & Kashmir Govt.	00.00	2294000.0
- Partner Contribution from Kamala Nehru College, New Delhi	1615660.00	00.0
- Partner Contribution from Sri Venkateshware College, New Delhi	1114580.00	00.0
- Partner Contribution from PGDAV College, New Delhi	3801600.00	00.0
- Partner Contribution from Acharya Narendra Dev College	1394531.00	00.0
- Partner Contribution from Dayal Singh College, New Delhi	3530587.00	00.0
- Partner Contribution from Lady Sriram College, New Delhi	636310.00	00.0
- Partner contribution from Maharaja Agrasen College	972160.00	00.0
- Partner Contribution from Maitreyi College , New Delhi	570240.00	00.0
- Partner Contribution from Atma Ram Sanatan Dharam College, New Delhi	1449281.00	00.0
- Partner Contribution from Bihar State Tourisam Development Corp., Gaya	5427500.00	00.0
- Partner Contribution from NIFT,, Kangra (12 Strct.)	6004762.00	00.0
- Partner Contribution from Delhi Art College, New Delhi	1123300.00	00.0
- Partner Contribution from IFCI Ltd.,	1879119.00	00.0
- Partner Contribution from ILF&S and TBM, Tripura	2559000.00	00.0
- Partner Contribution from NBDA, Dimapur	250000.00	00.0
Total	65403123.00	35411704.0

### Schedule 19 - Increase / (Decrease) in Stock of Finished Goods & Work in Progress

		Current Year	Previous Year
a)	Closing Stock		
	- Finished Goods	0.00	0.00
	- Work-in-Progress	0.00	0.00
b)	Less : Opening Stock		
	- Finished Goods	0.00	0.00
	- Work-in-Progress	0.00	0.00
Ne	t Increase/(Decrease) [a-b]	0.00	0.00



### Schedule 20 - Establishment Expenses (NMBA)

	Current Year	Previous Year
a) Salaries	6384001.00	4361380.00
b) Allowances and Bonus	13816.00	10362.00
c) TIFAC Employer Contribution to Provident Fund	9819.00	141730.00
d) Contribution of Provident Fund (Employees)	00.00	13000.00
e) Salary Arrear - 6 <sup>th</sup> Pay Commission	1952417.00	1361855.00
f) Expenses on Employees' Retirement and Terminal benifit(Gratuity)	112060.00	00.00
g) Others (Specify)		
- Consultancy Charges	00.00	00.00
- Wages	00.00	00.00
- Honorarium	7212.00	00.00
- Medical Expenses	99582.00	181524.00
- Leave Travel Concession	00.00	172313.00
- Leave Salary	302273.00	00.00
- Lease Accommodation	75000.00	147000.00
- Transfer on Traveling Allowance	00.00	00.00
- Tuition Fee	27200.00	14400.00
- Pension Contribution	635023.00	11902.00
- Periodical & Magazine Expenses	6014.00	9965.00
- G.P.F. (Sh. Raju Sharma )	00.00	8000.00
- Group Insurance	00.00	360.00
TOTAL	9624417.00	6433791.00

### **Schedule 21 - Administrative Expenses Etc**

	Current Year	Previous Year
a) Repairs and Maintenance	219592.00	122385.00
b) Rent, Rates and Taxes	00.00	00.00
c) Car Hire Charges	2757517.00	2005081.00
d) Postage & Courier Charges	75815.00	291036.00
e) Printing and Stationary	501988.00	1687504.00
f) Traveling Expenses (Domestics)	1969155.00	2117710.00
g) Expenses on Seminar/Workshops /Others Exp.(D)	5746868.00	5386689.00
h) Meeting Expenses	953660.00	167153.00
i) Expenses on Fees	00.00	00.00
j) Auditors Remuneration	35150.00	22472.00
k) Advertisement and Publicity	448133.00	484263.00
I) Conveyance Charges	127407.00	00.00
m) Telephone and Communication Charges	216119.00	00.00
n) Internet Charges	338890.00	00.00
o) Subscriptions for Magazines	10175.00	00.00
p) Others (Specify)		
- Stationery	276873.00	212466.00
- MISC. Office Expenses	399408.00	389661.00
- Periodical & Magazine	00.00	00.00
- NID Publication	11352.00	00.00
- Bank Charges	13837.00	11484.92
q) Maintenance of Vishwakarma Bhavan	00.00	00.00
r) Loss on Sale of Fixed Assets	00.00	00.00
s) Legal Charges	00.00	00.00
t) Travel Abroad	3447455.00	2960095.00
u) International Conference on NMBA	433731.00	355979.00
v) Other Fixed Assets	00.00	00.00
TOTAL	17983125.00	16213978.92



# National Mission on Bamboo Applications Technology Information, Forecasting & Assessment Council (TIFAC) Schedules Forming Part of Income & Expenditure for the year Ended 31.03.2010

#### Schedule 22 - Expenditure on Grants, Subsidies Etc.

(Amount Rs.)

