## **DEPARTMENT OF INDUSTRIES AND COMMERCE**

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# **KARNATAKA EVALUATION AUTHORITY**

Final Report

Evaluation study of Specialized Skill Development Institutions (SSDIs) of Industries and Commerce Department

December 2015

Submitted by:



ICRA Management Consulting Services Limited

### INDIA

Tower A4 & A5, First Floor, Logix Park, Sector – 16 Noida - 201 301, Phone: + (91 120) 4515 800 Fax: + (91 120) 4515 850

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# 1 List of abbreviations

Abbreviation Full Form		
AICTE	All India Council for Technical Education	
ASIDE	Assistance to States for Development of Export Infrastructure and Allied	
	Activities (ASIDE) Scheme	
ATI Departmental Artisan Training institutes		
CAD/CAM	Computer Aided Design/Computer Aided Manufacturing	
CAGR	Compounded Annual Growth Rate	
CIPET	Central Institute of Plastic Engineering and Technology	
CNC	Computer Numerical Control	
DIC	Department of Industries and Commerce	
FY	Financial Year	
GTTC Government Tool Room and Training centre		
ITI Industrial Training Institute		
KGMSDC         Karnataka German Multi Skill Development Centres		
KILT	Karnataka Institute of Leather Technology	
KSCCFL	Karnataka State Coir Co-operative Federation Limited	
KSCDCL	Karnataka State Coir Development Corporation Limited	
NTTF	Nettur Technical Training Foundation	
SCSP	Scheduled Caste Sub-Plan	
SDP         Special Development Programme		
SEZ	Special Economic Zone	
SKKY	Suvarna Kayak Koushalya Abhivrudhi Yojane	
SSDI	Specialized Skill Development Institutions	
TSP	Tribal Sub-Plan	

### 2 Executive Summary

The State of Karnataka has a target of creating 4.04 million jobs during the 12th Five Year Plan period and development of skill is one of the targets reflecting the vision of rapid, sustainable and more inclusive growth during this five year plan period (2012-17). The purpose of investment made in infrastructure and Training Programmes is to create employment opportunities for the growing youth population which is also necessary to sustain the high growth movement.

The Skill Training Institutions working under the Department of Industries and Commerce are being provided grants to create/ upgrade infrastructural facilities such as construction of new building / renovation of existing buildings and also to procure modern machinery & equipments to provide modern skill training. The grants are being released to various Specialized Skill Development Institutions (SSDIs) such as Government Tool Room and Training centre (GTTC), Karnataka Institute of Leather Technology (KILT) and for Departmental Artisan Training institutes (ATI), Karnataka State Coir Development Corporation. Going forward, these institutions would be important avenues of generating skill supply against employment generation of 4.04 million jobs.

ICRA Management Consulting Services Ltd. was given the mandate of Evaluation of these SSDIs. The scope of this engagement is to evaluate the outcome of the grants released to the Specialized Skill Development Institutions of Department of Industries and Commerce.

In accordance with the Term of Reference, IMaCS undertook the study of various SSDIs – GTTCs (seven and HQ level), ATIs (seven), CIPET, KILT and KSCDCL with the objective of independent evaluation of outcome of grants released to the Institutions. Also, industry stakeholders (30 Nos) who are the employers of the trainees trained at SSDIs were interviewed and a commensurate number of trainees were also interviewed.

### **Evaluation Finding and Conclusions**

• **GTTCs:** There are 20 centres of GTTCs operating in Karnataka. The infrastructure at the GTTCs is being strengthened with a grant of Rs. 35.4 crore through SSDI scheme. The Institution runs six long term courses with a total intake of 1334 at the end of 2014-15. The total intake across institutions has grown by over 42% from 870

in 2010-11 to 1240 in 2014-15 against their flagship course of Diploma in Tool & Die Making and Diploma in Precision Manufacturing. The GTTCs have an average placement rate of 70% across their courses with the Diploma in Tool & Die Making course exhibiting the highest placement rate of 81%. The Institution is also consistently meeting its targets for trainees to be trained under SCP and TSP. The GTTC provides training as well as job work services to the industry. The GTTCs are facing issues with respect to the lack of manpower with an actual manpower of 188 persons against a sanctioned strength of 222 persons. The problem is particularly acute in case of teaching staff where against a sanctioned strength of 159 only 63 training staff is actually in place.

- **ATIs:** Artisan training Institutes are the departmental training institutes established for imparting training to the hereditary Artisans to upgrade their skills. 27 ATIs are which exist in the State of which 23 are running in Govt buildings and 4 are run in private buildings. Rs. 2.99 crore has been released towards revival of 13 ATIs during 2013-14. The total sanctioned staff strength in all ATIs is 66. Out of these 33 posts are filled up and the remaining posts are vacant. Out of the seven ATIs visited by IMaCS only one was functional with evidence of trainings conducted during the evaluation period. The ATIs though have geographical spread across the state and building infrastructure in place, face multiple challenges of obsolete courses and technology, unavailability of staff in relevant area of training and lack of value of certification/ placement support.
- **KILT:** KILT was instituted as a supporting institution for the leather industry in the State to be engaged in knowledge building, skill & entrepreneurship development, imparting training to semi skilled & skilled artisans and catering to the needs of the leather Industries in the State. Flagship course of KILT is Three Years' Diploma in Leather and Fashion Technology. Additionally Six months' Skill development courses are also being offered in the related area. For KILT, An amount of Rs.9.23 crore has been disbursed to KILT towards constructions of New Building/procurement of machinery at Ullal. Rs. 3.62 crore was disbursed towards High Tech Training programmes, administrative expenses during 2010-11 and 2013-

14. The Diploma is Leather Technology course as of now is yet to achieve full enrolment with capacity utilisation during the review period ranging between13% to 27% annually. While the institute has started operations in the new location in 2010 key factor for under utilisation has been lack of industry demand in the vicinity. The Institute now also has a hostel accommodation in place. Most of the machinery and infrastructure required to run the courses offered is already in place. From the year of 2015-16 the institute is offering Diploma in Leather and Fashion technology, which has fashion orientation. This course is expected attract more students towards the courses, as Bengaluru is a garmenting cluster having potential to employ more people in the sector. Under SCP/TSP the institute has achieved 100% and 50% of the annual target during 2012-13 and 2013-14 respectively. The institute is being run by 5 trainers and 2 support staff against no provision of sanctioned staff.

**KSDCL:** Karnataka State Coir Development Corporation Limited was established in the year 1985 with the main objectives of developing Coir based industries and also to act as catalytic agent in developing Coir sector in private sector. Presently, the Corporation is having twelve de-fibring units, four curled coir units and seven auto spinning units in rural areas. As for the training centres, the Coir Industry is new to the State. The required skilled artisans were not available in the State. Only during the last decade training is being imparted extensively in product manufacturing. In the initial years from 1985 to 1991 the Corporation has trained only 1,500 persons in the Training and Production Centres. KSDCL has provides training and provides employment in its production centres. However, in the present day, KSDCL has exceeded the targets set under SCP/TSP. From our visits and interactions at KSDCL, we have understood that the trainees trained at KSDCL are absorbed in to KSDCL production units. These employees are paid on piece rate basis. As coir business is low margin business people prefer other avenues. As mentioned by the management earlier 1500 persons were employed at the production units. However currently only 700 persons are employed. Product cost is also high in comparison with the other unorganised units due to higher overhead cost. So competing with the un-organised players is a challenge. So instead of training new employees focus can be on training existing employees towards productivity improvement.

- CIPET: Central Institute of Plastics engineering and Technology is an autonomous institute under the Department of Chemicals and Petrochemicals, Ministry of Chemicals and Fertilizers, Government of India. CIPET, Mysuru trained a total of 434 students in 2013-14 against it long term courses and 150 students in short term courses in 2014-15. Government of Karnataka has disbursed a total of Rs. 198.78 lakh towards civil construction at CIPET, Mysuru. Girls hostel has been completed with 44 girl students residing in the same. Over 170 boys are staying in the boys hostel and the second floor needs to be completed, which is expected to be completed by March 2016. Across India there are 28 locations where CIPET operates... The CIPET is ISO 9001- 2008 certified organisation which helps the institute in ensuring quality management and continuous improvement.
- KGMSDC: Karnataka German Multi Skill Development Centre(KGMSDC) is a society promoted by Government of India and Government of Karnataka with technical support of German International Services(GIZ-IS). The primary mission of the Training Centres is to conduct a broad based multidisciplinary programme in various Industrial Technical Fields, directed towards the development of skills and trades and to become a world class training centres that represents specialized trade training programs in alignment with the Industry requirements across the globe. It has set up Karnataka German Technical Training Institute (KGTTI) having centres at Bengaluru and Kalaburagi. The program of KGMSDC offers challenging and complimentary roles for administrators, engineers and technicians.

All programs follow German vocational education and training standards that are demand oriented and directly imply a close relationship with industry. To provide International Standards and Hands-on training both KGTTIs has extensive state-ofart training facilities. KGMSDC is a registered society formed under Society Registration Act 1960. The registered society has members from Government of India and Government of Karnataka, complemented by local stakeholders and representatives of industries, chambers and academia. GIZ is the technical partner for project implementation.

Key learning from KGMSDC has been managing quality through Quality Management system and focus on simulation and offering multi skill development programmes. The management believes that ISO-9001 certification would help them deliver quality and improve continuously. Focus on usage of simulators the management believes will enhance learning of the student before working on the actual equipment, to manage constraints.

### Recommendations

Based on the inputs received from the institutions the challenges faced by each institute are different which include, resource constraints, under utilisation capacities, obsolete courses, and dysfunctional institutions. We have focused our recommendations on infrastructure, technology, courses, management and other resources which we expect to help the institutes in capacity building and

#### A. Short term recommendations

The following are the short term recommendations which are implementable without significant policy/budgetary interventions.

#### 1. Implementation of Quality Management Systems

Considering the continuous expansion of the centres, maintaining quality and focusing on continuous improvement is essential towards achieving stakeholder satisfaction. Some of the skill development institutes such as CIPET and KGMSDC have certifications in Quality Management Systems (ISO 9001) to ensure quality and continuous improvement in operations.

As the institution expands, the processes followed have to be consistent and robust to ensure quality of training, placement, service to the industry. We recommend all the GTTCs/ KILT to have Accreditation from institutes such as ISO or NBA (National Board of Accreditation) to achieve international quality standards. The management and other

stakeholders should part of defining KPIs for the institutes, monitor them on on-going basis and take corrective actions wherever required.

### 2. Establishment of formal placement centres across all the centres GTTC, KILT:

Out of the seven GTTCs visited, only one of them reported having a formally established placement cell. As per the feedback of the companies, the placement process is smooth. However having a dedicated placement cell at each of the Institutes would only benefit the placement process as the potential to place students in best of the firms with better salary/stipend improves and formal feedback process will help in continual improvement of the institute.

We recommend that a formal placement centre may be established across all the centres of GTTC with placement co-ordinator. The role of placement centre has been detailed in a separate annexure.

### 3. Focus on development of communicative skills and inculcation of work ethics

This was reflected well in the survey in which 36% of the surveyed respondents marked the in-plant trainees with a score *below average* on their communication skills in case of GTTCs. 35% rated the trainees average on their communicative skills and only 25% of the respondents rated the trainees to be better than average. We have understood that the students often come from rural area with primary language as Kannada and Urdu. So there is a need to increased focus on development of communication skills with emphasis on English learning through external agencies specialising in this area.

Amongst the multiple Industry players surveyed to solicit a feedback, one of the most noticeable feedbacks shared was that each of them pointed out the need to cultivate work ethic in the students. Most of them opined that they felt the need for the students to be sensitized to the importance of being regular at their work sessions and taking initiative to learn when the opportunity exists. Another feedback shared for students of Institutions located in remote pockets was that they needed to have an orientation to give them an idea of what kind of routine to expect at a regular workplace. So focus on orientation programmes to the students has to be increased.

4. Focus on retraining of people at KSCDCL

KSCDCL conducts training to fulfil captive requirements for its production units. However, it is difficult to absorb and retain all the trainees with in the production units. Keeping in mind the fact that even with the training of a modest 100 -200, people are not readily absorbed into the sector, the yearly target number of trainees can be limited to 20-25 people for KSDCL based on the requirements. Instead focus can be on re- training persons to increase efficiency.

### **B.** Long term recommendations

These are implementable in a Horizon of 2- 5 or with sizeable expenditure, or both but does not involve policy changes.

5. Strengthening Manpower at GTTCs

The staff strength in GTTC has been a matter of concern. Across all the GTTCs as depicted in Exhibit 12. GTTCs are witnessing the shortage of manpower both for teaching as well as Non-teaching staff. Further the actual teaching staffs include contractual staff of 49 persons. So the total shortage is 105 persons.

Also there have been cases of companies that recruit from the Institute giving the feedback that since in many places, trainers are themselves are young pass outs of the Institute with relatively less industry experience, the training quality has suffered. Also, the number of trainers available in the Institute is lesser compared to the courses being run.

### 6. Introduction of blended learning modules:

The institutes such as GTTC on one hand are expanding their foot print by opening newer branches and on the other hand face shortage of resources including staff availability. Ensuring the quality of learning with constraints may become a challenge. Blended learning as the combination of digital content and face-to-face training to effectively inculcate learning. Areas where digital content/multimedia can be effective in learning can be identified and developed which can be integrated with face to face method of learning. Multi-media method of teaching will enhance learning especially for the students from rural background lacking effective comprehending skills. This may initially

be done on a pilot basis for selected courses and few centres and then can be replicated across all the courses and centres based on the learning outcomes.

### 7. Identifying and implementing relevant courses

The first steps that the ATIs can take are towards the reviving and updating the courses that are offered to the trainees there. Old courses may need to be completely wound up. The ATIs would do well to identify courses that suit the demography and the local industry set up. In the case of short term courses, some courses that can always be actively considered are courses like tailoring, two wheeler repair, four wheeler repair, electrical and electronics repair, IT related training, motor/pump repair, mobile repair, welding and construction since even within the context of a small town/village they will always be needed. Also, a person trained in these aspects can look at self employment to support oneself in addition to availing working opportunities in companies. Based on the district level skill mapping studies the relevant courses may be identified.

### C. Recommendations requiring change in Policy

The following are the recommendations requiring change in policy

8. Management of ATIs by other skill development institutions

Through our discussion with the stakeholders we would like to recommend that the modus operandi of management may be redefined for the ATIs. Currently operating Skill development institutions such as GTTC and/or KGTTI may be given responsibility of operating the ATIs with trained/qualified staff for new relevant courses. Government can fund towards

- o Upgrading the infrastructure and machinery and
- Viability gap funding towards administration and operations management on recurring basis

The institution may be run to ensure the following

- Need based recruitment

- Need based course development and modifications
- Establishing industry interface wherever required
- Achieving self sustainability and continuity
- Scaling up of organisation as required

The idea has to be that the ATIs effectively become completely new centres of learning but with the flexibility to structure and run courses according to the nuances of their geography and present needs (suitable industry, demand for certain set of skills). This would also ensure a faster response to changes in the skills' demand or employment/livelihood scenario of the place. So, while GTTCs focus on organized market, vocational courses can be taught at ATIs making use of existing infrastructure (buildings), most of which are located at accessible locations within their respective geographies.

### 9. Introduction of related Courses in KILT and GTTC

The capacity utilisation for the long term course, Diploma is Leather Technology course at KILT as of now is yet to achieve full enrolment with capacity utilisation during the review period is ranging between 13% and 27% annually. While the institute has started operations in the new location in 2010 key factor for under utilisation has been lack of industry demand in the vicinity. From the year of 2015-16 the institute is offering Diploma in Leather and Fashion technology, which has orientation towards garmenting industry. This course is expected attract more students towards the courses, as Bengaluru is a garmenting cluster having potential to employ more people in the sector To leverage the infrastructure available in the campus, introducing related exclusive long term courses related to industries such as apparel may be started keeping the demand in the location in mind. This would enable institute to leverage existing machinery related to design and production.

GTTC has to focus on introduction of new and emerging courses related to the manufacturing stream. During our discussions with GTTC some of the areas such as Industrial electronics, Automation, Robotics has potential for employment creation. To develop world class infrastructure, course curriculum it is suggested that tie-ups/MoUs

with leading institutions across the world be established which would help in reduction of learning curve, establishment of best practices and world class training curriculum.

### 10. Decentralisation of GTTC Institutions

The administration and the management of GTTCs is mostly centralised at the State level with the decision making of operational affairs resting with the headquarters. Changes to curriculum or decisions regarding absorption of trainers or other operational issues are still looked after by the Head office, which may lead to lack autonomy at centre levels leading to lack of localisation.

Subsequent to our visits and interaction with GTTC staff we would like that recommend that the administrative management of GTTCs may be shifted towards a more decentralised arrangement. The institutions may be clustered around the regions (North South, East, West and/or central). And all the centres may be allocated to one of regions. The best performing institute in capacity intake, placement, and industry service may act as a regional *Lead Centres*.

### **3** Introduction

The union of India at the end of 2014- 15 has become a \$ 2.1 trillion dollar economy with revised growth numbers pegged at "7.4% in the current fiscal compared with 6.9% last year." The manufacturing <sup>1</sup>sector in the same horizon has recorded a growth of 6.8% sectorally in 2014-15 over the 5.3% in 2013- 14. With launch of the 'Make in India' initiative, the Prime Minister

of India, aims to give global recognition to the Indian economy and also place India on the world map as a manufacturing hub. India has also set for itself an ambitious target of increasing the contribution of manufacturing output to 25 per cent of gross domestic product (GDP) by 2025, from 16 per cent currently. Further, India's manufacturing sector could touch US\$ 1 trillion by 2025<sup>2</sup>. The government of India has a vision to create 100 million additional jobs by 2022 in manufacturing sector.

An essential input to making ambitious programmes like Make in India work is *skilled workforce*. Thus, the importance of skill initiatives like Skill India cannot be overemphasized as these are the last mile connection to translating GDP growth and investments into real, true growth at the very grass root levels. The Prime Minister's initiative of *Skill India* supports this

school of thought. Skill India was launched earlier this year, on the occasion of World Youth Day on 15<sup>th</sup> July, 2015 with the "**target to provide skill training to 40.02 crore people by 2022**". Contribution of states towards achieving this vision will be vital.

The state of Karnataka has vibrant automobile, agro, aerospace, textile and garment, biotech and heavy engineering industries. The state has sector-specific SEZs for key



industries such as IT, biotechnology, and engineering, food processing and aerospace.

Karnataka is termed as the Knowledge Capital of India. The state has successfully attracted skilled labour, especially, in the knowledge sector. Karnataka is among the states that produce a

<sup>&</sup>lt;sup>1</sup> Source: PIB, Livemint

<sup>&</sup>lt;sup>2</sup> Mckinsey and Company

large number of doctors, engineers and medical technicians in the country. Thus, the State is quite poised to take off in the new growth story of India and to deliver the same. The State has Institutions in place to deliver the necessary support system of skilled manpower.

The State of Karnataka has a target of creating 4.04 million jobs during the 12th Five Year Plan period and development of skill is one of the targets reflecting the vision of rapid, sustainable and more inclusive growth during this five year plan period (2012-17). The purpose of investment made in infrastructure and Training Programmes is to create employment opportunities for the growing youth population which is also necessary to sustain the high growth movement.

The Skill Training Institutions working under the Department of Industries and Commerce are being provided grants to create/ upgrade infrastructural facilities such as construction of new building / renovation of existing buildings and also to procure modern machinery & equipments to provide modern skill training. Although, institutional structure has been put in place there is still a long way to go. Also, gaps in skill eco system have to identified and plugged. The grants are being released to Government Tool Room and Training centre (GTTC), Karnataka Institute of Leather Technology (KILT) and for Departmental Artisan Training institutes (ATI), Karnataka State Coir Development Corporation. These institutions are implementing Skill Development Programmes. Funds are released under Koushalya Abhivrudhi Yojane, Suvarna Kayak Koushalya Abhivrudhi Yojane(SKKY) and another scheme called modernisation and Technology Training of Industries and Commerce Department for development and up gradation of skill for better employability.

Since 2009-10 Rs. 68.44 crore have been spent under the scheme of SSDIs and Rs.69.72 crore have been spent on other scheme of the department namely- Modernisation/Technology Training.

The details of each specialised Skill Development Institutions are as follows:

### 1. Government Tool Room and Training Centre (GTTC) :

GTTC is a premier Tool Room and Training centre, established by Govt. of India and Govt. of Karnataka with the Danish assistance in the year 1972. GTTC functions as an autonomous institution under the Department of Industries & Commerce, Government of Karnataka. GTTC has specialized in Tool Engineering, Design, Analysis, and skill building in Tool Manufacturing,

Precision manufacturing, Electronics, Mechatronics and allied disciplines. GTTC has established 20 centres all over the Karnataka viz Bengaluru, Mysuru, Hassan, Mangalore, Kalaburagi, Dandeli, Hospet, Belagavi, Hubballi, Harihar, Maddur, Kudalasangama , Kanakapura, Lingsugur, Gundlupet, Humnabad, Kadur, Kolar, Tumakuru, Shimoga with following objectives:

- To provide technical education to youth with employable skills
- To impart world class training in tool engineering and emerging technologies
- To provide highly skilled manpower and technical services to industries
- To provide 100% employment opportunities to GTTC trained candidates
- To provide technical services in Dies, Moulds, Tools, Hi tech components laser and Related areas

### **Training Activities:**

The centre conducts specific Long Term AICTE recognise training course such as 4

- 4 year Diploma in Tool and Die making
- 4year Diploma in Mechatronics
- 4year Diploma in Precision Manufacturing
- 3 year Diploma in Electronics and Telecommunications
- 1 year Diploma in Tool Design
- 2 years M.Tech in Tool Engineering

The centre conducts regular Short Term Training Programmes with certification of its own in the following areas for all courses:

- CAD Drafting
- CAD Design
- CNC Milling Machine Programme and Machine Operation
- CNC Turning programming and Machine Operation
- Computer Aided Machining
- Metrology
- The Centre is having the following facilities-
- Placement and Monitoring Cell
- Regular Industrial Visit

- Project consultancy Service to young entrepreneurs
- Secured Hostels for Boys and Girls

The centres conduct Seminars in local ITI/Diploma Institutions to create awareness of skill development courses. Active participation in "JOB MELAS" is done. GTTC is providing technical services to around 300 industries in the state. Unemployed Youth of BPL families are undergoing Skill Development Training at various GTTC centres.

So far an expenditure of Rs. 36.95 crore is incurred on civil works, Rs.58.68 on machinery and equipment and Rs. 13.90 crore on Training etc from 2009-10 to 2013-14.

### 2. Karnataka Institute of Leather Technology (KILT):

KILT is an autonomous body registered under society act. KILT is offering the following courses-

- 3 year Diploma in Leather & Fashion Technology
- 1 year post graduation diploma in Leather processing Technology/Footwear Technology/Leather goods & Garment Technology
- 3 months certification courses in Footwear Designs/leather goods and garments design/leather testing & quality control/Merchandising & Marketing

The Institute is having the following facilities-

- Placement and Monitoring Cell
- Regular Industrial Visit
- Project consultancy Service to young entrepreneurs
- Secured Hostels for Boys and Girls

KILT is establishing export facility centre for Leather Technology at Ullal. KILT had sanctioned grants under ASIDE scheme of GOI as well as from Government of Karnataka for construction of training blocks, administrative building etc and also for procurement of Machineries. The Government of Karnataka share has been released to institute.

### 3. Artisan Training Institutes (ATI):

Artisan training Institutes are the departmental training institutes established long years ago for imparting training to the hereditary Artisans to upgrade their skills. 27 ATIs are functioning in

the State of which 23 are running in Govt buildings and 4 are run in private buildings. The courses offered were general engineering works (Fabricated material) carpentry, smithy, lacquerware, agarbatti and candle making. Over a period of time, these trades have lost their importance. Department felt to modernise these ATI's, during 2013-14 by introducing new courses namely fashion designing, CNC lathe works, House hold electrical appliances, 3D printing and scanning, Computer Hardware and Software, Motor rewinding, Transformer repair and services and weaving of towels and bed sheets. During 2013-14, 13 ATIs have been given funds for reviving the centres..

### 4. Karnataka State Coir Development Corporation (KSCDCL)

The Corporation was established with the main objective of developing Coir sector in the State. The main functions of the Corporation are to:

- Carry on the business of developing, promoting and stabilizing the coir and coir based and coconut based industries in Karnataka
- To support, protect maintain increase and promote the production and sale of coir, coir products and coconut products
- To implement scheme of the Government of Karnataka and the Government of India for the development of coir and coconut based industries.
- To generate rural employment to women (including SC/STs) by providing training and engaging in production of coir products in the coir complexes
- To undertake and promote research and development of coir and its products

### 5. Central Institute of Plastic Engineering and Technology(CIPET)

It was established in 1991 in Mysuru and since then it has been serving the plastics and allied industries in and around Karnataka. The centre runs both academic and industry programs for the skill development/up gradation for the benefit of students and industries. All CIPET trainees are usually placed through the campus Training and placement cell. The institute also offers technical services in the area of plastic mould design, tooling and mould manufacturing, plastics processing and testing and third party inspection. In addition it offers consultancy and Advisory services and undertakes R&D projects as well. CIPET, Mysuru is well equipped with state-of-the

art machines in tool room, processing and Testing departments while the CAD laboratory is equipped with the latest software and workstations. The centre has a spacious auditorium, a modern conference hall, a well stocked library and well-maintained classrooms. There is a Boys hostel on campus for the male trainees while a Girls hostel in under construction. The institute imparts short term training programmes of one week and long term sponsored training programmes of 3 years Diploma Courses in Plastic and Plastic Mould Technology, Post Diploma in Plastic Mould Design, Post Graduate Diploma in Plastic Processing and Testing of18 months duration besides this moulder training programme and EDP are also conducted on regular basis. Training is imparted to overseas students also.

### 6. Karnataka German Multi Skill Development Centres (KGMSDC)

Karnataka German Multi Skill Development Centres (KGMSDC) is a society promoted by GOI and GOK with technical support of German International Services (GIZ-IS). It has setup Karnataka German Training Institute (KGTTI) having centres at Bengaluru and Kalaburagi. The primary mission of KGTTI is to provide broad best multi disciplinary world class training programme in various technical fields, directed to world development of specialised skills in alignment with the industry requirement across the globe.

Bengaluru	Kalaburagi
CAD/CAM, CNC programming & Operation	GIS, GPS Total Station, Mason, Bar
Metrology	Bending, Site Supervisor, survey &
	Draftsman, Plumbing
SMT, Wave Soldering, Embedded Systems,	CNC, CAD/CAM, Tool Design
VLSI, Electronic Maintenance.	
PLC and Drives, Pneumatics, Hydraulics,	Electrical Pumps and Motor Repairing,
Man-Machine Interface Field Instrumentation	Industrial electrician, Motor control and
	Electric panel, electronics Maintenance,
	PCB Manufacturing.
Effluent treatment, Waste water treatment,	Air Conditioner, Deep Freezer,
Environment audit- Environment Impact	Automobile air-conditioning, Central Air-
Assessment, Eco-Industrial Parks.	Conditioning.
MIG, MAG, TIG Pipe Welding, International	MIG, MAG, TIG Pipe Welding

Welder	International Welder
IT-Hardware and Networking. CCNA, VM	IT-Hardware and Networking, CCNA
Ware	VM Ware

KEA has engaged IMaCS to conduct an evaluation study of SSDIs.

### *Objective*

- The purpose of the Evaluation is to check whether the objectives of the schemes are fulfilled
- 2. Whether GTTC/KILT/KSCDC Ltd/ATIs are strengthening gradually?
- 3. Whether these Institutions are competing with the private skill institutions?
- 4. By strengthening these institutions any intake capacity has been increased in these institutions.
- 5. To study the employability of the candidates who have under gone training courses.
- 6. Whether these institutions are adopting specialised skills in alignment with industry requirements of the district/ state.
- 7. How far the support from KGTTI has been fruitful in upgrading the training and modern skill/methods by the institutions.

The terms of reference of the same have been reproduced as under for ready reference:

- To check whether the objectives of the schemes are being fulfilled
- To assess if the GTTC/KILT/KSCDCL Ltd/ATIs are strengthening gradually
- To assess the change in intake capacity the institutions
- To study the employability of the candidates who have under gone training courses
- To assess the alignment of the courses offered by the institutes with industry requirements of the district/ state.
- To assess the extent to which the support from KGTTI has been fruitful in upgrading the training and modern skill/methods by the institutions

### 4 Approach and Methodology

### Approach of the Study

Our approach towards comprehensively addressing all the aspects as spelt out in the Terms of Reference shall be structured under three distinct modules, as pictorially represented in Figure 1 and subsequently explained in detail:

### Module 1: Diagnostic Assessment of the Specialised Skill Development Institutes

During this module SSDI (Specialised Skill Development Institutions) will be diagnosed.

### Work stream A: Profiling of Institutes

In the institutes will be profiled across various parameters as mentioned below.

- Availability of Infrastructure in the institute
- Current Manpower strength
- Various Courses offered in the campus
- Intake Capacity across various courses
- Placement across the courses
- Services offered/provided to Industries
- Professional Collaboration/ Tie ups with other institutes

#### **Exhibit 1. Approach Framework**

 Diagnostic Assessment of the Specialised Skill Development Institutes

 Profiling of Institutes
 Assessment of targets and achievements of the Institutions
 Assessment of Institutional strengths

 Impact assessment of the Institutions

 Institutional Impact on capacity development
 Need Gap Analysis

 Secommendations for Short and Long Term

 Infrastructure Needs
 Manpower Requirement
 Best Practices
 Institutional Framework

#### Work stream B: Assessment of targets and achievements of the institutions

Under this module the progress of the institutions will be evaluated with respect to the targets along the below mentioned parameters:

- Infrastructure development
- Training & Placement
- Performance under SCSP(Scheduled Caste Sub-Plan) and TSP(Tribal Sub-Plan)

### Work stream C: Assessment of Institutional Strengths

Under this module, the information on institution will be analysed across several years to-

- a) Assess Institutional gradual strengthening with respect to
  - Improvement in Infrastructure
  - Change in intake capacity
  - Change in staff strength
  - Change in the mix of Courses offered

- Support/Services to Industries
- b) Evaluation of Processes and systems with respect to
  - Publicity and awareness to promote the institute
  - Performance of Placement Centres
  - Technical service provided to industry
  - Management/Regional Review
  - Stipend/Financial support to trainees
  - Other government and competing private institutes
  - Align courses to local industrial needs/skill gaps

By the end of module 1 institutes will be profiled, achievement will be compared against the target and various strengths and areas of improvement will be highlighted.

### Module 2: Impact assessment of the Institutions

### Work stream A: Institutional Impact on capacity development

Under this module impact due the institutions will be assessed on the below mentioned parameters

- ➢ Total Training
- > Placement
- Self employment
- Service to industry

### Work stream B: Need Gap Analysis

Based on inputs from Module 1 and Work stream B of Module 2 a Need Gap Analysis will be done a cross the following areas

- > Infrastructure requirement to strengthen institutions
- Staff requirement across the institutions
- Change/ Modifications in the Courses based on contemporary local needs
- Need for Tie-ups with other institutes
- Placement/Self employment

By the end of this module impact of the institutes will be assessed and Need gaps in the institutions will be evaluated.

### Module 3: Recommendations for the short and medium term

Based on the Need gap analysis in the Module 3 the recommendations will be derived.

The recommendations two tiered as mentioned below

- Short term recommendations: These are implementable within a year without significant policy/budgetary interventions.
- Long term recommendations: These are implementable in a Horizon of 4- 5 years which may be need significant budgetary support

Key areas around which the recommendations will derived are as mentioned below.

- ➢ Infrastructure to be scaled up
- Deployment of Staff
- Modification/Changes in Courses
- Collaboration required
- Support for Placement/Self employment

### Methodology for the study

This engagement has been executed by a combination of primary and secondary research.

### **Primary research**

A structured questionnaire was prepared for the institutes and the following institutes were be visited during the primary research

- 1. Government Tool Room and Training Centres (GTTC)
- 2. Artisan Training Institutes (ATI)
- 3. Karnataka Institute of Leather Technology (KILT)
- 4. Karnataka State Coir Development Corporation (KSCDC), Bengaluru
- 5. Central Institute of Plastics Engineering & Technology (CIPET), Mysuru
- 6. Karnataka German Multi-skill development centre (KGMSDC)

GTTC Centres Covered	ATI Centres Covered
Bengaluru Urban	Nelamangala
Tumakuru	Tumakuru
Mangalore	Mangalore
Mysuru	Mysuru
Hospet, Bellary	Kalaburagi
Lingasugur, Raichur	Raichur
Kalaburagi	Chikkaballapura

Another questionnaire was prepared for beneficiary firms and interactions with 30 such beneficiary firms were held to receive the feedback on the institutes

### Secondary research

Extensive secondary research and analysis was conducted for the engagement. For this purpose, we reviewed information available in the public domain including annual reports of DIC–industry information from various associations of user industries, research reports of reliable agencies, databases and other sources we considered reliable. An annexure listing various secondary resources has also been furnished.