	Current Year	Previous Year
a) Grants given to Institutions/Organisations		
Project Expenditure Grant (As per Annexure - A)	148266397.00	138998640.00
Project Expenditure Loan (As per Annexure - B)	100949130.00	49855214.00
b) Subsidies given to Institutions/organisations	0.00	0.00
Total	249215527.00	188853854.00

Note : Name of the entities, their activities along with the amount of the grant/subsidies are to be disclosed

#### Schedule 23 - Interest

	Current Year	Previous Year
a) On Fixed Loans (Including Bank Charges)	0.00	0.00
b) On Other Loans (Including Bank Charges)	0.00	0.00
c) Others (Specify)	0.00	0.00
Total	0.00	0.00

### National Mission on Bamboo Applications Technology Information, Forecasting & Assessment Council (TIFAC) Schedules Forming Part of Account for the year ended 31.03.2010

#### Schedule – 24

#### ACCOUNTING POLICIES AND NOTES TO THE ACCOUNTS FOR THE YEAR ENDING 31<sup>st</sup> MARCH, 2010

#### A) ACCOUNTING POLICIES

- **1** The Council has adopted Mercantile System of Accounting.
- 2 Fixed Assets are shown at cost Less Depreciation.
- **3** Prior period and extra ordinary items and changes in accounting policies having material impact on the financial affairs of the Council are disclosed.
- 4 Depreciation has been calculated as per Income Tax Act, 1961.
- 5 Amounts released under various projects (Grant/repayable technology assistance) are accounted as expenditure for the year in which the same are released, irrespective of the fact that the amounts so released may not have been fully utilized towards the projects during the accounting year.
- **6** The Refund of grant / assistance to NMBA by the beneficiaries, as per condition stated in agreements with them shall be accounted as income on receipt basis.
- 7 Contingent liabilities in respect of on-going Projects / Studies etc. are neither provided nor determined.
- **8** Grant in aid utilized for the year 2007-08, 2008-09 and 2009-10 includes projects specific counter part contribution from Implementing Agency.

#### **B)** NOTES TO THE ACCOUNTS

- **1** Stock of Publications and Studies, which are published and printed by the Council and distributed at a cost are not accounted for as Stock in hand at the end of the year.
- 2 Audited financial statements / utilization statements duly certified by Chartered Accountants in respect of grant utilized / released during the year has not yet been received in some cases from the implementing agencies.
- **3** Previous year figures have been regrouped wherever necessary, to make them comparable with current year figures.
- 4. There is no liability for gratuity on death / retirement of employees during the year, nor provided for future liability.

#### For Chandiwala Virmani & Associates (Formerly Chandiwala Gupta & Associates) Chartered Accountants

Sd/-	<b>Sd</b> /-	Sd/-	Sd/-
(Bharat Bhushan)	Accounts Officer	Registrar	<b>Mission Director</b>
Partner	NMBA	NMBA	NMBA

#### M. No: 087365

Date : 27.09.2010 Place : New Delhi



## National Mission on Bamboo Applications Technology Information, Forecasting & Assessment Council (TIFAC) Schedules Forming Part of Account for the year ended 31.03.2010

#### Schedule 25- Contingent Liabilities and Notes on Accounts (Illustrative)

#### 1. CONTINGENT LIABILITIES

1.1. Claims against the Entity not acknowledged as debts - Rs. \_\_\_NIL\_\_\_ (Previous year Rs. \_\_\_NIL\_\_\_ )

#### 1.2. In respect of

- Bank guarantees given by/on behalf of the Entity Rs. \_\_\_NIL\_\_\_ (Previous year Rs. \_\_\_NIL\_\_\_ )
- Letters of Credit opened by Bank on behalf of the Entity Rs. \_\_\_NIL\_\_ (Previous year Rs. \_\_\_NIL\_ )
- Bills discounted with banks Rs. \_\_\_\_NIL\_\_\_\_ (Previous year Rs. \_\_\_\_NIL\_\_\_\_)
- 1.3. Disputed demands in respect of :

Income-tax Rs. \_\_\_\_NIL\_\_\_ (Previous year Rs. \_\_\_\_NIL\_\_\_ )

Sales-tax Rs. \_\_\_\_NIL\_\_\_ (Previous year Rs. \_\_\_\_NIL\_\_\_\_)

Municipal Taxes Rs. \_\_\_NIL\_\_\_\_ (Previous year Rs. \_\_\_NIL\_\_\_\_)

1.4. In respect of claims from parties for non-execution of orders, but contested by the Entity – Rs. \_\_NIL\_(Previous year Rs. \_\_NIL\_)

#### 2. CAPITAL COMMITMENTS

Estimated value of contracts remaining to be executed on capital account and not provided for (net of advances) Rs. \_\_\_\_NIL\_\_\_ (Previous year Rs. \_\_\_\_NIL\_\_\_\_)

#### 3. LEASE OBLIGATIONS

Future obligations for rentals under finance lease arrangements for plant and machinery amount to Rs. \_NIL(Previous year Rs. NIL)

#### 4. CURRENT ASSETS, LOANS AND ADVANCES

In the opinion of the Management, the current assets, loans and advances have a value on realization in the ordinary course of business, equal at least to the aggregate amount shown in the Balance Sheet.

#### 5. <u>TAXATION</u>

In view of there being no taxable income under Income-tax Act 1961, no provision for Income Tax has been considered necessary.