# 5 A snapshot of findings in response to evaluation questions

Evaluation Questions	Key Findings
Funding details of total sanctioned amount and actual	• For GTTCs, Rs. 35.40 crore sanctioned under SSDI and a total
amount disbursed in different year under different	disbursement of Rs. 35.40 crore has been made. Under SCP/TSP GTTC
heads	was provided with Rs.6.73 crore towards training between 2010-11 and
	2013-14
	• For ATIs, Rs. 2.99 crore has been released towards revival of 13 ATIs
	during 2013-14.
	• For KILT, An amount of Rs.9.23 crore has been disbursed to KILT
	towards constructions of New Building/procurement of machinery at
	Ullal. Rs. 3.62 crore was disbursed towards High Tech Training
	programmes, administrative expenses during 2010-11 and 2013-14
	• For CIPET Rs. 1.98 crore has been disbursed towards civil construction
	between 2010-11 and 2012-13
	• For KSCDC, The State has released funds of Rs. Rs.4.26 crore through
	DIC for its operations under Special development programmes (SDP).
	(Refer Annexure A for details)
Courses offered and performance against these courses	GTTC: Across the long term courses the intake capacity has increased from
	870 seats in 2010-11 to 1240 in 2014-15.

Evaluation Questions	Key Findings
	ATIs: Though the institute offers over 14 courses, training has not taken
	place.
	KILT: The institute offers 3 year Diploma in Leather technology and short
	term skill development training. Capacity utilisation for Diploma course
	during the review period ranged between 13% to 27%.
	KSCDCL: With production as focus, the institution offers short term
	training in spinning/ matting and composite board manufacturing. In 2010-
	11 a total of 120 persons were trained and in 2013-14 a total of 318 persons
	were trained witnessing a 38% CAGR.
Have you identified the skill requirement of the	GTTC, KILT and KSCDCL offer specialised courses and ATIs have been
districts before conducting the training programme? IF	offering region specific courses which are however obsolete. District skill
yes, which are they? If no, state reasons.	mapping studies were not witnessed in any of the institutes
Which are the courses in which you compete with	GTTC face competition from NTTF in case of DTDM course.
private institutions? For these courses, please share the	Total intake for DTDM course is 940 across 19 centres. Beneficiaries rate
total number of seats and total intake for the current	GTTC higher over NTTF. Other functional Institutes such as, KILT,
year	KSCDCL are specific to an industry does not have any competing institutes
	within the state.
Performance of Institutions in terms of imparting	GTTC : A total of 365 persons from the mentioned segments were trained
training to SCs/STs/BCs/Minorities/Women	during 2013-14 an increase of 65% from 2010-11
Beneficiaries	ATI: Not available
	KILT: During 2010-11 and 2013-14 a total of 24 persons in the mentioned

Evaluation Questions	Key Findings
	segments were trained under long term programme and 112 persons were
	trained under short term programmes
	KSCDCL: Training was conducting under SCP/TSP
How the institutions have performed under SCSP and	• For GTTCs, the SCP/TSP targets set have been met for the years through
TSP during 2010-2014? What were the targets set	2010-11 to 2013-14.
under SCSP and TSP during 2009-2013? Have the	• For ATIs, data not available.
targets set been met or not? If not, Reasons thereof	• For CIPET, data not available.
	• For KILT, SCP/TSP targets were achieved to the tune of 50% and 100%
	in 2013-14 and 2012-13 respectively.
Are the training modules, syllabi and curricula revised	• GTTC: The syllabi revised once in five years which is adequate
in these institutions? If yes, what is their frequency of	• ATI: No. The syllabus/and courses are not revised
revision? How frequently do you think the syllabi have	• KILT: Frequency not available. Recently action has been taken towards
to be revised?	revision of syllabus
	• KSCDCL: Production training on same machine, no revisions were
	evidenced from discussions
Do the Institutions help the candidates for self	• GTTC: No
employment? If yes, what type of help is rendered to	• ATI: No.
them? (Technical, financial/bank linkages, Accounting	• KILT: Technical assistance for self-employment.
linkages, etc.)	• KSCDCL: Employment provided in own production units

Evaluation Questions	Key Findings
Is there a placement centre at the institutions?	• Out of GTTCs visited, only two centres had dedicated placement centres.
(Yes/No) If yes, what is the procedure adopted to place	However placement is being carried out in all centres by getting in touch
the candidates in the industries? If not, what help is	with alumni/companies visited earlier. The general feedback from
given by these institutions to get employment after	Industries and students on the placement process has been positive.
training is imparted?	• ATIs: Placement not available
	• KILT: though there is no formal placement centre, students are referred
	to leading Leather/Garments Industries for internship/ job opportunities.
	• KSCDCL: Placement provided in Own manufacturing units.
Is the institution giving multi skill training to their	• GTTCs offer specialised courses in the area of tool making, precision
trainees? If not, is it desirable to do so?	manufacturing, electronics and mechatronics
	• ATIs has courses across multiple skills however they need to be more
	relevant in today's demand/context
	• For KILT is a specialised institute for leather technology. It may focus on
	the related areas for providing skill development.
How many people are employed at the centre? Please	• For the seven GTTCs surveyed, the trend of number of trainers has been
share the numbers under the following heads for the	stable except for Kalaburagi where it has fluctuated and decreased.
past five years	However, in terms of GTTCs at an overall level, the actual number of
	trainers in comparison to the number of trainers sanctioned is a grave
	concern.
	• For ATIs: 33 posts are filled up
	• For KILT, the staffing has remained constant with 5 trainers and 2 non

Evaluation Questions	Key Findings
	training staff.
	• KSCDCL: Trained by in-house production personnel across different
	units. Data on numbers not available
What is the Sanctioned staff for the organization versus	• For GTTC, actual number of trainers is 63 against the sanctioned 159 and
how many are actually working - teaching, non	number of non teaching staff is 65 against the sanctioned 123.
teaching/others (like administrative employees,	• For ATIs, 33 posts are filled up against sanctioned 66 posts
accounts, security etc.)?	• For CIPET, data not available.
	• For KILT, there are no sanctioned posts. There are 5 trainers and 2 non
	training staff.
Has there been any addition to your infrastructure	• GTTCs: Yes there has been up-gradation of infrastructure including
during the years 2010-2014? (Yes /No) If yes, please	buildings, machinery and establishment of new branches
provide details.	• ATIs: Rs. 2.99 crore has been released towards revival of 13 ATIs during
	2013-14, which mainly included civil works.
	• For CIPET Rs. 1.98 crore has been disbursed towards civil construction
	between 2010-11 and 2012-13 which included shop floor expansion,
	girls' hostel construction and expansion of boys' hostel.
	• For KILT, development of new building and deployment of new
	machineries is under progress.

Evaluation Questions	Key Findings
Is there a requirement of up gradation of infrastructure	• For GTTCs, up gradation worth of Rs. 47.50 crore is envisaged across
at your institution? What would be the kind of up	centres for civil infrastructure.
gradation and what will be the funding and time	• For ATIs, building infrastructure exists is in place and machineries can be
required to implement these up gradations?	procured once functioning is restored, depending on the courses offered.
	• For KILT, expenditure of Rs. 2 crore, Rs 1 crore towards building and
	Rs. 1 crore towards machinery, is envisaged.
	• KSCDC: Data not available
Do you have any collaboration/association with	None of the Institutions have such collaboration. KILT as per the
KGMSDC? (Yes/ No) If yes, please provide details on	discussions is exploring the same and DIC is in discussion with KGMSDC
services provided by KGMSDC. If no, kindly provide	for an association with ATI. The courses offered at GTTC and KSCDCL are
reasons.	specific and no collaboration with KGMSDC is envisaged
Are the Institutions providing technical service by	• GTTCs: Providing training and tool development services to the industry.
getting work orders from the industries in their	• ATI: No service is being provided
respective areas? (Yes/No) If yes, what is the type of	• CIPET: Training and development /manufacturing of components
service provided and to which industry? If not, why	• KILT provides Technical service to Leather Sector Industries on need
not?	basis
What are the current challenges do you face in	• For GTTCs, man power, availability of machinery is a key bottleneck.
conducting training in terms of: a. Availability of staff	• For ATIs, demand/relevance of courses in present day and availability of
b. Demand/relevancy of a course c. Placement d.	trained staff in new relevant courses is a challenge.
Availability of funds e. Any specific insights on	• For KILT, demand for the courses, availability of staff and funds is a key
specific courses (e.g.: which course needs to be wound	concern.

Evaluation Questions	Key Findings
up, Introduced or upgraded)	
How do you spread awareness/ create publicity for the	GTTCs, functional ATIs, KSCDCL and KILT all use a combination of
courses at your institution to attract enrolments?	newspaper advertisements, pamphlets, workshops and tie ups with related
	Institutes to attract trainees.

### 6 Study findings

### 6.1 Government Tool Room & Training Centre (GTTC)

### 6.1.1 Profile of GTTC

Government Tool Room and Training Centre was established in the year 1972 at Bengaluru with the participation of the Karnataka State Government, in collaboration with the Government of Denmark under the Bilateral Development Co-operation Agreement with proliferation of technology for development of the industries with supply of skilled manpower being the key to meet the needs of the global requirements.

### The objectives of GTTC are:

- a) To manufacture jigs, fixture cutting tools, gauges, press tools, plastic moulds, forging dies and other tooling for Small Scale industries advanced tool making process using CAD/CAM techniques are to be adopted.
- b) To provide training facility in tool manufacturing and tool design to generate a work force of skilled workers, supervisors, Engineers / designers etc.,
- c) To work as a Nucleus Centre for providing Consultancy, information service, documentation etc; for solving the problems related to tooling of industries in the region.
- d) To act as a common facility centre for small industries and to assist them in product and prototype development

### Vision

To emerge as an International Centre of Excellence in Training, Production, R&D and Consultancy Services related to Tooling & Precision Manufacturing — from Concept to End Product.

### Mission

To continuously improve the skills in Training, Develop Innovative Process to Optimize Production using Latest Facilities / Methodologies, Trends, Techniques to meet all Stake Holder Needs and be the Leader.

### **Objectives of the Tool Room**

- To conduct Industry Oriented Technical Training Programs to youth with Employable skills
- To assist MSME units in technological up-gradation by providing quality toolings
- To provide highly Skilled Work force to Industries.

Government Tool Room & Training Centre, a globally acclaimed Tool Room and Training centre, is a joint venture of Government of Karnataka and DANIDA, Government of Denmark, established in the year 1972, is situated in a campus at Rajajinagar, Industrial Estate, Bengaluru. Government of Karnataka has established 20 GTTC centres to provide skilled manpower and technical services to the existing and emerging Industries.

GTTC has trained more than 53,000 candidates in various long & short term Skill Development Training Programmes.

The main activities of the GTTC can be classified as follows:

- Offering Hands On Long Term, Short Te r m and Need based Training Programmes.
- Design and Manufacturing of Press Tools, Dies for Metals & Plastics, Jigs & Fixtures etc,
- Manufacturing of Critical and Precision components for Aeronautical and Defence Sectors etc.

### Facilities

GTTC has state - of - the - art sophisticated manufacturing facilities such as 3 to 5 axis high speed CNC Machining Centers, CNC Turning Machines, CNC Turn - Mill centres, CNC Jig Grinding, CNC Spark Erosion, CNC Wire EDM, CMM, Profile Projector, High Power Lasers for Cutting & Engraving and other conventional supporting machinery and equipments. Power Press, Plastic Injection moulding Machines and Pressure Die Casting Machine for component production

### Long - Term Courses

The centre is conducting following unique and specialised Industry driven courses these courses are approved by Government of Karnataka and All India Council for Technical Education (AICTE). The medium of instruction is English. Long term courses include the following:

- Diploma in Tool & Die Making: Diploma in Tool and Die Making
- Diploma in Precision Manufacturing
- Diploma in Electronics and Communication Engineering
- Diploma in Mechatronics

#### **Salient Features**

There are many features that set the training in GTTC apart and give it the edge. Some of these salient features are:

- Practical shop floor training.
- Working on Computers & CNC Machines
- Augmented Software Training schedules with specific reference to Design
- Stimulating Industry visits
- Special emphasis on Soft Skills
- Lecture programme by Professionals of Eminence
- Hands on Exposure Students are involved in design and fabrication of Tools / Dies / components for production activities
- Scientific Analysis of Tooling & Precision Manufacturing techniques through advanced CAD/CAM technology
- Industry Institute Interaction
- Excellent Placement Opportunities

### **In-plant Training**

After completion of 3 years Training in GTTC, Diploma in Tool & Die Making, Precision Manufacturing, Mechatronics course students will be deputed to related industries across the country for a period of one year mandatory In-Plant Training to augment their practical knowledge.

During In-plant training, trainees will acquire skills in areas of design, process plan, manufacturing techniques, inspection methods etc. The trainee will also do a project, related to

these areas and submit a report at the end of In-Plant training period. Trainees will be paid good stipend during their training period and most of the students are absorbed in the same industry.

Trainees after completion of this Diploma Course have excellent job opportunities in Industries in India and Abroad.

Apart from these features of regular courses, GTTCs also work with various skill development courses described as follows.

### **Skill Development Certificate Courses**

GTTC is offering various skill development short-term courses for SSLC, ITI, Diploma, B.E with Mechanical background students to acquire employable skills. The course details are as follows:

No.	Courses	Duration	Qualification
1	Tool Room Machinist	1 Year	SSLC Pass/Fail
2	Tool & Die Technician	2 Years	SSLC
3	Solid Works/CAD	1 Month	ITI/Diploma/BE
4	CNC programming &	1 Month	ITI/Diploma/BE
	Operations		
5	PRO-E	1 Month	ITI/Diploma/BE
6	Master CAM	1 Month	ITI/Diploma/BE
7	CATIA	1 Month	Diploma/BE

### **Government Sponsored Training Programs**

GTTC is conducting Government sponsored FREE Skill Training Programs for the benefit of educated un-employed and economically weaker section youth with an objective to make them industry ready:

- Sponsoring Departments: Directorate of Industries & Commerce, Social Welfare Department, DIC, Directorate of Municipal Administration under various schemes: SCP/TSP, SDP, NULM etc.
- The selected candidates will be paid stipend of Rs.1500.00 to Rs.2000.00 per month during the training period as per the scheme guidelines

• Target to train 4000 plus candidates/year in various employable skills training programs

No.	Courses	Duration	Qualification
1	Turner/Miller/Grinder/Fitter	4 Months	SSLC
2	Tool Room Machinist	1 Year	SSLC
3	CNC Programme and Operation	3 Months	PUC/ITI
4	Advance Metrology	3 Months	PUC /ITI
5	CNC Turning/Milling	6 Months	ITI/Diploma/BE
6	Advance Course in CNC Programming & Operations	6 Months	ITI/Diploma/BE
7	Master in CAD -CAM	6 Months	ITI/Diploma/BE
8	CAD -CAM	4 Months	ITI /Diploma/BE
9	Advance Machinist	6 Months	ITI/Diploma/BE

## **Corporate Training**

GTTC is also conducting Tailor made Skill Enhancement Training programs for working professionals from Industries, Institutions with an objective to upgrade the technical skills for better productivity.

- The Training modules are designed as per industry requirements.
- Hands on Training
- Flexible Timing Schedules for the convenience of working professionals
- Weekend Training Programs-Saturdays & Sundays

GTTC has trained thousands of Technicians and Engineers in On Job Skill Enhancement Training Programs to upgrade technical skills for various industries viz: General Electricals [GE], TE Connectivity, BHEL, Kennametal, AEQUS, Automotive Axles, PES Institute, CIPET, QUEST, Rane Madras, HICAL Technology, Good Rich Aerospace, L&T, Nestle etc.

# 6.1.2 Diagnostic Assessment of the GTTCs

## 1. Details on funding and availability of Infrastructure in the Institute

During the evaluation period the Institute has steadily strengthened its Infrastructure. Funds accorded to GTTC over the years for up gradation of Infrastructure have been represented below.