			(Amount-Rs
FOR	EIGN CURRENCY TRANSACTIONS	<b>Current Year</b>	<b>Previous Year</b>
6.1.	Value of Imports Calculated on C.I.F. Basis:		
	- Purchase of finished Goods	N.A.	N.A.
	- Raw Materials & Components (Including in transit)	N.A.	N.A.
	- Capital Goods	N.A.	N.A.
	- Stores, Spares and Consumables	N.A.	N.A.
6.2	Expenditure in foreign currency:		
	a) Travel	N.A.	N.A.
	b) Remittances and Interest payment to Financial		
	Institutions/ Banks in Foreign Currency	N.A.	N.A.
	Other expenditure:		
	- Commission on Sale	N.A.	N.A.
	- Legal and Professional Expenses	126184.00	N.A.
	- Miscellaneous Expenses	N.A.	N.A.
3.3	Earnings:		
	Value of Exports on FOV basis	N.A.	N.A.
6.4	Remuneration to auditors:		
	- Auditors Fee	33090.00	20000 .00
	- Taxation matters	0.00	0.00
	- For Management services	0.00	0.00
	- For certificate	0.00	0.00
	- Others	0.00	0.00

7. Corresponding figures for the previous year have been regrouped/rearranged, wherever necessary.

8. Schedules 1 to 25 are annexed to and form an integral part of the Balance Sheet as at 31.03.2010 and the Income and Expenditure Account for the year ended on that date.

For Chandiwala Virmani & Associates (Formerly Chandiwala Gupta & Associates) Chartered Accountants

<b>Sd</b> /-	Sd/-	<b>Sd</b> /-	Sd/-
(Bharat Bhushan)	Accounts Officer	Registrar	<b>Mission Director</b>
Partner	NMBA	NMBA	NMBA

#### M. No: 087365

Date : 27.09.2010 Place : New Delhi

Annexure - A



# NATIONAL MISSION ON BAMBOO APPLICATIONS Project Expenditure Grand in Aid (Project) 1<sup>st</sup> April, 2009 to 31<sup>st</sup> March, 2010

Particulars	Current Year	Previous Year
<ul> <li>Ads: Study on Bamboo Base Small &amp; Medium Enterprises in M.P. and Chhatishgardh</li> </ul>	00.00	2,66,100.00
- BDO-Ruksin: Establishment of Bamboo Shoot Processing Unit at Tuli with NBDA (new)	00.00	4,39,643.00
- BENU-Tripura: Est. for Demonstration treatment Eqpt. for Round Bamboo unit	00.00	2,000.00
- CIHCS: AP: Est. of 25 Kwe Gassifire unit at West Kamang Distt. AP	00.00	4,09,533.00
- CIPET; Rehabilitation Programme for Andaman & Nicobar and Portblair for Tsunami project	7,17,226.00	9,08,913.00
<ul> <li>Ctp – Enlistment of Engg. Bamboo Structure under DGS&amp;D With CTP, Bangalore</li> </ul>	1,21,958.00	00.00
- DF, B:Est. of 25 Kwe Gasifire System with Dristi Foundation, Madhubani , Bihar (Ovn Bio Tech)	00.00	1,02,302.00
- DFO, H.D. BTC, Kokrajhar, 20 ha Plantation at Karigaon, BTC	00.00	2,05,000.00
- GGFPPL: Product Promotion Grant for bamboo shoot at The Bamboo Store, Delhi & others.	5,77,000.00	3,25,625.00
- Govt. of Sikkim: Est. of Pressure Treatment Equipment for Horticulture Division Govt. of Sikkim (new)	00.00	3,60,298.00
- IHBT: Mapping, Seedling and productivity assessment of bamboo in Kangra, Una, Hamirpur with Ihbt,Palampur.	89,150.00	00.00
- IIT, Delhi: Study on Bleaching & Antimicrobial Treatment & applications of dyes on bamboo sticks with Eco-Friendly .	00.00	1,00,000.00
- Inomy :Development of NMBA Website on the Basis of already developed content structure & design Interface by Inomy Media.	3,64,000.00	3,72,000.00
- IPIRTI: Estb. Of Bamboo Mat Unit by SKMCCCL, Bangalore	00.00	9,95,000.00
<ul> <li>IWST: Standard packages of Practices for cultivation of Guadua , Angust ,Folia etc.</li> </ul>	00.00	76,000.00
<ul> <li>IWST: Enhancing production capacity for Planting of Stock of Bamboo Infrastructure &amp; quality</li> </ul>	00.00	2,58,000.00
<ul> <li>KFRI: Revision of BIS standard for bamboo based products through kfri, Peechi.</li> </ul>	40,000.00	00.00
- KSBC: Est. of Mechanization of Bamboo Mat Unit, at Angamalya , Kerla -New	00.00	5,85,427.00