S.No	Head	Sanctioned	Actual Disbursement(in Rs. crore)						
		Amount(in	2010-	2011-	2012-	2013-	Remarks		
		Rs. crore)	11	12	13	14			
01	SSDI	35.40	-	22.40	-	13.00	For up		
							gradation of		
							Infrastructure		

Exhibit 2. Funding towards infrastructure up gradation

<u>As shown in Exhibit 2 Total sanctioned amount under SSDI towards up gradation of infrastructure is Rs. 35.4 crore.</u> A detailed break up of tentative utilization of funds of every year has been furnished in Annexure and supports the utilization of released funds towards the up gradation of infrastructure. So the funds have been used to build infrastructure in existing and new GTTCs as well as towards machinery purchase and up gradation.

### 2. Current Manpower Strength

#### Exhibit 3. Manpower deployed at GTTCs

Centre	District	Teaching Staff for all GTTCs(No.s)		Non Teach for all GTT	Contractual( (Teaching staff)	
		Sanctione	Actual	Sanctioned	Actual	Actual
		d				
Bengaluru	Bengaluru	28	9	12	05	00
Mysuru	Mysuru	13	04	07	08	00
Kalaburagi	Kalaburagi	11	03	07	06	08
Hospet	Bellary	04	03	05	05	05
Lingasugur	Raichur	06	02	06	01	00
Humnabad	Bidar	04	02	05	03	04
Belagavi	Belagavi	11	03	07	06	00
Hubballi	Dharwad	11	06	07	03	08

Total		159	63	123	65	49
	Kannada					
Mangalore	Dakshina	11	02	05	02	00
Shimoga	Shimoga	06	02	06	01	00
	u					
Kadur	Chikkamagalur	04	01	05	02	04
Gundlupet	Chamraj Nagar	04	02	05	01	04
Kolar	Kolar	08	01	06	04	02
Maddur	Mandya	04	02	05	02	05
Harihara	Chitradurga	04	02	05	02	02
	Kannada)					
Dandeli	Karwar (Uttara	06	03	06	02	00
Kanakapur	Ramnagara	06	06	06	01	00
K-Sangama	Bagalkot	06	02	06	06	06
Hassan	Hassan	06	04	06	03	01
Tumakuru	Tumakuru	06	04	06	02	00

Centre wise manpower details are provided under Exhibit 3. As can be seen from the exhibit the total manpower currently deployed is 177 persons which would include teaching and non-teaching staff working on permanent as well as contractual basis, against a sanctioned strength of 282 persons. In addition to this over 100 persons are associated with GTTCs as guest lecturers. Excluding guest lecturers GTTCs are operating with a shortage of 105 persons.

### 3. Courses offered in the Campus and Intake capacity across courses

GTTCs offer various long term programmes, their flagship courses being the four year full time courses of Diploma in Tool and Die Making and Diploma in Precision Manufacturing. Apart from these there are other courses offered as well, which are as follows.

#### Long Term Training Programmes

S.No.	Diploma Course		2014-15
		Intake	No. Of centres
			course is offered in
1.	Diploma in Tool & Die Making (DTDM)	940	19
2.	Diploma in Precision Manufacturing (DPM)	180	7
3.	Diploma in Mechatronics	50	1
4.	Diploma in Electronics & Communication	50	1
5.	M.Tech in Tool Engineering	36	1
6.	Post Diploma in Tool Design	78	NA
	Total	1334	

Source: DIC Annual Report, GTTC, IMaCS analysis

The total intake capacity across the courses in 2014-15 is 1334 across six courses. DTDM is the flagship course which is being offered in 19 centres. DPM is being offered in seven centres. Other courses are being offered only in Bengaluru centre only. Better utilization of the courses, inferred from the admission, pass out rate and placement strengths of the courses reflect the demand of these courses and that these courses are requirements of the industry. The total intake of courses every centre wise has been listed below to reflect the trend of new courses added over time.

SL.N O	PLACE	COURSE	YEAR WISE NUMBER OF STUDENTS INTAKE					
			2010-	2011-	2012-	2013-	2014-	
			11	12	13	14	15	
			Intak	Intak	Intak	Intak	Intak	
			е	e	e	e	e	
1	BENGALURU	Diploma in Tool &	50	50	75	75	75	
		Die Making						
		Diploma in Precision	30	30	30	30	30	
		Manufacturing						

SL.N	PLACE	COURSE	YEAR	WIS	E NU	U <b>MBER</b>	OF
0			STUD	ENTS IN	TAKE		
			2010-	2011-	2012-	2013-	2014-
			11	12	13	14	15
			Intak	Intak	Intak	Intak	Intak
			e	е	e	e	e
		Diploma in	30	30	50	50	50
		Mechatronics					
		Diploma in Electronics	50	50	50	50	50
		& Communication					
2	MYSURU	Diploma in Tool &	50	50	75	75	75
		Die Making					
		Diploma in Precision	30	30	30	30	30
		Manufacturing					
3	HASSAN	Diploma in Precision	50	50	50	50	50
		Manufacturing					
4	MANGALORE	Diploma in Tool &	30	50	50	30	30
		Die Making					
		Diploma in Precision			30	30	30
		Manufacturing					
5	KALABURAGI	Diploma in Tool &	50	50	50	50	50
		Die Making					
		Diploma in Precision		30	30	30	30
		Manufacturing					
6	BELAGAVI	Diploma in Tool &	50	50	50	50	50
		Die Making					
		Diploma in Precision		30	30	30	30
		Manufacturing					
7	DANDELI	Diploma in Tool &	50	50	50	50	50
		Die Making					

SL.N	PLACE	COURSE	YEAR	WIS	E NU	U <b>MBER</b>	OF
0			STUD	ENTS IN	NTAKE		
			2010-	2011-	2012-	2013-	2014-
			11	12	13	14	15
			Intak	Intak	Intak	Intak	Intak
			e	e	e	e	e
8	HOSPET	Diploma in Tool &	30	30	30	30	30
		Die Making					
9	HUBBALLI	Diploma in Tool &	50	50	50	50	50
		Die Making					
		Diploma in Precision		30	30	30	30
		Manufacturing					
10	HARIHARA	Diploma in Tool &	30	30	30	30	30
		Die Making					
11	KUDALASANGA	Diploma in Tool &	50	50	50	50	50
	МА	Die Making					
12	MADDUR	Diploma in Tool &	50	50	50	50	50
		Die Making					
13	KANAKAPURA	Diploma in Tool &	50	50	50	50	50
		Die Making					
14	LINGASUGURU	Diploma in Tool &	50	50	50	50	50
		Die Making					
15	GUNDLUPET	Diploma in Tool &	30	30	30	30	30
		Die Making					
16	KADUR	Diploma in Tool &	30	30	30	30	30
		Die Making					
17	HUMNABAD	Diploma in Tool &	30	30	30	30	30
		Die Making					
18	KOLAR	Diploma in Tool &				60	60
		Die Making					

SL.N O	PLACE	COURSE	YEAR STUD	WIS ENTS IN	JMBER	ABER OF	
			2010-	2011-	2012-	2013-	2014-
			11	12	13	14	15
			Intak	Intak	Intak	Intak	Intak
			е	e	е	е	e
19	TUMAKURU	Diploma in Tool &			60	60	60
		Die Making					
20	SHIMOGA	Diploma in Tool &				60	60
		Die Making					
	TOTAL		870	980	1140	1240	1240

### 4. Placement across the courses

Details of the students completed the Diploma courses and their placement across all the GTTCs are as mentioned in Exhibit 4, Exhibit 5, Exhibit 6 and Exhibit 7. As can be inferred from the exhibits in case of DTDM course, the pass our percentage has shown steady improvement, the number of students not enrolling for placement has witnessed the growth indicating the increasing preference for higher education. While the percentage of students enrolled in case of DTDM and DPM is around 80%, less than or equal to 60% of the students in case of Dip. in electronics and mechatronics enrol for placements.

#### Exhibit 4. Placement details DTDM

### Course Name : DIPLOMA IN TOOL & DIE MAKING

YEAR OF ADMISS ION	YEAR OF PASSIN G	Seats Available as per AICTE approval (Capacity)	Actual Intake(Enroll ed) for the course	Number of Student s Passed out	Percentag e of students passed	Total number of students Enrolled for placement	Total student s placed	Percentage of students enrolled for placement	Total not enrolled for placemen t	
2006-07	2010-11	460	460	322	70%	274	274	85%	48	Joined for higher education
2007-08	2011-12	460	460	343	75%	287	287	84%	56	
2008-09	2012-13	460	460	358	78%	294	294	82%	64	
2009-10	2013-14	460	460	368	80%	299	299	81%	69	

#### Exhibit 5.Placement details of Diploma in Electronics of all GTTCs

Course Name	Course Name :DIPLOMA IN ELECTRONICS FOR WOMEN CANDIDATES ONLY										
YEAR OF ADMISSION	YEAR OF PASSING	Seats Available as per AICTE approval (Capacity)	Actual Intake(Enrolled) for the course	Number of Students Passed out	Percentage of students passed	Total number of students Enrolled for placement	Total students placed	Percentage of students enrolled for placement	Total not enrolled for placement	Reason	
2006-07	2010-11	50	50	41	82%	22	22	54%	19	Joined for higher education	

2007-08	2011-12	50	50	40	80%	24	24	60%	16	
2008-09	2012-13	50	50	32	64%	15	15	47%	16	
2009-10	2013-14	50	50	30	60%	18	18	60%	11	

#### Exhibit 6. Placement details of Diploma in mechatronics of all GTTCs

Course Name	Course Name :DIPLOMA IN MECHATRONICS											
YEAR OF ADMISSION	YEAR OF PASSING	Seats Available as per AICTE approval (Capacity)	Actual Intake(Enrolled) for the course	Number of Students Passed out	Percentage of students passed	Total number of students Enrolled for placement	Total students placed	Percentage of students enrolled for placement	Total not enrolled for placement	Reason		
2007-08	2011-12	20	20	15	75%	9	9	60%	6	Joined for higher education		
2008-09	2012-13	20	20	16	80%	7	7	44%	9			
2009-10	2013-14	30	30	24	80%	10	10	42%	14			

#### Exhibit 7. Placement details of DPM across all GTTCs

Course I	Course Name :DIPLOMA IN PRECISION MANUFACTURING											
YEAR	OF	YEAR OF	Seats	Actual	Number	Percentage	Total	Total	Percentage	Total not	Reason	
ADMISS	ION	PASSING	Available	Intake(Enrolled)	of	of	number of	students	of	enrolled		
			as per	for the course	Students	students	students	placed	students	for		
			AICTE		Passed	passed	Enrolled		enrolled	placement		
			approval		out		for		for			
			(Capacity)				placement		placement			

2007-08	2011-12	40	40	31	78%	25	25	81%	6	Joined for
										higher
										education
2008-09	2012-13	40	40	32	80%	24	24	75%	8	
2009-10	2013-14	60	60	41	68%	34	34	83%	7	

For the long term courses the placement has been provided to all the students, except in the cases where the students opt for higher education. During our personal interaction with students in various centres of GTTCs the students agreed with this statement and no exception was found. However the students mentioned that placements happen in industrial clusters such as Bengaluru, Mysuru, Aurangabad, Pune, Hyderabad, etc. Few students also mentioned that after gaining experience they get opportunities to work outside India, especially in middle-east countries.

Year	Target	Trainees	Trainees	Traine	Trainees	Self
	number of	trained	trained	es	placed	employed
	trainees	under SCP	under TSP	trained		
2010-11	460	252	208	460	243	NA
2011-12	254	144	110	254	121	NA
2012-13	429	354	25	429	233	NA
2013-14	505	200	305	505	257	NA

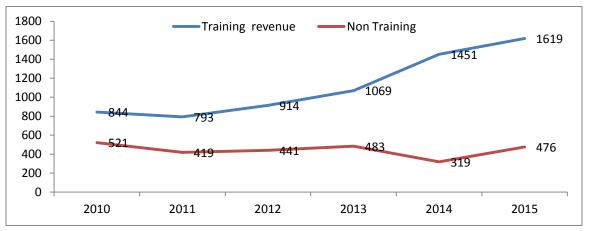
Exhibit 8 .Placement details under SCP/TSP

For the short term courses under SCP/TSP the training targets have been met. However placement averages around 50% during various years. The reason provided by the institution is because of locational preference, where the students look for local placement. However these jobs being industrial in nature, jobs may not be available in every location of choice.

#### 7. Services offered/provided to the Industries

The GTTCs also offer services to the Industry in terms of job work to be done or skills' training. From the Exhibit 9, it can be inferred that the training revenue has grown at a compounded annual growth rate (CAGR) of 14% .However the Non-training revenue has been stagnant and has reduced from 2010 levels.





Income generated from Services offered by GTTC Centres (in Rs. lakh)										
	2010	2011	2012	2013	2014	2015				
Training revenue	844	793	914	1069	1451	1619				
Non Training	521	419	441	483	319	476				
Total	1364	1211	1355	1552	1770	2095				

As per our discussions with the seven GTTCs, only Mangalore, Mysuru and Bengaluru GTTCs are providing regular services to the industry.

In the recent past, there have also been instances of corporate training programmes being conducted by GTTC for the employees of GE, TE Connectivity and Goodrich India. Details are given below:

S.N	Name of Company	Qualificatio	No. of	Need based training			
0		n	employees	programme			
1	General	M.Tech	50	Hands on Trg. on Shop floor			
	Electricals[GE],			practice and Manufacturing			
	Bengaluru			Skills			
2	TE Connectivity,	Diploma	30	Pro-E & Tool Design			
	Bengaluru						
3	TE Connectivity,	ITI	28	Hands on Tra on Shon floor			
	Bengaluru			Hands on Trg. on Shop floor			
4	Good Rich Skills	B.E/Diploma	30	practice and Manufacturing			

S.N	Name of Company	Qualificatio	No.	of	Need	based	training
0		n	employees		progran	nme	
	Aerospace,						
	Bengaluru						
	Total Candidates			1.	38		

Source: DIC Annual Report 2013-14

### 8. Professional Collaboration

GTTC has also entered into MoU with SIEMENS for training on Sinu Train Simulation Software for CNC Programming & Operations. Trainers Training Programme: SIEMENS has trained 42 faculties of GTTC under this programme.

### 9. Financial Details

A snapshot of the sanctioned and actual financial disbursements by DIC for all GTTCs has been captured below.

S.No	Head	Sanctioned		Actual 1	Disburse	ment(in R	s. lakh)
		Amount(in	2010-	2011-12	2012-	2013-	Remarks
		Rs. lakh)	11		13	14	
1.	SCP/TSP	673.57	132.48	85.26	120.74	335.09	Skill Training to
							SC ST candidates
2.	SSDI	3540.00		2240.00		1300.00	For up gradation
							of Infrastructure
	Total	4213.57	132.48	2325.26	120.74	1635.09	

Source: IMaCS Primary Survey, IMaCS

Source: Primary Survey, IMaCS Analysis

A comparative list of expenditure on Infrastructure for the GTTC centres surveyed for the evaluation study is furnished below.

Expenditure (in Rs.	2010	2011	2012	2013	2014	2015	Total
lakh)							
GTTC Bengaluru	450.00	0	0	0	402.00	0	852.00
GTTC Kalaburagi						-	-

GTTC Hospet			1.75				1.75
GTTC Lingasugur	16.05	18.50	66.04	-	-	-	-
GTTC Mangalore						1300.00	1300.0
							0
GTTC Mysuru	-	-	58.74	8.67	12.86	40.63	120.90
GTTC Tumakuru			-				-

## 6.1.3 Need gap analysis

In this section, we identify different strengths and challenges that we found the GTTCs to be facing when we visited the centres to assess their adequacy.

#### 1. Improvement in Infrastructure:

In terms of infrastructure, the GTTCs we have visited had workshops equipped with machinery and class rooms. Students and staff were satisfied with the addition of machinery and building space during the review period. However respondents mentioned that the improvement in student to Machine ratio may help in improvement in the learning .As per the data provided by institute the Machine to Student ratio is currently at 1:5, excluding intake for short term courses. As per the inputs from the institute 70% of the pedagogy is practical training therefore availability of machines becomes more critical. It may be targeted to have Machine to Student ratio of 1:2. In addition there is a need to upgrade machinery as some of the machines are older than ten years. List of machinery which are old and irreparable are listed in Exhibit 10. A continuous up gradation/addition was witnessed in the locations we have visited. So the investment through SSDI has helped in building the requisite infrastructure in GTTCs. Hostel facilities were not available in all the locations, though students did voice the need for hostel facilities. In several locations, students had issues with respect to availability of tools and drinking water especially in Lingasugur and Kalaburagi, which are hygiene issues and have to be addressed by the management. It was found during our discussions with GTTC centres that there is significant potential for introducing courses such as Dip. in Mechatronics, in key industrial hubs such as Mysuru, Mangalore and Hubballi. So, the

infrastructure addition/up gradation may be planned accordingly, so that the centres may be strengthened.