		Current Year	Previous Year
- TBS,N	D:- Marketing of Bamboo Products at Delhi	6,00,000.00	17,11,453.00
	Estb. Of 250 kg Briqueting & Gasifier Equipment for MBDA, m (264G)	3,65,739.00	00.00
	cational Trial of Bamboo Plantation in 10 Sector through nt University	6,50,000.00	17,16,460.00
	Estb.of 100-kwe Gasifire, Round ,Stick & Slate of Bamboo Blind t NBRC-Dimapur-227	4,15,000.00	4,26,000.00
	ement of material for prefabricated shelter of flattened bamboo ious sector as demonstration of NMBA Products	8,67,916.00	3,00,964.00
- Prefabr	icated structure for High altitude area in Leh & Kargil sector	00.00	10,56,000.00
	ement of material for Prefab Shelter-500 at Dantewada tisgarh Unit)	2,98,10,280.00	6,68,92,569.00
- PU: St	udy on Taxonomically useful Vegetative Character of Indian bamboo	00.00	1,56,000.00
- Produc	t promoting scheme of bamboo composite and wood substitute.	3,07,055.00	45,47,522.00
- Tau: E	valuating Neutraceutical Composition, Madurai R & D centre	00.00	1,51,000.00
	Setting of Vaccume processing Bamboo Shoot unit by TFDPC, opur , Tripura	00.00	28,434.00
- TERI T in Rajs	Techno demonstration practices to enhance bamboo productivity sthan.	8,30,400.00	00.00
	Sehor (MP) Tech. Package for Bamboo Plantation with soil nent using fly ash & Mycorrhizal bio	00.00	2,10,786.00
- Testing	g Charges of bamboo products	1,00,090.00	2,15,085.00
- Teri: B	amboo Plantation Through I.S.P. In Rajasthan	00.00	6,70,240.00
- Teri: V Bambu	itro regeneration of Economicaly B. Spicees, D. Giganteus, sa etc.	00.00	7,39,200.00
- GOM:	Construction of shed & kline in Meghalya State Govt.	00.00	10,04,579.00
- IWST:	Setting of V.P. Centre at Bangalore	00.00	1,60,000.00
- KFRI:	Post harvest protection of Bamboo from Insect.	00.00	1,02,146.00
- Kosons Guwah	: Gwh, Est. of bamboo Flooring unit at Amigaon , ati	00.00	64,800.00
- NBDA:	Setting of Shoot / Vaccume processing unit at Tuli.(227)	1,23,907.00	3,93,891.00
- Prefab	Structure at NEHU ,Shilong project	2,05,14,048.00	2,31,41,431.00
- Prefab	Structure at University of Delhi project	21,90,422.00	20,05,050.00
- Prefab	Structure for High Altitude Area in J & K project	20,23,020.00	81,50,744.00
- Prefab	Structure for Indian Army HQ-56 (ECHS) project in 6 Location	20,57,997.00	20,00,000.00



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	Current Year	Previous Year
<ul> <li>Prefab Structure for Nagaland Govt./State disaster emergency operation project</li> </ul>	38,75,596.00	33,03,322.00
- Prefab Engineering bamboo Structure for SSA - Rajasthan Govt. project	56,72,357.00	75,50,983.00
- Prefab Structure for D.C., Tawang project	00.00	5,54,123.00
- Prefab Structure for Indian Army Cant at Mathura project	00.00	26,38,388.00
- SRF,LKO : Film & Multimedia Presentation of NMBA	19,07,267.00	3,20,000.00
- IISC,Blr.: Development of multi blade cutter Machine for NBDA ,Kohima	00.00	2,38,646.00
- IWST, Bangalore : Technology & Commercialization for Bamboo Thermoplastic Valuation	00.00	1,90,000.00
- WMIPL,Ldh.: Import of machine for devlopment of advance stick, silvering machine from china	00.00	2,62,615.00
<ul> <li>FDC: Presure treatment plant through Asu Arch India Ltd., Kolkatta for project of FDC, Meghalya</li> </ul>	3,64,370.00	2,85,500.00
- FRI: Development for modified bamboo equipment & fire retardant chemical for bamboo treatment	00.00	23,265.00
- GGFPL: Marketing of Bamboo Shoot unit in north east area	00.00	7,54,000.00
- GTC: Construction of 5 kline at Maynaguri West Bengal project	00.00	50,000.00
- IHBT: Study on Microbial Intervention Improving Bamboo Productivity	00.00	3,41,600.00
- PMCTW: Using of Bamboo Product & Composite as village knowledge at Thanjavoure	00.00	1,23,483.00
<ul> <li>SDRT: Production, Development / Amalgamation of Electronic with Science &amp; Technology Bamboo</li> </ul>	7,00,000.00	3,00,000.00
- GOM: Est. of Six Briqueting Machine & Five Charcoal Kline Machine at Meghalya State (SE,Hyd.)	00.00	8,12,520.00
- Inomy: Marketing Support Portal for Indian Bamboo Products., New Delhi	3,57,500.00	00.00
<ul> <li>MSF: Skil Development of Bamboo in Education and in the Invention &amp; Improvement of Useful Gadgets, New Delhi</li> </ul>	5,00,000.00	00.00
- NBDA: Est. of Micro Processing unit in Bamboo Cluster Village.	20,00,000.00	00.00
- OVN: AMC for Demonstrative Gassifire Unit in North-East Area, Assam .	6,50,000.00	00.00
<ul> <li>Study: Know-how about working &amp; Living Condition of Bamboo Based Workers in some Villages in Dehradun.</li> </ul>	50,000.00	00.00
- SWEEP: Development of Bamboo based Machine for Power Generation in U.P. Villages, New Delhi.	2,00,000.00	00.00
- Demonstration of bamboo flooring tiles for NMBA store at New Delhi.	12,37,869.00	00.00
- Prefab structure for ILFS-TBM as two unit in Jogenderpur and Majlispur , Tripura	45,39,209.00	00.00