Sl.				Grindi	Cylindrical	CNC	CNC				
No.	Centre	Lathe	Milling	ng	Grinding	Milling	Turning	Total			
			Quantity in numbers.								
1	Bengaluru	3	3	2	1	4	2	15			
2	Mysuru	3	3	3	1	4	2	16			
3	Hasan	2	2	2	1	1		8			
4	Mangaluru	3	3	2	1	1	1	11			
5	Kalaburagi	3	3	2	1			9			
6	Belagavi	3	4	2	1	1		11			
7	Dandeli	3	4	2	1			10			
8	Hospet	3	3	2	1			9			
9	Hubballi	3	3	2	1	2	1	12			
10	Harihar	3	3	2	1			9			
11	Maddur	3	3	2	1			9			
	Kudalasang	3	3	2	1						
12	ama	5	5	2	1			9			
	Total	35	37	25	12	13	6	128			

#### Exhibit 10. GTTC: Centrewise machines which cannot be repaired

## 2. Change in intake capacity

The intake capacity has been growing over the years from the total intake of 870 seats in 2010-11 to 1240 no.s in 2014-15 witnessing a 9% CAGR.

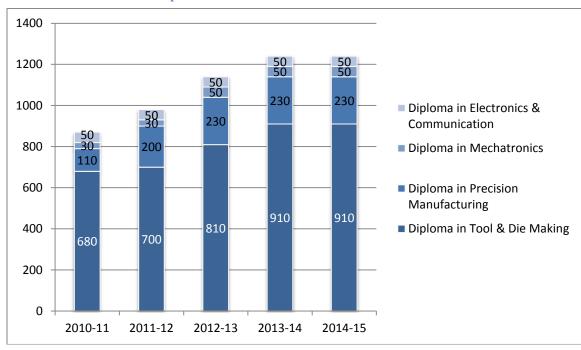


Exhibit 11. Student intake for diploma courses in no.s

Further analysis shows that the increase in intake is due to below mentioned developments during 2010-11 and 2014-15;

Description	Additional intake
New centre addition	180 No.s
New course addition in existing centre	120 Nos.
Course Capacity increase in existing centre	70 No.s
Total addition during 2010-11 and 2014-15	370No.s

Thus, addition of three new centres during this period has contributed around 50% of additional intake and DPM was introduced in 4 existing centres (Mangalore, Kalaburagi ,Hubballi, Belagavi) which contributed to 120 no.s of additional intake. 70 No.s of additional capacity was added across 2 courses in Bengaluru and Mysuru.

#### 3. Staff strength

The staff strength in GTTC has been a matter of concern. As depicted in Exhibit 12, all GTTCs are witnessing shortage of manpower both teaching as well as Non-teaching. Further the actual teaching staffs include contractual staff of 49 persons.

So, the total shortage is 105 persons.

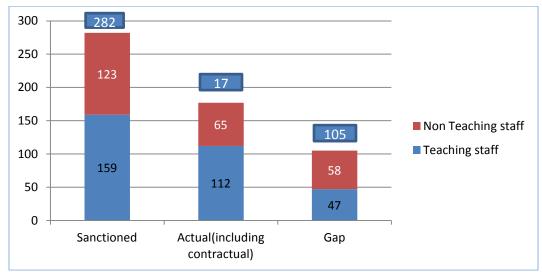


Exhibit 12. Manpower status in GTTC(Number of Persons)

Source: GTTC, IMaCS analysis

Further during our discussions with GTTC centres, the problem with manpower was found to be two dimensional. On one hand there is an absolute manpower shortage and on the other hand issues exist with the contractual teaching staff. We understood that remuneration offered to the contractual staff is less than the remuneration in industry and similarly growth opportunities are limited. Thus, the challenge the institute faces, is with respect to attracting well qualified and experienced teaching staff. So, this issue has to be addressed as it may lead to capability issues in trainees/students.

#### 4. Change in mix of courses offered

The institute has diversified by addition of courses in electronics and mechatronics from core courses on Tool and Die making. The good utilization of the courses, inferred from the admission, pass-out and placement for the courses reflect the demand of these courses and that these courses are in line with the requirements of the industry. Adequacy of the syllabus of the courses was also echoed by the industry players we have discussed with. This was reflected in the survey of the industries where students worked, a similar

feedback was precipitated with 80% of the surveyed respondents rating the trainees to be technically average or above.

During the review period DPM was introduced in 3 centres where DTDM was being taught. Thus, improving the mix of courses offered.

Further a common suggestion precipitated from the survey of beneficiary companies was that there needs to be improved focus on the method of delivery of the courses. Particularly, the practical exposure of students has to be improved. Almost all industry players were of the opinion that that practical know how of the students needs to be improved in the manner of delivery of courses.

#### 5. Support/Services to the Industry

GTTC provides training as well as job work services to the industry. As depicted in Exhibit 9, the non-training revenue has been stagnant and has marginally reduced from Rs. 521 lakh in 2010 to Rs.470 lakh in 2015.

#### 6. Performance of Placement Centres

Out of the seven GTTCs visited, only Bengaluru, Mysuru reported having a formally established placement cell. Although, as per the feedback of the companies, the placement process is smooth but it would be best to have a dedicated placement cell at each of the Institutes as this would only benefit the placement process. Also, as per the feedback there is hardly any other feedback from various companies apart from the required monthly performance report. A dedicated placement cell could look after such activities having a more regular/robust process with master list of companies, and soliciting feedback to Institutes apart from the scheduled monthly performance review of the in plant trainees. This too is mostly an event driven exercise, as in if there have been serious issues like absenteeism or depending on personal contacts of the alumni running these companies. Thus, there needs to be a better outreach programme.

#### 7. Other government and competing private Institutes

From the survey of beneficiary industries, it was found that GTTCs are still a preferred destination for tool room recruiters. However, there is a credible competing institute of NTTF. Apart from these, some industries also look at picking out apprentices from ITIs and one or two private polytechnic colleges. Over 50% of the surveyed respondents also pick from these institutions.

GTTC as an institution during the review period has witnessed improvement in infrastructure, geographical presence, number of courses offered in various branches and adequate placement. However with the expansion there have been challenges faced by institution which included staff strength, span of control, and consistency in skill development. Geographical expansion is important for GTTCs as the requirement of skilled personal will be more important than ever with the nation having increased manufacturing share. So these issues have to be adequately addressed so the institution witnesses sustainable expansion with the improved reputation.

# 6.2 Artisan Training Institutes

Artisan training Institutes are the departmental training institutes established for imparting training to the hereditary Artisans to upgrade their skills. 27 ATIs are functioning in the State of which 23 are running in Govt buildings and 4 are run in private buildings. The courses offered were general engineering works (Fabricated material) carpentry, smithy, lacquerware, agarbatti and candle making. Over a period of time, these trades have lost their importance. Department felt to modernise these ATI's, during 2013-14 by introducing new courses namely fashion designing, CNC lathe works, House hold electrical appliances, 3D printing and scanning, Computer Hardware and Software, Motor rewinding, Transformer repair and services and weaving of towels and bed sheets.

During 2013-14, 13 ATIs have been given funds for reviving the centres. The total sanctioned staff strength in all ATIs is 66. Out of these 33 posts are filled up and the remaining posts are vacant. The existing staff needs orientation of new trades for imparting training. It is proposed by the department to get the training outsourced from KGTTI, GTTC and NTTF.

## 6.2.1 Profile

As of date, there are 27 ATIs functioning in the State of which 23 are running in Govt buildings and 4 are run in private buildings. Their spread in the State is shown in Exhibit 13.

District Name	Shared location of ATI
Bengaluru Rural	Channapatna
Belagavi	Belagavi
Bellary	Bellary
Bidar	Bidar
Bijapur	Bijapur
Chikballapura	Chikballapur
Chikkamagaluru	Chikkamagaluru
Chitradurga	Chitradurga

Exhibit 13. Geographic spread of ATIs

District Name	Shared location of ATI
Dakshina Kannada	Bannadka
Dharwad	Hubballi
Kalaburagi	Kalaburagi
Hassan	Hassan
Koppal	Koppal
Mandya	Nagamangala
Mysuru	Hunsur
Raichur	Raichur
Shimoga	Sagar
Tumakuru	Tumakuru, Hirehalli
Karwar (Uttara Kannada)	Kumta

S.No.	Name of course	Duration	Qualification
1	Wood carving	2 years	SSLC
2	Tailoring	1 year	SSLC
3	Lacquerware	1 year	SSLC
4	Carpentry	2 years	SSLC
5	Sheet Metal craft	1 year	SSLC
6	General Engineering/Smithy	2 years	SSLC
7	Repair of Transistor, TV and domestic electrical	1 year	SSLC
	appliances		
8	Electrician craft	1 year	SSLC
9	I.P. sets and borewell repairs	1 year	SSLC
10	Plumbing and sanitary works	1 year	SSLC
11	Leather craft	2 years	SSLC
12	Automobile repair	2 years	SSLC
13	Cane and bamboo craft	2 years	SSLC
14	Non ferrous metal craft	2 years	SSLC

List of courses being run at these ATIs is furnished below.

A list of the courses being run in these Institutes is captured below.

S.No.	Centre	Crafts in which training is offered		
1	Channapatna, Bengaluru	Carpentry, Lacquerware, Smithy/GE		
2	Belagavi	Carpentry, Leather, Smithy/GE, Automobile, Plumbing and sanitary		
3	Bellary	Smithy G/E, Carpentry, Plumbing and sanitary		
4	Bidar	Leather, Smithy G/E, Carpentry, Sheet metal		
5	Chitradurga	Carpentry, Smithy G/E, Automobile, I.P. Set and borewell repairs, Electrical		
6	Chikballapura, Kolar	Leather, Smithy G/E, Carpentry		

S.No.	Centre	Crafts in which training is offered	
7	Chikmagalur	Cane, Electrical, Smithy G/E, Carpentry	
8	Kalaburagi	Carpentry, Smithy G/E, Radio and TV, Repairs,	
		Electrical, Automobile and borewell repairs,	
9	Hubballi, Dharwad	Carpentry,Leather, Automobile Radio Repair and	
		Electrical	
10	Hunsur, Mysuru	Carpentry, Electrical, Automobile, plumbing and	
		sanitary	
11	Bannadka, Dakshina	Carpentry, Automobile, I.P. Set and Electrical	
	Kannada		
12	Hassan	Cane, Carpentry, Smithy G/E, I.P. Set and Electrical	
13	Tumakuru	Tailoring and embroidery	
14	Hirehalli, Tumakuru	Carpentry, Smithy G/E, Automobile, I.P. Set, Radio	
		and TV Repair	
15	Bijapur	Carpentry, Smithy G/E, Leather	
16	Nagamangala, Mandya	Carpentry, Smithy G/E, Non ferrous	
17	Kumta, Uttara Kannada	Smithy G/E, Cane	
18	Sagar, Shimoga	Carpentry, Smithy G/E, Cane, Sandalwood carving,	
		Leather	
19	Raichur	Welding, Gen. Engineering, Motor winding,	
		Automobile, I.P.Set, Borewell, Repairs, Carpentry	
20	Koppal	Smithy, Carpentry	

# 6.2.2 Performance assessment of ATIs

As outlined earlier, the ATIs run courses that have outlived their significance. With computers becoming ubiquitous across industries and sectors, ATIs are trying to upgrade their courses to disseminate related awareness in the youth to enhance their employability. Also, the ATIs are trying to design courses according to industries already present in their vicinity to facilitate employment for the trainees.

As a part of our primary survey, we have had discussions with the following ATIs. Their performance is outlined in the following subsections. A summary of the same is given below for ready reference.

S.No.	ATIs	Have own	Have own	Are training
		building	Staff	Services Provided
			available	during last five
				years
1	ATI Tumakuru	Yes	Yes	No
2	ATI Mangalore	Yes	Yes	No
	(Moodbidri)			
3	ATI Nelamangala	Yes	Yes	No
4	ATI Mysuru(Hunsur)	Yes	Yes	No
5	ATI Kalaburagi	Yes	Yes	Yes
6	ATI Raichur	No	No	No
7	ATI Chikkaballapura	Yes	Yes	No

Source: Primary Survey, IMaCS Analysis

Out of seven ATIs we have visited only one centre has provided training during last five years.

#### 6.2.2.1 ATI Kalaburagi

#### Infrastructure

ATI Kalaburagi has necessary office and building in place for the training. ATI availed financial assistance to the tune of Rs. 14.50 lakh from the DIC in June 2014. This was renovation of the old ATI building so that the new/planned courses could commence in the renovated building. The building was renovated by hiring a contractor for the job.

In 1995-97, due to conventional trades of carpentry and other crafts becoming irrelevant, there were very less trainees interested in training at the ATI. Correspondingly, machinery maintained at the ATI became unserviceable and were auctioned off. Thereafter, machineries were purchased but not maintained at the ATI. The ATI has no new machinery in place for training of trainees through the DIC as of now. The scrapping of old ATI machinery left vacant space at the

ATI held land which was subsequently used to bring up a food cluster setup under Cluster Development Programme. The coming up of this cluster is the main reason for introduction of food technology course in the curriculum of the ATI, as it provides an avenue of possible employment.

Financial requirement for infrastructure to be set up to start the planned courses has been estimated and shared with DIC as a proposal. Approximation of the same are mentioned below.

S.No.	Description of infrastructure needed	Estimated	Expenditure(in	Rs.
		lakh)		
1.	Motor rewinding machines	17.9		
2.	Computers (20 units)	Almost 10		
3.	Food processing machines	6-7		

Source: Primary Survey, IMaCS Analysis

#### Manpower

The staffing of ATI is far lesser than the sanctioned staff. Given that courses are yet to be started, this does not affect the scenario much but shall definitely become an issue if the courses are to be commenced in full swing.

Number of staff	Sanctioned	Actual
Teaching	5	3
	( 3 instructors, 2 asst. instructors)	(1 instructor, 2 asst.
		instructors)
Non Teaching	4	3
	(1 Head of institution, 1 Clerk, 2 Office	(1 Clerk, 2 Office boys)
	boys)	
Total	9	6

Source: Primary Survey, IMaCS Analysis

The post of the Head of the Institution is being held on an ad hoc basis as an additional charge by DIC personnel.

### Training

ATI Kalaburagi has recently started new training courses which are more relevant to the present times. The courses taught or planned by them are as follows.

S.No.	Name of the course	Duration
1.	Electrical rewinding	3 months
2.	Computer Office Automation	3 months
3.	Food Technology	3 to 4 months

Source: Primary Survey, IMaCS Analysis

In the past five years, there has not been any training. The first batch of trainees from ATI was trained this year and was a batch of 10 trainees for Computer Office Automation. They were trained with ten computer sets borrowed from KVIC administration initially meant for usage by taluka officers.

The new courses being introduced were identified through discussion with GTTCs, ITIs, major cement manufacturers located in Kalaburagi (ACC, Vasavaadatta cements).

The ATI has a target to train 200 trainees through all three courses. However, there are many challenges to this. For example, for the first batch of computer course arranging an instructor had been a significant challenge. In this instance, the ATI had outsourced the job to an instructor. Students being trained were given a stipend. However, when ATI advertised for courses (through newspaper advertisements) to be chargeable as "pay and learn" so that the instructor could be retained with appropriate remuneration there were no takers. The existing staff is not qualified in the field to do the same. So, the first and foremost challenge is of takers for courses, should they be "pay and learn", and subsequently of infrastructure which is yet to be put in place for courses to be run.

#### 6.2.2.2 ATI Raichur

#### Infrastructure

The ATI has two large buildings to cater to the training Institute. However, there have not been any additions to the infrastructure in the period from 2010 to 2014. There are two buildings that are housed in the ATI premises. One building was handed over to State Bank of Hyderabad about six to seven years ago for their branch operations. Another ATI building that housed the ATI Government machinery about ten years ago is now being used by a private institution. On being asked to vacate the premises, the private institution is not cooperating and has gone to court to contest the direction. The decision for the same is pending.

#### Manpower

The ATI also is not staffed well to conduct training courses. The staff strength of the ATI is indicated as given below.

Number of staff	Sanctioned	Actual
Teaching	3	0
	(3 instructors)	
Non Teaching	3	1
		(1 industrial promotion alb)
Total	6	1

Source: Primary Survey, IMaCS Analysis

#### Training

ATI Raichur is awaiting revival. As per our visits, there have not been any training sessions at the ATI in the past twenty years. However, there is a plan to introduce the following courses:

S.No.	Name of Course	Duration of training	Planned batch size
1.	Tailoring	4 months	50
2.	Computers	4 months	50
3.	Repair of electronic equipments	4 months	50
4.	Motor rewinding	4 months	50
5.	Repair of electrical home appliances	4 months	50
6.	Embroidery and knitting	4 months	50
7.	General engineering	4 months	50
8.	Carpentry	4 months	50

Source: Primary Survey, IMaCS Analysis

Some of these courses are being run in the DD Office but not at the ATI.

## 6.2.2.3 ATI – Tumakuru

Infrastructure

ATI, Tumakuru, has basic office infrastructure in place as can be seen in the following photographs. Also, there has been some building repair for the existing infrastructure worth of Rs. 6.10 lakh.

### Manpower

Number of staff	Sanctioned	Actual	Vacancy
Teaching	5	4	1
Non Teaching	3	1	2
Total	8	5	3

Source: Primary Survey, IMaCS Analysis

Major challenge faced by the Institute has been there is a dearth of demand of the courses currently offered. Also, there are no *qualified personnel* to impart training for new proposed courses.

### Training

Courses currently available are in the field of Ready Made Garments, Mobile Repairs, General Engineering and Carpentry and T.V. Repairs. However, the need is to introduce newer courses, Carpentry and general works are to be wounded and New Crafts are to be introduced with Qualified Faculty.

Like the other two precedents ATI, Tumakuru too has not conducted any training sessions in the past five years.

To make the institution functional would require New Building and old Building Repairs worth of Rs. 33.5 lakh. More importantly, introduction of new advanced Courses with Qualified Faculty and Sufficient funds is required.

## 6.2.2.4 ATI – Moodbidri

### Infrastructure

ATI at Moodbidri, has the necessary building in place for the training Institute. The Institute is equipped with 5 staff persons against a sanctioned strength of 9 out of which 3 are on deputation in other departments. The institute has not conducted any courses in the past five years. In 2012-13 Rs.

### 6.2.2.5 ATI – Chikkaballapura

ATI Chikkaballapura has not been functional for the last 5 years.

#### Infrastructure

The centre has a building where the DIC officials are operating from and a part of the building is also provided to ATDC for training. Machinery is not available in the centre.

### Manpower

Against a sanctioned strength of 9 persons only two persons are actually employed at the centre. Plans for revival are on anvil but the institute is not functional as of now.

### 6.2.2.6 ATI - DIC - Mysuru (Hunsur)

#### Infrastructure

ATI Mysuru, has the necessary building in place for the training Institute. The machinery is obsolete and idle in the institute.

### Manpower

The Institute is equipped with 5 staff persons of which two are working for other departments on deputation against a sanctioned strength of 8 persons.

### Training

ATI Mysuru earlier had the following courses.

S.No.	Course	Duration	Qualification
1.	Plumbing and sanitary works	1 year	SSLC
2.	Carpentry	2 years	SSLC
3.	Automobile repair	2 years	SSLC
4.	Electrician craft	1 year	SSLC

However, ATI Mysuru has not conducted any courses in the past five years.

## 6.2.2.7 ATI - DIC - Nelamangala

### Infrastructure

ATI, Nelamangala has the building in place for a training Institute. The building has been rented / leased to an NGO, which is currently conducting ITI courses and training in garment industry. ATI Nelamangala has not conducted any training sessions in the past five years.

### **Case Study:**

The infrastructure at ATI Nelamangala is being currently utilised by Divya Jyothi Vidya Kendra (DJVK) since 2012 on rental basis. While Building belongs to ATIs, the Equipment is being owned by DJVK.

DJVK a non-governmental organisation focused on trainings such as vocational training, training in tailoring, driving training, awareness programmes and cultural program activities for the benefit of the neglected, helpless senior citizen – a home for senior citizens is also being maintained. While vision of the institute is to restore dignity, social and economic status for dalits and underprivileged and empower youth in particular, the mission is to offer training to the under privileged women, youth and disabled and to organise education for the rural and secluded.

This Institute offers courses for students in three industrial trades viz machine fitting, welding, and electronic mechanical courses. The objective of offering these courses to rural youth is to impart skilled training with appropriate facilities for harnessing their skills in practical industrial training. The course is of two years duration and students of all above courses take examination conducted by Government of India's National Council for Vocational Training and certified accordingly. The placement wing of the organization has successfully placed them in various industries. During last three years, totally 148 students have been benefited by successfully completing these three courses. (Source discussion with management and web link http://djvk.org/activities.html)

Vocational course on Garment Manufacturing is also being run in the premises supported by government.

# 6.2.3 Need Gap Analysis

As per observations recorded above, it is our understanding that practically no training is being provided at the Artisan Training Institutes for quite some time.

Major underlying reasons for the same are:

- 1. **Obsolete courses:** Most of the courses such as smithy, lacquering, leather craft, Transistor and TV repair and carpentry offered at ATIs have over time lost their relevance and thus, the demand. So the courses may be either removed or modified based on the current needs. Our suggestions in this regard are updated in **Error! Reference source not found.**.
- 2. **Obsolete technology:** Several of the machinery/techniques taught are manual ,while the technology has changed in the real world.
- 3. Unavailability of staff in relevant area of training: The training staff that is in place in the Artisan Training Institutes is the same staff that was recruited a long time ago, in some cases, 10-15 years ago. These trainers are ill suited to conduct the kind of trainings in demand today as their specialization is quite different from the specialization demanded by the more relevant courses of the day. So, even though there are some instances of the ATI trying to resurrect courses there is a crunch of adequately qualified personnel to conduct these training sessions.
- 4. **Certification is not recognised:** During the discussions with the ATI staff one of the aspects which came out was that the certificate is not recognised by private or government institutions. More importantly, with the courses offered at the Institutes having outlived their relevance, the attractiveness/rationale behind need to train at ATIs has weakened considerably.

# 6.3 Karnataka Institute of Leather Technology (KILT)

### 1. History and Background

Karnataka State is known for pioneering many activities in the Industry Sector. It has played an important key role in the development of Leather Industries. As a pre-requisite in Leather Processing, a Tannery Production Centre, first of its kind in the entire South India, was started with an innovative idea by none other than, Bharat Ratna Sir.M.Visvesvaraya, who established, Mysore Chrome Tanning Industry (MCTI) way back in the year 1940 and thereafter, the KILT was started in the year 1983-84 and engaged in knowledge building, skill & entrepreneurship development, imparting training to semi skilled & skilled artisans and catering to the needs of the Industries. Thus, KILT as an Institute, uniquely diversified its activities, with clarity for more social commitment in terms of service and imparting knowledge.

The very purpose of establishing KILT is to create, human resources in terms of highly skilled manpower to cater the needs of the leather industries both locally & exporters. The role of KILT during the earlier scenario & the present scenario are detailed below.

### EARLIER SCENARIO:

- Karnataka Institute of Leather Technology (KILT) started in the year 1983-84 was the only Institute to start Diploma in Leather Technology course in the state assisted by LIKDAR.
- In the year 1995-96, KILT was registered under Societies Act with due approval of AICTE & DTE funded by the Department of Industries & Commerce directly.
- During these 30 years 432 diploma students have passed out against the enrolment of 829 with a percentage of 57% & also under Skill Development Programmes 428 SC/ST & General Candidates have been trained. The Skill Development Programme have been started from the year 1995-96.

### PRESENT SCENARIO:

• The Department of Industries & Commerce got 10 acres of Government Land at Ullal Upanagar, with grant under ASIDE programme to a tune of Rs.16.10 crore for establishing building & for machineries of which Rs.11.65 crore towards building & Rs.4.45 crore for equipments.

- An MOU was signed with Central Leather Research Institute (CLRI), Chennai in the year 2014-15 for restructuring the diploma course and functioning of KILT. The earlier diploma course syllabus was very old which was not in conformity to the present day Leather Technology.
- The CLRI framed a new course in diploma by incorporating the "Leather & Fashion Technology" which is first of its kind in the country. The intake of 45 students per year & this new course has been dully got approved by All India Council for Technical Education(AICTE) New Delhi & Department of Technical Education(DTE).
- Every year KILT is receiving Administrative grants from Government of Karnataka.

In addition to the focus on skill development through KILT the Govt. also support setting up of industries through its polices supporting to establish units few of which are listed below which are as per Karnataka Industrial Policy 2014-19:

- State will support Mega Leather Park under Mega Leather Cluster Scheme of Government of India
- 2. Minimum 100 clusters in different sectors will be set up during the policy period at a rate of 20 clusters per year
- 3. Investment Promotion subsidies
- 4. Exemption from stamp duties
- 5. Concessional Registration charges
- 6. Reimbursement of Land conversion Fee
- 7. Exemption from entry tax
- 8. Subsidy for setting up of Effluent Treatment Plant
- 9. Exemption from Tax on Electricity Tariff
- 10. Support for Technology Up gradation
- 11. Special support to Minorities, Backward classes, SC/ST and Women entrepreneurs

KILT is being promoted by the State as a Premier Advanced Leather Institute by keeping all the requirements to the level of International Standards and imparting the quality education at a very reasonable cost. The highlights of the KILT, in the present Global Scenario is that, it has not only

started Leather related Fashion Technology, a course approved by Central Leather Research Institute (CLRI), but also establishing Testing and R&D Centres benefiting both Academic & Commercial activities. The Leather based Fashion Technology is a unique course being the first of its kind in the country.

#### 2. Various courses offered

Flagship course of KILT is Three Years' Diploma in Leather and Fashion Technology Additionally Six months' Skill development courses are also being offered in the related area The performance of the Institute against these courses has been captured below:

### Long term course - Diploma in Leather Technology

Year	Name course	of	Duratio n of training (Years)	Total seats availabl e	Total numbe r of persons trained	Capacity Utilisatio n	Total number of placement s made	Number of persons helped for self employmen t
2010	Diploma	in		Not conducted				
-11	Leather							
	Technolog	у						
2010	Diploma	in	3	45	7	16%	4	3
-11	Leather							
	Technolog	у						
2011	Diploma	in	3	45	8	18%	3	5
-12	Leather							
	Technology							
2012	Diploma	in	3	45	6	13%	3	3
-13	Leather							
	Technolog	у						
2013	Diploma	in	3	45	12	27%	7	5
-14	Leather							

Technology			

#### Short term course - Skill development Course

Year	Name of course	Duratio n of training	Total seats availabl e	Total number of persons trained	Total number of placement s made	Number of persons helped for self employmen t
2011- 12	Skill Development Programme	6 Months	40	40	15	25
2012- 13	Skill Development Programme	6 Months	40	32	10	22

Source: Primary Survey, IMaCS Analysis

The institute is yet to utilise the capacity. Lack of infrastructure was cited for the same. Considering the courses are being held in new campus from the current year the institute aims to improve as the relevant infrastructure is in place including the hostel facility for the students from other places.

#### 3. Availability of Infrastructure in the Institute

The institute in new location has started operations in 2010 now also has a hostel accommodation in place. Most of the machinery and infrastructure required to run the courses offered is already in place. As a result, courses have been started as well but are yet to attain full membership of classes.

S.No.	Description of infrastructure needed	Estimated Expenditure(in Rs.
		lakh)
1	Additional Buildings for Skill Development	100 lakh
2	Machineries	100 lakh

Source: Primary Survey, IMaCS Analysis

#### 4. Current Manpower Strength

The institute is run by contractual employees under the oversight of the Managing Director, who is a permanent employee. It is noteworthy that there are no sanctioned posts for the institute.

Year	Total staff (A)=(B)+(C )	Trainers (B) = (D)+(E)	Other depts. (Admin, Account etc.) ( C )	Permanent Trainers (D)	Contractual trainers (E)
2009 -10	7	5	2	0	5
2010 -11	7	5	2	0	5
2011 -12	7	5	2	0	5
2012 -13	7	5	2	0	5
2013 -14	7	5	2	0	5

Source: Primary Survey, IMaCS Analysis

However, there is augmentation of manpower required so as to deliver training. It is understood from our discussions that the same is being undertaken through cadre & recruitment rules.

# 5. Intake capacity across the courses and placement across the courses; SCP/TSP performance

A summary of the progress made by the Institute in respect of training conducted under SCP/TSP for the short term and the long term courses has been summarised below.

#### Short term course

Year	Name of	Duration	No. of	No. of	No. of persons
	course	of	persons	placements	helped for self
		training	trained	made	employment
			(SC/Wom	(SC/Wome	(SC/Women)
			en)	<b>n</b> )	
2011 -	Skill	6 Months	40	15	25
12	Development				
	Programme				
2012 -	Skill	6	32	10	22

Year	Name of	Duration	No. of	No. of	No. of persons
	course	of	persons	placements	helped for self
		training	trained	made	employment
			(SC/Wom	(SC/Wome	(SC/Women)
			en)	<b>n</b> )	
13	Development	Months			
	Programme				
2013 -	Skill	6	40	8	32
14	Development	Months			
	Programme				

# Long term course

Year	Name	of	Durati	No. of pers	sons trained	No. of	No. of persons
	course		on of			placement	helped for self
			trainin			s made	employment
			g			(SCs+STs	(SCs+STs+BCs+
				(SC/Men	(Minoritie	+BCs+Min	Minorities)
				)	s)	orities)	
2010 -	Diploma	in	3 Years				
11	Leather						
	Technology			4	1	3	2
2011 -	Diploma	in	3 Years				
12	Leather						
	Technology			3	1	2	2
2012 -	Diploma	in	3 Years				
13	Leather						
	Technology			4	2	3	3
2013 -	Diploma	in	3 Years				
14	Leather			5	4	4	5

Year	Name of	Durati	No. of persons trained	No. of	No. of persons
	course	on of		placement	helped for self
		trainin		s made	employment
	Technology				

The yearly physical target (in numbers) and achievement have been captured below, as have been the financial targets and achievement (expressed in Rs. lakh).

		2013-14				2012-13			
Sl. No	Programmes	Yearly Target		Achievement		Yearly		Achievement	
INO			Ŭ			Target		DI	T7.
		Phy.	Fin.	Phy.	Fin.	Phy.	Fin.	Phy.	Fin.
1	Six Month Training	40	8.26	20	4.14	32	5.96	32	5.96
	(SCP/TSP)								
2	Three Year Diploma	45	141.7	14	70.00	45	69.50	10	69.50
	course		0						
3	Production :					500	3.00	120	1.80
	Training/Practicals								

Source: DIC Annual Reports 2013-14, 2012-13

#### 6. Publicity and awareness to promote the Institute

The institute endeavours to rope in students by publicizing different avenues such as Pamphlets, Advertisements in newspaper, Tie ups with any related institutes and conducting workshops.

#### 7. Financial support from State Government

For KILT, An amount of Rs.242.00 lakh has been released to KILT towards constructions of New Building at Ullal.

The State Government through the Department of Industries and Commerce extends financial support to KILT over the years for high-tech training programmes and towards administrative expenses of the institute. A summary of the same has been furnished below.

Year	2010-	2011-	2012-	2013-	2014-
	11	12	13	14	15
Funds released to KILT for high-tech training	67.00	70.00	75.46	149.96	-
programmes, administrative expenses (in Rs.					
lakh)					

Source: DIC Annual Report 2014-15, 2013-14,2012-13,2011-12,2010-11

# 6.3.1 Need gap analysis

It is observed that the Institute was conceived with the cause of promoting leather industry in the geography. However, since leather industry in Karnataka has limited presence in comparison with other large clusters. There is a lack of interest in the local students for the courses. Several candidates hail from areas like Vaniambadi (Chennai, Tamil Nadu), which is a leather cluster with significant manufacturing and export contribution.

As observed the absence of local industry presents the institute with significant challenge for placements. Thus far, the Institute relies on its own network and request for manpower coming from known industries.

The industry also faces the twin challenge of some more lucrative industries flourishing in the vicinity such as the ITeS industry and Apparel industry. Both these industries offer more job opportunities and people prefer ITeS (BPO/KPO) opportunities because of better pay. Leather and footwear industry is not relatively remunerative and opportunities are limited. However from the current year of 2015-16 the institute is offering Diploma in Leather and Fashion technology, which has fashion orientation, is expected to offer more job opportunities for the students. This is course is expected attract more students towards the courses.