		Current Year	Previous Year
-	Prefab structure for CEO, Medicinal Plant Board, Raipur .	3,16,800.00	00.00
-	Prefab structure for IIM, Shillong .	7,25,000.00	00.00
-	Prefab structure at IFCI Ltd., Nehru Place, New Delhi.	18,79,119.00	00.00
-	Prefab structure for Maharaja Agrasen College, New Delhi	9,72,160.00	00.00
-	Prefab structure one unit for Maitreyi College of Delhi University , New Delhi	5,70,240.00	00.00
-	Prefab structure for PGDAV College of Delhi University, New Delhi	38,01,600.00	00.00
-	Prefab Structure for Kamla Nehru College of Delhi University , New Delhi	16,15,660.00	00.00
-	Prefab Structure for College of Vocational Studies at New Delhi	17,68,901.00	00.00
-	Prefab Structure for Srivenkateswara College of Delhi University, New Delhi	11,14,580.00	00.00
-	Prefab structure for Acharya Narendera Dev College , New Delhi	18,71,841.00	00.00
-	Prefab Structure for Aatama Ram Satan Dharam College , New Delhi	13,69,728.00	00.00
-	Prefab Structure for CBRI/IIS, Bangalore with Society for Development of Composites on Devpt. & Const. of SIP base bamboo house for flood relief in Karnataka .	4,87,000.00	00.00
-	Prefab structure at Directorate of Information & Publicity, New Delhi	6,69,900.00	00.00
-	Prefab structure for Lady Sriram College under Delhi University, New Delhi	6,37,500.00	00.00
-	Prefab structure for Bihar State Tourism Corporation, Bodh Gaya as 20 structure.	60,80,717.00	00.00
-	Prefab structure for Dayal Singh College, New Delhi	47,07,450.00	00.00
-	Prefab structure for Delhi Art of College , New Delhi	11,78,932.00	00.00
-	Prefab structure for ITDC, unit of Ashok Group, Pondichery.	25,08,980.00	00.00
-	Prefab structure & Roofing sheet for NBDA, Kohima unit.	13,93,244.00	00.00
-	Prefab structure for NIFT, Kangra for 24 structure .	88,74,802.00	00.00
-	Prefab structure for SDC, Bangalore as" Support for Composite Pyramid Structure and Guest House at CTP, Bangalore".	7,00,000.00	00.00
-	EGW: Skill Upgradation & Development training of Women bamboo artisans at Meghalya .	2,00,000.00	00.00
-	Training Centre: Society for Disability Rehabiliation Studies, New Delhi for Madhubani, Teghra, Khatunna in Bihar.	1,00,000.00	00.00
-	Training Centre for Kudal through Konkan Bamboo & Cane Development Centre at Kudal .	18,89,716.00	00.00
-	Training Centre for Supaul District in Bihar through Sampragian, New Delhi	4,00,000.00	00.00
-	Training Centre for Ahmedabad through Tapi bamboo development centre, Ahmedabad	23,21,197.00	00.00



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(Amount	Rs.)
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		Anount Rs.
	Current Year	Previous Year
- AEPL: Development of proposed on CNG/Electric City Taxi using bamboo Composite & Plastics.	8,14,275.00	00.00
- APTDC & BBDB: Training in Skill Development training in community level square stick mfg. unit Bodoland bamboo Devpt. Board & APTDC,Hyd.	1,85,000.00	00.00
- Bhaskar F: Market Skill Development & Training Program at Balia in Bihar through Bhaskar Foundation.	1,40,000.00	00.00
- DR: Designing of Master folder of bamboo structure & housing material, activate carbon / charcoal, shoot , gassifire , furniture, photo album & posters through Design Route, New Delhi	4,86,898.00	00.00
- EF: Setting of New bamboo Store through Eklavya Foundation at Ahmedabad.	4,50,000.00	00.00
- EPC: Design Validation of engineering Bamboo Structure for disaster emergeny operating centre under MOHA through Engineerin Project Consultant, New Delhi	2,57,261.00	00.00
<ul> <li>EVIPL: Study in Feasibility/assessment for development &amp; documentation of methology of bamboo housing sector by Emergennt Venture ,</li> </ul>	2,75,750.00	00.00
- INBAR: Design, Devpt., transfer, standardization , sophisticated bamboo connection technology for construction of small & large bamboo structure.	31,00,000.00	00.00
- IPIRTI: Energy efficiency in bamboo base house through IPIRTI, Bangalore .	8,25,000.00	00.00
- IWST: Development of cellulose Nano Whiskers from bamboo as import of machine at Bangalore	20,91,652.00	00.00
<ul> <li>JU: R&amp;D project on bamboo technology with NBC &amp; CPWD through Jadavpur University, Kolkatta.</li> </ul>	8,89,200.00	00.00
- Rhizome: Est. of new bamboo store through Rhizome, Ahmedabad.	1,50,000.00	00.00
<ul> <li>SDCPL: Study on bamboo furniture product in India "EOI for studies &amp; Research activities" through STADD Devpt. Consulting P. Ltd., N. Delhi</li> </ul>	11,85,000.00	00.00
- SIIR: Establishment of Two pilot plant for bamboo – Hygiene products through SIIR, New Delhi	11,06,500.00	00.00
- TERI: Testing of different spices of bamboo for estimating total tar and particular matter in raw Gas under controlled parameters in gasification unit through TERI, New Delhi.	4,00,000.00	00.00
<ul> <li>VDP: Relocation of IITF bamboo cubicles structure &amp; stills to bamboo shop tribes through V Design Purple, Chandigardh</li> </ul>	9,57,750.00	00.00
<ul> <li>VPAPL: Setting of bamboo base solar flat Pite collector through VIn Polly Additive P.Ltd., N. Delhi</li> </ul>	7,50,000.00	00.00
<ul> <li>WKI: Devpt. of Bamboo base hydroponics unit through World Kids Inc., Mumbai</li> </ul>	2,00,000.00	00.00
- WKINC: Setting of new bamboo store through World Kids Inc., at Alibag, Mumbai	10,27,668.00	00.00
Total	14,82,66,397.00	138998640.00



# NATIONAL MISSION ON BAMBOO APPLICATIONS Project Expenditure (Project Loan) 1<sup>st</sup> April, 2009 to 31<sup>st</sup> March, 2010