The Leather Industry holds a prominent place in the Indian economy. This sector is known for its consistency in high export earnings and it is among the top ten foreign exchange earners for the country. Under Make in India Leather industry is identified as one of the priority sectors. KILT being a specialised institute in the segment has to support in the development of leather industry within the state by offering high quality training, capacity development and through

entrepreneurship development. With this objective in mind, the recommendations are detailed in the next chapter.

# 6.4 Central Institute of Plastics Engineering and Technology (CIPET)

#### **Background of CIPET, India**

Central Institute of Plastics engineering and Technology is an autonomous institute under the Department of Chemicals and Petrochemicals, Ministry of Chemicals and Fertilizers, Government of India.

CIPET is an ISO 9001:2008 QMS, NABL, ISO/IEC 17020 accredited premier national Institution devoted to Academic, Technology Support & Research (ATR) activities for the growth of Polymer & allied industries in the country. CIPET operates on hub and spokes model with 23 locations spread across the length and breadth of the country. CIPET has 16 centres at Ahmedabad, Amritsar, Aurangabad, Bhopal, Bhubaneswar, Chennai, Guwahati, Hyderabad, Hajipur, Haldia, Imphal, Jaipur, Kochi, Lucknow, Mysuru and Panipat. All the CIPET centres have state of art infrastructural facilities in the areas of design, CAD/CAM/CAE, tooling and mould manufacturing, plastics processing, testing and quality control to cater to the needs of polymer and allied industries in the country.

To provide qualified Human Resources to the industry, CIPET offers a blend of specialized academic Programs in the field of Plastics Engineering and Technology, be it Doctoral, Post Graduate, Undergraduate, Post Diploma or Diploma.

To upgrade the skill & technical competency of personnel employed in plastics industry, CIPET offers a wide range of short-duration, skill-cum-technology up-gradation Programs at all Centres. The academic atmosphere in CIPET is a rare blend of modern day technical skills with a traditional emphasis on imparting technical knowledge. The highly trained and motivated team of faculty at CIPET has achieved enviable excellence in manpower development. A summary of the courses offered in CIPET has been mentioned below:

Program	Course	Duration
Diploma	Diploma in Plastics Technology	3 years
programs	Diploma in Plastics Mould Technology	3 years

Program	Course	Duration
	Post Diploma in Plastics Mould design with	1.5 years
	CAD/CAM	
	Post Graduate Diploma in Plastics	1.5 years
	Processing and Testing	
	Post Graduate Diploma in Plastics testing	1.5 years
	and Quality Management	
	B.E./B.Tech. in Plastics engineering/	4 years
UC Drogroma	technology	
UG Programs	B.E./B.Tech. in Manufacturing engineering/	4 years
	technology	
	ME/M.Tech. in Plastics	2 years
	Engineering/Technology	
	M.Tech. in Polymer Nano Technology	2 years
DC Drogroms	M. E. In CAD/CAM*	2 years
PG Programs	M.Sc. (Tech.) Material Science and	5 years
	Engineeering	
	M.Sc. Polymer Science	2 years
	M.Sc. Bio Polymer Science*	2 years

Source: CIPET Annual report, Primary Survey, IMaCS Analysis

Every year CIPET trains about 10000 students through long-term Programs and about 20000 trainees through short-term Programs with hands-on experience with the most modern sophisticated facilities in Design, CAD/CAM, Tool Room, Plastics Processing and the Plastics Testing & Quality Control. With a strong Alumni base of about 40,000 professionals across the world "CIPET" is indeed a recognized qualifying brand for supervisory and managerial manpower for the plastics industries.

CIPET renders Technology Support Services in Design, Tooling, Plastics Processing, and Testing & Quality Assurance in India and abroad. The Plastics Testing Centre (PTC) at CIPET is equipped with state of the art equipments and is recognized as one of the best plastics testing facilities in Asia. Several Central & State Govt organizations utilize CIPET's expertise for consultancy services and as a third party inspection agency for plastics products. The

biodegradable testing centre of CIPET is first of its kind in the country works jointly with Europian Bioplastics & International Biodegradable products Institute.

- A total number of 41119 Technology Support Services were rendered to the plastics and allied industries during 2013-14, which is 2% higher than the previous year.
- The performance in the Technology Support Services domain of CIPET is in increasing trend and continued to excel in all the spheres of its activities viz. Design, tooling, plastics processing and testing, inspection and quality control.

Envisioned to be a Global R&D Hub, CIPET has established two exclusive R & D wings at Chennai and Bhubaneswar. The Advanced Research School for Technology & Product Simulation - ARSTPS at Chennai focuses on Innovative Product Design for Automobile, Aerospace, Medical and Packaging Industries, product and Tool Design Conceptualization, E-Manufacturing of Prototypes, Rapid Prototyping for Lead Time Reduction, Reverse Engineering for Metal Substitution with Aesthetic and Ergonomical Approach. The Laboratory for Advanced Research in Polymeric Materials (LARPM) at Bhubaneswar concentrates on Bio polymers, E Waste Recycling , Polymer Composites & Nano-composites, Characterization of Blends , Alloys, and Fuel Cells. The Main Objectives of the R & D wings are to jointly collaborate R&D projects with the industry, and with Indian and Foreign Universities, to develop working Prototypes, to find Solutions to Engineering Problems, and to conduct Micro-analysis on behavior of Materials, Structures and Mechanical Systems.

CIPET has been recognised by Department of Scientific and Industrial Research (DSIR) as a scientific and research organisation in the field of Plastics Engineering & Technology.

CIPET has signed a Memorandum of Agreement with several leading International Universities for faculty & student exchange Programs, bilateral R & D initiatives and collaborative research projects.

Through the funding support from administration ministry, OPEC, UNIDO and World Bank, CIPET is constantly / updating its civil and technical infrastructure facilities & capabilities named at continual process improvement, enhancing the knowledge of competency level of employees and delightful services to the valued customers. In its evaluation and appraisal, a World Bank report said, "CIPET has exceeded the objectives and expectations of the project in its implementation".

CIPET publishes serial publications like CIPET Times with coverage on latest technological developments, news and views about CIPET and industry trends. CIPET's International Journal of Plastics Technology (IJPT) has international recognition as the Scientific Journal in the field of plastics technology with elite and eminent international Editorial board.

CIPET facilitates the industry in the following areas:

# • MANPOWER DEVELOPMENT:

Provides specialized manpower in the managerial/ supervisory/ Sr. Technician level to plastics and allied industries through Long and Short Term Courses meant for Engineers, Diploma holders, Science Graduates & SSLC students.

#### • TECHNICAL SERVICES:

Provides technical services in the area of Mold Design, CAD, Tooling, Processing and Testing of plastics raw materials and products.

Year	Purpose	Amount	
		Disbursed in	
		Rs.lakh	
2010-11	Shop floor	73.78	Completed
	expansion		
2011-12	Construction of	100.00	Completed
	additional		
	classroom and I st		
	floor girls hostel		
2012-13	Construction of	25.00	In Progress: 75% completed. Delay
	Second floor Boys		due to material cost escalation.
	Hostel		expected to be completed by March
			2016

# Exhibit 14. Funds Disbursed to CIPET towards civil construction

Government of Karnataka has disbursed a total of Rs. 198.78 lakh towards civil construction at CIPET, Mysuru. Girls hostel has been completed with 44 girl students residing in the same. Over 170 boys are staying in the boys' hostel and the second floor needs to be completed, which is expected to be completed by March 2016.

#### **Progress of CIPET - Mysuru**

Short term courses

Year	Name of	Duration of	Total number	Total number of
	course	training	of persons	placements made
			trained	
2011-12	РРМО	6 Months	113	210
2011-12	IMMO&M	6 Months	102	
2011-12	CNC	6 Months	27	
2011-12	CAD/CAM	6 Months	26	
2012-13	РРМО	6 Months	233	
2012-13	IMMO&M	6 Months	157	
2012-13	CNC	6 Months	23	355
2012-13	CAD/CAM	6 Months	18	
2012-13	MMT	NA	7	
2013-14	РРМО	6 Months	174	
2013-14	IMMO&M	6 Months	122	
2013-14	CNC	6 Months	37	189
2013-14	CAD/CAM	6 Months	20	
2013-14	MMT	NA	14	
2014-15	РРМО	6 Months	202	
2014-15	IMMO&M	6 Months	182	150
2014-15	CNC	6 Months	38	130
2014-15	CAD/CAM	6 Months	48	

Year	Name of	Duration of	Total number	Total number of
	course	training	of persons trained	placements made
2014-15	MMT	NA	2	

#### Long term courses

Year	Name of	Duration	Total number	Total of all	Total number of
	course	of	of persons	courses	placements made
		training	trained		
	DPT	3 years	200		
2011-12	DPMT	3 years	243	443	NA
	PGD-PPT	1.5 years	0		
	DPT	3 years	233		
2012-13	DPMT	3 years	188	470	NA
	PGD-PPT	1.5 years	49		
	DPT	3 years	176		NA
2013-14	DPMT	3 years	197	434	
	PGD-PPT	1.5 years	61		

Source: Primary Survey, IMaCS Analysis

# 6.5 Karnataka State Coir Development Corporation Ltd. (KSDCL)

Coir Industry is one of the traditional Cottage and Agro based industry with high rural employment potential and export prospects. Karnataka is one of the major coconuts producing state in India, besides Kerala and Tamil Nadu.

Karnataka State Coir Development Corporation Limited was established in the year 1985 with the main objectives of developing Coir based industries and also to act as catalytic agent in developing Coir sector in private sector. Presently, the Corporation is having twelve Defibring units, four curled coir units and seven auto spinning units in rural areas.

Also, the Corporation is having 75 production Centres for the production of yarn, rope, curled coir, coir matting and foot mats in rural areas providing employment opportunities for about

1,500 beneficiaries. KSDCL has twelve sales outlets and four sales counters besides mobile vans to sell the products in the local market and also we are catering to the needs of the states like Delhi, Gujarat, etc.

Functions of the corporation include:

- To develop skills among unemployed for self-employment.
- To optimize the use of the existing raw material and better utilization of men and machinery.
- To establish infrastructure facilities for promoting of coir sector.
- To provide welfare facilities and empowerment of rural women both socially and economically through special schemes.
- To set up training-cum-production Centres, common facility Centres for the benefit of artisans and SSI units.
- To provide backward & forward linkages to entrepreneurs engaged in coir activities.
- To establish market at potential places for selling coir products.
- To organize workshops and awareness programs for coconut growers, entrepreneurs about scope of coir and coir products both in domestic and international market.
- To promote Geo Textile which is most essential for soil conservation in sloppy areas, canal embankments and road construction.
- To exploit the opportunities available for coir pith mainly in export market which can be converted as Briquette for transportation and main application in off shore drilling and coco pith being growing media for high tech plant varieties in western countries.
- To create awareness among the farmers for enhancing the productivity by using pith as manure for agricultural and horticultural purpose. The organic manure which is rich in micro nutrients and serves as growing media for high tech plant values.
- To organize workshop and awareness program for farmers for preservation of husk for better value added products.
- To promote Zero waste concept in coir.
- To liaise between R&D Institutions, Coir Board & various sect oral organization for Technology Up gradation & Modernization to ensure better quality products

The corporation has its own production and training centres.

- Fibre Manufacturing Units There are about 174 units at the installed capacity of 55,950 Tons per annum. Out of which 127 units are working with the installed capacity of 42,000 MT per annum producing 23,523 MT of fibre.
- **Yarn Sector** There are 164 units producing about 4,397 MT of Coir yarn mainly operating on traditional ratts.
- Rope Making Sector There are 27 units producing about 850 Tons of rope for domestic sales.
- Mat and Matting Sector There are 97 Mat and matting manufacturing units with the installed capacity of 13,055 MT per annum. These units produce 2,001 MT of mat and mattings and most of these units are in the organized sector like Coir Corporation and Coir Federation.
- **Curled Coir Sector** There are 56 curling units with the installed capacity of 12,130 MT per annum by producing 6,690 tons of curled coir and majority of these units are located in Tumakuru District.
- **Rubberized Coir Sector** The National level reputed firms like Kurlon, Restolex, Bedsy and Duroflex are the main market players in the state.

As for the training centres, the Coir Industry is new to the State. The required skilled artisans were not available in the State. Only during the last decade training is being imparted extensively in product manufacturing. In the initial years from 1985 to 1991 the Corporation has trained only 1,500 persons in the Training and Production Centres.

KSDCL has effectively engaged in accomplishing SCP/TSP targets during 2012-13 and 2013-14. The performance of the Institute has been captured below.

Year	Targe	No. Of persons	No. Of persons	Total	Achievemen
	t	trained under	trained under	Traine	t against
		SCP	TSP	d	targets

2010-11	NA	100	20	120	_
2011-12	NA	100		100	_
2012-13	126	396	103	499	396%
2013-14	196	228	90	318	162%

The State releases funds to KSDCL through the Department of Industries and Commerce for its operations under Special development programme.

The funds released to the KSCDCL under SDP(Special Development Programme) have been captured below.

Year	2010-	2011-	2012-	2013-14	2014-
	11	12	13		15
Funds released to KSCDCL under	50.00	NA	133.50	243.20	NA
SDP (in Rs. lakh)					

Source: DIC Annual Report 2010-11, 2011-12, 2012-13, 2013-14,2014-15

KSDCL also has sales and production targets with employment targets to guide its operations. Its target versus achievement performance for the years 2010-11 to 2012-13 is tabulated below. Sales and production are expressed in Rs. lakh.

The organisation conducts courses in the area of

- Manual/motorised spinning- 2 to 6 months
- Geo textile Weaving (matting)- 2 to 6 months
- Composite Board Manufacturing- 2-6 months

Financial and physical targets and Achievements. (Rs. in lakh)

S.N	Year	2	2012-13		2011-12				2010-11		
0	Item	Target	Achiev ement	%	Target	Achie veme	%	Targe t	Achiev ement	%	
						nt					
1	Sales	500	1002	200	465	400	86%	390	355	91%	
				%							

2	Productio	400	798	200	300	360	120	275	224	84%
	n			%			%			
3	Employm		1150			1000			1200	
	ent									

Source: DIC Annual Report 2010-11, 2011-12, 2012-13

# 6.5.1 Need Gap Analysis

From our visits and interactions at KSDCL, we have understood that the trainees trained at KSDCL are absorbed in house in KSDCL operations. As the coir business is low margin business people prefer other avenues. As mentioned by the management earlier 1500 persons were employed at the production units. However currently only 700 persons are employed. Product cost is also high in comparison with the other un-organised units due to higher overhead cost. So competing with the un-organised players is a challenge. Key challenges are

- Traditional product range
- No technological changes
- Non commercialisation of profitable new products(Composites)

# 6.6 Karnataka German Multi-skill development centre (KGMSDC)

Karnataka German Multi Skill Development Centre(KGMSDC) is a society promoted by Government of India and Government of Karnataka with technical support of German International Services(GIZ-IS). The primary mission of the Training Centres is to conduct a broad based multidisciplinary programme in various Industrial Technical Fields, directed towards the development of skills and trades and to become a world class training centres that represents specialized trade training programs in alignment with the Industry requirements across the globe.

It has set up Karnataka German Technical Training Institute (KGTTI) having centres at Bengaluru and Kalaburagi. The program of KGMSDC offers challenging and complimentary roles for administrators, engineers and technicians.

All programs follow German vocational education and training standards that are demand

oriented and directly imply a close relationship with industry. To provide International Standards and Hands-on training both KGTTIs has extensive state-of-art training facilities. KGMSDC is a registered society formed under Society Registration Act 1960. The registered society has members from Government of India and Government of Karnataka, complemented by local stakeholders and representatives of industries, chambers and academia. GIZ is the technical partner for project implementation.

Availability of skilled and competent workforce is a major factor in growth and development of industry and economy. Formal education and training system is unable to keep pace with the ever increasing demand for skilled people trained in the latest technology. Realizing this crucial aspect, Karnataka has set up an action plan for empowering people through improved Skills and Training and provide employment opportunities to 5 lakh people in next 5 years. In this context the Department of Employment and Training (DET), Government of Karnataka started establishment of two Multi Skill Development Centres (MSDCs) of international standards for training in advanced technology areas with the technical collaboration of the German Technical Cooperation.

KGMSDC Bengaluru and Kalaburagi branches in the past three years of their inception have done well and achieved Recovery Ratio (Revenue/Expenditure) of 93.52 % and 124.77%. This points to a successful delivery mechanism that may be emulated by the other DIC Institutions.