Particulars	Current Year	Previous Year
- BAFPPL: Est. of Bamboo Round Stick & Charcoal making unit at Nagachera , Agartala	00.00	22,00,000.00
- Ceeke: Mfg. Unit of Bamboo Mat Ply and Board at Thingdawal, Kolasib Mizoram	00.00	35,78,385.00
- CRI: Mfg. Unit of Stick making at Nagaon by Craftique Industries	4,41,373.00	00.00
- GRTPBPL: Est. of Bamboo Mat Unit at Kolasib by Grace RTP ,Mizoram	00.00	73,76,315.00
- GGGPL, Orisa: Establishment of Stick Making unit at Baliapanda, Puri	6,45,918.00	15,11,640.00
- KSBC: Mfg. unit of bamboo mat at Angamalya - Kerla	00.00	32,59,491.00
- KSPPL: Est. of Bamboo Fiber-Thermoplastic unit at Mangalore	1,95,00,000.00	1,24,84,000.00
- MCBW: Est. of Stick Making Unit at Keinour-Manipur	8,72,800.00	3,02,200.00
- NEBISW: Est. of Stick & Charcoal making Unit at Kharbam- Imphal	00.00	3,02,200.00
- PBPL, Lohit: Est. of Mfg. Unit of Bamboo ply at Alubari by Patkai Bamboo	00.00	11,56,360.00
- PKBI: Est. of Stick Making Unit at Saiphai, Aizwal	00.00	9,50,350.00
- PSGGI: Est. Round Bamboo Stock Unit at Dharma Nagar, Tripura	00.00	9,50,000.00
<ul> <li>PCCI,N:- Est. of Bamboo Charcoal &amp; Briqueting Machine of 150 TPA at Najibabad</li> </ul>	20,87,500.00	18,74,000.00
- SDSGS: Est. of Stick and Agarbati Making Unit at Uttara Kannada -Mangalore	00.00	15,00,000.00
- TBI, Tezu-Est. of Feeder Unit of Flattened Bamboo slats unit -Grant	00.00	1,54,234.00
- ZOZAM: Est. of Stick Making Unit at Chaltlang, Aizwal	00.00	4,47,514.00
- AAIAVCPL: Est. of Activated Carbon Unit at Bongaigaon	41,58,040.00	31,75,000.00
- CBTC: Est. of Bamboo Stick and Strip Making Unit at Nagon by Brahamputra Enterprises	00.00	15,00,125.00
- MEGHABBP: Est. of Bamboo Charcoal Making Unit at Shilong	3,00,000.00	8,05,200.00
<ul> <li>NSPL: Est. of Bamboo Ply Industries unit at Kamrup ,Assam as additional TDA</li> </ul>	1,26,30,000.00	48,73,000.00



# Annual Report- वार्षिक रिपोर्ट 2009 - 2010

	Current Year	Previous Year
- SATPL: Est. of Briqueting Machine for west management for bamboo product, the machine of Maa Kamakhya Udyog shifted to Swaranga Agro Tech Pvt. Ltd. Tinsukia	1,00,000.00	2,73,200.00
- DFI: Expension of Bamboo Shoot Processing Unit at West Garo Hill, Meghalya	8,50,000.00	8,00,000.00
- EBE: Upgradation Fermented of Bamboo Shoot Packaging Unit at Nagwalba,Peren in Nagaland.	1,07,600.00	3,82,000.00
- AAFGP: Establishment of Stick Making Unit at Papum Para, Arunachal.	12,25,000.00	00.00
- ANPL: Establishment of 1.20 MW Power Gassifire Bamboo Unit at Mendori Village, Bhopal	1,06,00,000.00	00.00
- DBMMPL: Establishment of Bamboo Mat Board Unit at Kolhapur	1,46,66,776.00	00.00
- DLSIPL: Establishment of Bamboo Timber Unit at , Nagpur .	1,35,00,000.00	00.00
- GBTCPL: Establishment of 200 KW Gassifire bamboo Unit at Kahilipara, Guwahati	18,60,000.00	00.00
- MLC: Establishment of Agarbatti Making Unit at Mahas, Raigardh.	8,50,000.00	00.00
- NBPPL: Establishment of Stick and Mat Waving Unit at Balsore, Orissa	29,31,090.00	00.00
- NGTPL: Establishment of Stick and Mat Waving Unit at Balasore, Orissa.	30,00,000.00	00.00
- NKBPPL: Establishment of Bamboo Furniture & Pre-Fab Structure Unit at Kudal	31,03,033.00	00.00
- NEPBPL: Establishment of Bamboo Shoot Processing Unit at Dimapur	63,90,000.00	00.00
- SPBSI: Establishment of Stick and Mat waving Unit at Balasore, Orissa.	6,40,000.00	00.00
- VMOTC: Establishment of Bamboo Toothpick Unit at Panchkula, Chandigardh	4,90,000.00	00.00
Total	10,09,49,130.00	4,98,55,214.00

# National Mission on Bamboo Application Technology Information Forecasting & Assessment Council (TIFAC) Receipts & Payments Account for the year ended 31.3.2010

RECEIPTS	Current Year Amount (Rs.)	Previous year (Amount (Rs.)
I) OPENING BALANCES		
a) Cash in hand	00.00	00.00
b) Bank Balances		
i) In current accounts	00.00	00.00
ii) In Deposit accounts	00.00	00.00
iiii) Savings accounts	147547815.29	117427901.21
II) GRANTS RECEIVED		
a) From Government of India- Plan (S-13)	30000000.00	20000000.00
b) From Government-Non Plan	00.00	00.00
c) From State Government	00.00	00.00
III) INCOME FROM INVESTMENTS		
a) Earmarked/Endow Funds	00.00	00.00
b) Own fund	00.00	00.00
IV) INTEREST RECEIVED		
a) On Bank Deposits (NMBA)(Schedule-17) Less: Receivable on deposit - Rs.0.00	00.00	00.00
- Security Deposit : Harish C. Gaur	25000.00	00.00
b) Tour Advances: - Aseem Narain )	00.00	1500.00
Tour Advance :Ms. Tajinder kaur	3000.00	00.00
Petty advance recd. from Ms. Suja S. George	2000.00	00.00
c) Interest earned from S/B A/C (schedule-17)	6072655.00	5779020.00
d) Security Deposit refunded by MTNL	00.00	500.00
<ul><li>V) Other Income (specify) Schedule – 18 )</li></ul>	00.00	500.00
- Refund Unspent balance SDC,Bangalore (S-18)	187894.00	00.00
- Refund unspent balance from AFRI, Jodhpur	00.00	40802.00
- Refund unspent balance from UBKV, West Bengal	00.00	126484.00
<ul> <li>Refund unspent balance from TERI, New Delhi</li> </ul>	00.00	560783.00
<ul> <li>Income from Sale of NMBA Publication (S- 16)</li> </ul>	102347.00	479193.00
- Other Income(Tender for Training Centre, Machine)	16000.00	475155.00
- Other Receipts (License Fee) S-18	1225.00	2940.00
- Other Income (Misc. & Short Term TDA)	2027924.00	2940.00
- Lease Accommodation Received Sh. Aseem Narain	245.00	00.00
- Lease Accommodation Receivable Sh. S.K. Pandey	00.00	490.00
- Lease Accommodation Receivable Sh. S.K. Fandey - Other Receipt ( Documentary Film)	00.00	28000.00
- Other receipt ( Documentary Film) - Other receipt (supply of mach. to EMBEE / TIFAC project)	00.00	3175540.00
- Other receipt (suppry of mach, to EMIDEE / TIFAC project)	00.00	3173340.00

	Current Year Amount (Rs.)	Previous year (Amount (Rs.)
VI AMOUNT BORROWED		
- Security Money (Tender for training centre from machine Suppliers ) (S-11)	610000.00	00.00
VII OTHER RECEIPTS (GIVEN DETAILS BELOW:-)		
- Prefab Contrib. 56 Engg. Regt., Sagar, Hyderabad	645000.00	3284000.00
- Partner Contribution of prefab from ITDC, Pondichery	00.00	2400000.00
- Partner Contribution of prefab from Delhi University	2335413.00	2775868.00
- Partner Contribution of prefab from Govt. of Nagaland	00.00	3300000.00
- Partner Contribution of prefab from Rajsthan Council	00.00	6000000.00
- Partner Contribution of prefab from J & K Govt.	00.00	2294000.00
- Prefab Partner Cont. from CEO, C.G. State Medicinal Plant Board, Raipur	443520.00	00.00
- Prefab Partner cont. from College of Vocational Studies, N. Delhi	1419264.00	00.00
- Partner Contribution from Kamala Nehru College, New Delhi	1615660.00	00.00
- Partner Contribution from Sri Venkateshware College, New Delhi	1114580.00	00.00
- Partner Contribution from PGDAV College, New Delhi	3801600.00	00.00
- Partner Contribution from Acharya Narendra Dev College	1394531.00	00.00
- Partner Contribution from Dayal Singh College, New Delhi	3530587.00	00.00
- Partner Contribution from Lady Sriram College, New Delhi	636310.00	00.00
- Partner contribution from Maharaja Agrasen College	972160.00	00.00
- Partner Contribution from Maitreyi College , New Delhi	570240.00	00.00
- Partner Contribution from Atma Ram Sanatan Dharam College, New Delhi	1369728.00	00.00
- Partner Contribution from Bihar State Tourisam Development Corp., Gaya	5427500.00	00.00
- Partner Contribution from NIFT,, Kangra (12 Strct.)	5868693.00	00.00
- Partner Contribution from Delhi Art College, New Delhi	1123300.00	00.00
- Partner Contribution from IFCI Ltd.,	1879119.00	00.00
- Partner Contribution from ILF&S and TBM, Tripura	2559000.00	00.00
- Partner Contribution from NBDA, Dimapur	250000.00	00.00
VIII Project Refund :-		
NFPL- Refund of 1800 TPA Bamboo Shoot Project	30000.00	15000.00
Refund - SPF Silver Making Unit at Bongaigaon	00.00	10000.00
Refund - Deva Silver & Furniture Unit at Imphal (NEDFI)	169212.00	247892.00
Refund : Basera Building Centre,Bhopal	159000.00	238500.00

Technology Information, Forecasting & Assessment Council प्रौद्योगिकी सूचना, पूर्वानुमान एवं मूल्यांकन परिषद्



	Current Year Amount (Rs.)	Previous year (Amount (Rs.)
Refund : Kosons Forest Products Pvt. Ltd.,Guwahati	147787.00	80000.00
Refund : Prince Carbon Ind., Najibabad	00.00	150000.00
Refund : Erose Way Pvt. Ltd., Nagpur	23250.00	30000.00
Refund : SMWPL: Est. of Bamboo & Board structure unit at Bangalore	2772000.00	2772000.00
Refund : Suta Bamboo Ind.,Namsai	70000.00	83500.00
Refund : SVM Expension-EF Bamboo Ply Unit,Orisa	00.00	546100.00
Refund : GT,Dewas Mach. Instrument for better Quality	680000.00	680000.00
Refund: HPC, Nagon Paper Mills Ltd. B/ Dust Gassifire	700000.00	00.00
Refund :Wmipl Adv. Machine Mfg. unit at Ludhiana	340000.00	562615.0
Refund: Zbi Bamboo Processing Flattened bamboo Unit at Namsai	69700.00	139400.0
Refund : Vedha Machanised process unit at Nagpur	82000.00	245000.0
Refund :DMWPL, Secondary bamboo mach. , Kolkatta	528720.00	571280.0
Refund: MPPL, Bamboo Board unit at Guwahati	200000.00	277700.0
Refund :TBI, Est. of Bamboo Mat unit at Tezu	100000.00	40000.0
Refund : ABCPL, Bamboo Durosam/Eglu unit, kolkatta	2750000.00	2750000.0
Refund : BBCCPL, Est. of bamboo Cane unit at Silchar	57000.00	85000.0
Refund : MBPPL, Est. of bamboo board unit - Meghalya	40000.00	102500.0
Refund : PBPL, Est. of bamboo board unit at Arunachal	850000.00	1000000.0
Refund : RBI, Est. of Bamboo Mat unit at Guwahati	12884.00	100000.0
Refund : SAPL, Est. of bamboo board unit at Tinsukia	50000.00	50000.0
Refund : SGI, Est. of bamboo Mat unit -Sinddhudurg	00.00	60000.0
Refund : SNF, Nursery of bamboo plant at Kolhapur	336000.00	336000.0
Refund : ZMPL, Est. of stick making unit - Aizwal	1000000.00	250800.0
Refund: Banik Agro Forest Products P. Ltd., Agartala	200000.00	00.0
Refund: Ceeke Bamboo & Wood Products P.Ltd., Aizwal	825000.00	00.0
Refund: Excel Bamboo Enterprises, Kohima	100000.00	00.0
Refund: Grace RTP Bamboo P. Ltd., Mizoram	2400000.00	00.0
Refund: HPC, Kolkatta for Tissu Cultur Laboratory	1500000.00	00.0
Refund: Kerla State Bamboo Corp. Ltd., Angamaliya	100000.00	00.0
Refund: Konkan Specialities for thermo plastic unit at Mangalore	2000000.00	00.0
Refund: Luit Valley Food processing P.Ltd., Jorhat	63200.00	00.0
Refund: Mizoram Joss Stick Industries,	15000.00	00.0
Refund: P.S. Green Gold Bamboo Industries, Tripura	20000.00	00.0
Refund: Rity Foods Processing P.Ltd.,Guwahati	15000.00	00.0
Refund: Sri Dharamsthala Siri Gramudhyoge Samiti, Karnataka	1100000.00	00.0
Refund: St. Xavier's for Gassifire Unit at Bisram Ganj	20000.00	00.0
Refund: Vighnraj Bamboo Products P. Ltd., Guwahati	167500.00	00.0
Refund: Zocraft Bamboo P. Ltd., Aizwal	5000.00	00.0
· · · · · · ·	519550563.29	359100308.2



## **PAYMENTS FOR EXPENSES**

PAYMENTS		Current Year Amount (Rs.)	Previous year (Amount (Rs.)
1) Ex	penses		
a)	Establishment Expenses (Corresponding to		
	Schedule 20) Rs. 9624417.00		
	Add : Opening Exp. Payable Rs. 495986.00		
	Less Expenses Payable Rs. 1191656.00	8928747.00	6201051.00
b)	Administrative Expenses (Corresponding to		
	Schedule – 21 Rs. 17983125.00		
	Add: Opening Exp. Payable Rs. 20000.00		
	Add : Loss on sale of F/Assets Rs. 00.00		
	Less : Expenses Payb.(s-7) Rs. 422765.00		
	Less: Loss on sale of F/ Asset Rs. 00.00		
	(Previous year figure does not include obsolescence expenses in it.)	17580360.00	16213978.92
c)	Expenditure on Grants, Subsidies etc. (As per Schedule 22)	249215527.00	188853854.00
	dition in fixed Assets		
	fice Equipment	163770.00	92500.00
	rniture & Fixtures	00.00	16854.00
	orary Books	525.00	3255.00
	mputers and Peripherals	316220.00	159555.00
	e Alarm System	147649.00	00.00
	her Payments (Specify)	00.00	000.00
	ecurity Deposits: Tata Indicom Internet	00.00	200.00
	ecurity Deposit : Sh. Harish C. Gaur our Advance: Ms. Tajinder kaur	00.00	6000.00 3000.00
	our Advance: Ms. Tajinder kaur our Advance: Sh. Deepak Chauhan	3000.00	00.00
	etty Advance for Office: Ms. Suja S. George	00.00	2000.00
	ease Accommodation Receivable	00.00	245.00
_	etty Advance for Office: Sh. Baljit Singh	5000.00	00.00
	OSING BALANCE	0000.00	00.00
/	sh in Hand	156094.00	0.00
	sh at Bank (UBI)	182336862.29	101764486.29
	sh at Bank (SBI)	60696139.00	45782659.00
	sh at Bank (UBI,N. Place )	670.00	670.00
Tot	tal	519550563.29	359100308.21

#### For Chandiwala Virmani & Associates (Formerly Chandiwala Gupta & Associates) Chartered Accountants

<b>Sd</b> /-	Sd/-	<b>Sd</b> /-	Sd/-
(Bharat Bhushan)	Accounts Officer	Registrar	Mission Director
Partner	NMBA	NMBA	NMBA

#### M. No: 087365

Date : 27.09.2010 Place : New Delhi