# 6.6.1 Observation

The trainings in KGMSDC have been envisaged as commercial trainings with an end to be self sustainable which automatically imbibes the institution with two critical attributes:

- 1. Financial sustainability/responsibility
- 2. Professional relevance to ensure sustainability

The Government does extend help to the institution to stay relevant and keep its courses updated with the latest in the industry by aiding its venture with GIZ-IS. However, it is noteworthy that the courses can now pay for themselves which is a tremendous first step in aligning the training with latest in the industry and simultaneously forging towards financial relevance.

# 6.6.2 Takeaway for other Institutions

It is quite necessary for other DIC institutions to find a suitable equilibrium between relevance of courses they conduct and the courses they are equipped to conduct. Since some of the DIC Institutions were set up with an initial focus on a specific industry, it is understandable that they may not be required or able to emulate all features of KGMSDC. However, it is within the purview of the Institutions to evaluate their relevance in terms of the district/state they operate in and come up with courses that attract a trainee base and prospective employers. Also, a part of the exercise may be to identify institutions of relevance to bolster the technical skills of the trainers for these courses. Thereafter, a formal engagement may be signed like a memorandum of understanding or a periodic training contract with the institution to ensure the delivery of courses is correct and updated. Also they say process quality certifications such as ISO have helped them to maintain consistency as well as to improve continually. Considering the SSDIs have been focusing on technical aspects where hands on learning will be important, the focus can be enhanced on simulation /blended learning. In case of blended learning a student learns at least in part through delivery of content and instruction via digital and online media with some element of student control over time, place, path, or pace. While still attending a "brick-and-mortar" school structure, face-to-face classroom methods are combined with computer-mediated activities to enhance learning. This is relevant considering training provided by GTTC and ATIs are related to hands on working, which can enhance student understanding.

# 7 Recommendations

Based on the inputs received from the institutions the challenges faced by each institute are different which include, resource constraints, under utilisation capacities, obsolete courses, dysfunctional institutions. We have focused our recommendations on infrastructure, technology, courses, management and other resources which we expect to help the institutes in capacity building and

# 7.1 Short term recommendations

The following are the short term recommendations which are implementable without significant policy/budgetary interventions.

#### 1. Implementation of Quality Management Systems

Considering the continuous expansion of the centres, maintaining quality and focusing on continuous improvement is essential towards achieving stakeholder satisfaction. Some of the skill development institutes such as CIPET and KGMSDC have certifications in Quality Management Systems (ISO 9001) to ensure quality and continuous improvement in operations.

As the institution expands, the processes followed have to be consistent and robust to ensure quality of training, placement, service to the industry. We recommend all the GTTCs/ KILT to have Accreditation from institutes such as ISO or NBA (National Board of Accreditation) to achieve international quality standards with the following objectives;

- Maintenance and enhancement of quality
- Confidence and assurance on quality to various stakeholders
- Assurance of good standing of the institutions to Government

NBA is an autonomous body having the objective of Assurance of Quality and Relevance of Education, especially of the programmes in professional and technical disciplines, i.e., Engineering and Technology, Management, Architecture, Pharmacy and Hospitality, through the mechanism of accreditation of programs offered by technical institutions.NBA has introduced a process, parameters and criteria for accreditation. These are in line with the best international practices and oriented to assess the outcomes of the programme.

The management and other stakeholders should part of defining KPIs for the institutes, monitor them on on-going basis and take corrective actions wherever required.

#### 2. Establishment of formal placement centres across all the centres GTTC ,KILT:

Out of the seven GTTCs visited, only one of them reported having a formally established placement cell. As per the feedback of the companies, the placement process is smooth. However having a dedicated placement cell at each of the Institutes would only benefit the placement process as the potential to place students in best of the firms with better salary/stipend improves and formal feedback process will help in continual improvement of the institute.

We recommend that a formal placement centre may be established across all the centres of GTTC with placement co-ordinator. The functions of the placement centre are provided in Annexure J:

#### 3. Focus on development of communicative skills and inculcation of work ethics

This was reflected well in the survey in which 36% of the surveyed respondents marked the in-plant trainees with a score *below average* on their communication skills in case of GTTCs. 35% rated the trainees average on their communicative skills and only 25% of the respondents rated the trainees to be better than average. We have understood that the students often come from rural area with primary language as Kannada and Urdu. So there is a need to increased focus on development of communication skills with emphasis on English learning with assistance from external agencies/training providers who are specialised in the area of communication development.

Amongst the multiple Industry players surveyed to solicit a feedback, one of the most noticeable feedbacks shared was that each of them pointed out the need to cultivate work ethic in the students. Most of them opined that they felt the need for the students to be sensitized to the importance of being regular at their work sessions and taking initiative to learn when the opportunity exists. Another feedback shared for students of Institutions located in remote pockets was that they needed to have an orientation to give them an idea of what kind of routine to expect at a regular workplace. So focus on orientation programmes to the students has to be increased. KSCDCL

#### 4. Focus on retraining of people at KSCDCL

KSCDCL conducts training to fulfil captive requirements for its production units. However, it is difficult to absorb and retain all the trainees with in the production units. Keeping in mind the fact that even with the training of a modest 100 -200, people are not readily absorbed into the sector, the yearly target number of trainees can be limited to 20-25 people for KSDCL based on the requirements. Instead focus can be on re- training persons to increase efficiency.

#### 7.2 Long term recommendations

These are implementable in a Horizon of 2- 5 or with sizeable expenditure, or both but does not involve policy changes.

#### 5. Strengthening Manpower at GTTCs

The staff strength in GTTC has been a matter of concern. Across all the GTTCs as depicted in Exhibit 12. GTTCs are witnessing the shortage of manpower both for teaching as well as Non-teaching staff. Further the actual teaching staffs include contractual staff of 49 persons. So the total shortage is 105 persons.

Also there have been cases of companies that recruit from the Institute giving the feedback that since in many places, trainers are themselves are young pass outs of the Institute with relatively less industry experience, the training quality has suffered. Also, the number of trainers available in the Institute is lesser compared to the courses being run.

In this respect, the GTTCs may take care to recruit trainers with a threshold industry experience of five years and take care to maintain the AICTE recommended student to trainer ratio of 20:1 (Annexure B). This would take care of both the availability and quality of trainers and ensure quality of output. Measures in this respect may be taken to increase the permanent employees be taken or increase in remuneration to match industry levels so that the experienced staff with industry background may be attracted.

#### 6. Introduction of blended learning modules:

The institutes such as GTTC on one hand are expanding their foot print by opening newer branches and on the other hand face shortage of resources including staff availability. Ensuring the quality of learning with constraints may become a challenge. Blended learning as the combination of digital content and activity with face-to-face to effectively inculcate learning. Areas where digital content/multimedia can be effective in learning can be identified and developed which can be integrated with face to face method of learning. Multi-media method of teaching will enhance learning especially for the students from rural background lacking effective comprehending skills. This may initially be done on a pilot basis for selected courses and few centres and then can be replicated across all the courses and centres based on the learning outcomes.

#### 7. Identifying and implementing relevant courses

The first steps that the ATIs can take are towards the restructuring and updating the courses that are offered to the trainees there. Old courses may need to be completely wound up. The ATIs would do well to identify courses that suit the demography and the local industry set up. In the case of short term courses, some courses that can always be actively considered are courses like tailoring, two wheeler repair, four wheeler repair, electrical and electronics repair, IT related training, motor/pump repair, mobile repair, welding and construction since even within the context of a small town/village they will always be needed. Also, a person trained in these aspects can look at self employment to support oneself in addition to availing working opportunities in companies. Based on the district level skill mapping studies the relevant courses may be identified

# 7.3 Recommendations requiring change in Policy

The following are the recommendations requiring change in policy

#### 8. Management of ATIs by other skill development institutions

Through our discussion with the stakeholders we would like to recommend that the modus operandi of management may be redefined for the ATIs. Currently operating Skill development institutions such as GTTC and/or KGTTI may be given responsibility of

operating the ATIs with trained/qualified staff for new relevant courses. Government can fund towards

- o Upgrading the infrastructure and machinery and
- Viability gap funding towards administration and operations management on recurring basis

The institution may be run to ensure the following

- Need based recruitment
- Need based course development and modifications
- Establishing industry interface wherever required
- Achieving self sustainability and continuity
- Scaling up of organisation as required

The idea has to be that the ATIs effectively become completely new centres of learning but with the flexibility to structure and run courses according to the nuances of their geography and present needs (suitable industry, demand for certain set of skills). This would also ensure a faster response to changes in the skills' demand or employment/livelihood scenario of the place. So, while GTTCs focus on organized market, vocational courses can be taught at ATIs making use of existing infrastructure (buildings), most of which are located at accessible locations within their respective geographies.

#### 9. Introduction of related Courses in KILT and GTTC

The capacity utilisation for the long term course, Diploma is Leather Technology course at KILT as of now is yet to achieve full enrolment with capacity utilisation during the review period ranging between 13% and 27% annually. While the institute has started operations in the new location in 2010 key factor for under utilisation has been lack of industry demand in the vicinity. From the year of 2015-16 the institute is offering Diploma in Leather and Fashion technology, which has orientation towards garmenting industry. This course is expected attract more students towards the courses, as Bengaluru is a garmenting cluster having potential to employ more people in the sector To leverage the infrastructure available in the campus, introducing related exclusive long term courses related to industries such as apparel may be started keeping the demand in the location in mind. This would enable institute to leverage existing machinery related to design and production.

GTTC has to focus on introduction of new and emerging courses related to the manufacturing stream. During our discussions with GTTC some of the areas such as Industrial electronics, Automation, Robotics has potential for employment creation. To develop world class infrastructure, course curriculum it is suggested that tie-ups/MoUs with leading institutions across the world be established which would help in reduction of learning curve, establishment of best practices and world class training curriculum.

#### **10. Decentralisation of GTTC Institutions**

The administration and the management of GTTCs is mostly centralised at the State level with the decision making of operational affairs resting with the headquarters. Changes to curriculum or decisions regarding absorption of trainers or other operational issues are still looked after by the Head office, which may lead to lack autonomy at centre levels leading to lack of localisation.

Subsequent to our visits and interaction with GTTC staff we would like that recommend that the administrative management of GTTCs may be shifted towards a more decentralised arrangement. The institutions may be clustered around the regions (North South, East, West and/or central). And all the centres may be allocated to one of regions. The best performing institute in capacity intake, placement, and industry service may act as a regional *Lead Centres*.

This would aid a faster and a more Institute/regional specific decision making placing the onus of bringing up Institute's performance on to the management/Principal's office of the GTTC. Also institutes across different regions may focus on specialising across different areas depending on the regional industrial environment. Autonomy at regional level will also help in managing the future expansion of institutes with the regions with improved span of control.

# Annexure A: Financial Assistance received by Institutes under different Heads

# **GTTC**(All centres)

S.No	Head	Sanctioned	Actual Disbursement(in Rs. lakh)					
		Amount(in	2010-	2011-12	2012-	2013-	Remarks	
		Rs. lakh)	11		13	14		
1.	SCP/TSP	673.57	132.48	85.26	120.74	335.09	Skill Training to	
							SC ST candidates	
2.	SSDI	3540.00		2240.00		1300.00	For up gradation	
							of Infrastructure	
	Total	4213.57	132.48	2325.26	120.74	1635.09		

# ATI

Total of Rs.299.29 lakh released towards revival of 13 ATIs during 2013-14 as per the documents received from DIC.

# KILT

Year	Amount Disbursed in Rs. lakh				
	2010-	2011-	2012-	2013-	
	11	12	13	14	
Funds released to KILT for high-tech training	67.00	70.00	75.46	149.96	
programmes, administrative expenses (in Rs.					
lakh)					

Head	Project Cost(in Rs. lakh)	Amount Disbursed in Rs. lakh (As on 2013-14)	Pending to be released	Remarks
Building and Machinery for Ullal centre under SSDI	1610	923		Pending Building 242.00 lakh Machinery:445.00 lakh

CIPET(Funds allotted and utilised details in respect to civil works)

Year	Purpose	Amount Disbursed in Rs. lakh	Remarks
2010-11	Shop floor expansion	73.78	Utilised
2011-12	Constructionofadditionalclassroomand I st floor girls hostel	100.00	Utilised
2012-13	Construction of Second floor Boys Hostel	25.00	In Progress

Source: DIC documents

# Annexure B: Assessment and evaluation of select GTTC centres

# **GTTC Mangalore**

GTTC Mangalore has to its credit the training of 179 trainees and placement of 135 trainees recording 75% overall placements between 2010-11 and 2012-13. In 2013-14, there were a total

of 64 students in the second year of the ongoing long term 4 year courses of Diploma in tool and die making and Diploma in precision manufacturing.

For these years, GTTC Mangalore has mostly ran the long term courses, The short term courses executed in the earlier years of 2010-11 and 2011-12 include Mobile Servicing and Tool Room Machinist. A detailed breakup of the same has been given below.

Name of course	Duration	Total	Total	Total
	of	seats	number of	number of
	training	available	persons	placements
			trained	made
Diploma in tool and die	4 years	30	33	33
making				
Mobile Servicing	4 years	38	38	38
Tool Room Machinist	1 year	1	1	1
Diploma in tool and die	4 years	50	35	29
making				
Tool Room Machinist	6 months	4	4	4
Diploma in tool and die	4 years	50	43	30
making				
Diploma in precision	4 years	30	25	
manufacturing				
Diploma in tool and die	4 years	30	44	26
making (Strength of second				
year)				
Diploma in precision	4 years	30	20	
manufacturing (Strength of				
second year)				
	Diploma in tool and die making Mobile Servicing Tool Room Machinist Diploma in tool and die making Tool Room Machinist Diploma in tool and die making Diploma in precision manufacturing Diploma in tool and die making (Strength of second year)	of trainingDiploma in tool and die making4 yearsMobile Servicing4 yearsTool Room Machinist1 yearDiploma in tool and die making4 yearsTool Room Machinist6 monthsDiploma in tool and die and die die uaking4 yearsDiploma in tool and die making4 yearsDiploma in tool and die making4 yearsDiploma in tool and die manufacturing4 yearsDiploma in tool and die years4 yearsMaking (Strength of second year)4 yearsDiploma in precision manufacturing (Strength of manufacturing (Strength of4 years	of trainingseats availableDiploma in tool and die making4 years30Mobile Servicing4 years38Tool Room Machinist1 year1Diploma in tool and die making4 years50making6 months4Tool Room Machinist6 months4Diploma in tool and die making4 years50Tool Room Machinist6 months4Diploma in tool and die making4 years50Diploma in oprecision manufacturing4 years30Diploma in tool and die year)4 years30Diploma in tool and die years4 years30Diploma in oprecision making (Strength of second year)4 years30Diploma in oprecision making (Strength of second year)4 years30Diploma in oprecision manufacturing (Strength of second years4 years30Diploma in oprecision manufacturing (Strength of4 years30Manufacturing (Strength of4 years	of trainingseats availablenumber personsof personsDiploma in tool and die making4 years3033Mobile Servicing4 years3838Tool Room Machinist1 year11Diploma in tool and die anaking4 years5035Tool Room Machinist6 months44Diploma in tool and die anking4 years5043Tool Room Machinist6 months44Diploma in tool and die anking4 years5043Diploma in tool and die anking4 years3025Diploma in tool and die anking4 years3044Diploma in oprecision anaufacturing4 years3020Diploma in tool and die and die year)4 years3020Diploma in precision anufacturing (Strength of second anaufacturing (Strength of sec

Source: Primary Survey, IMaCS Analysis

Diploma in Precision Manufacturing, a four year course, was introduced between 2010-11 and 2013-14. The course had its first batch passing out in 2012-13 with 83% placement.

The institutes performance under the SCP/TCP program is a mentioned below.

Institute	Year	Actual trained	People placed
GTTC Mangalore	2010-11	38	38
GTTC Mangalore	2011-12	4	4
GTTC Mangalore	2012-13		
GTTC Mangalore	2013-14		

Break up of trainees trained across categories of SC/ST/BC/Minorities/Women

Year	Institute	SCs	STs	BCs	Minorities	Women
2010-	GTTC Mangalore	1	22	22	3	16
11						
2011-	GTTC Mangalore	0	5	21	6	
12						
2012-	GTTC Mangalore	6	5	36	8	2
13						
2013-	GTTC Mangalore	5	2	31	6	
14						

Source: Primary Survey, IMaCS Analysis

The institute has also had a relatively stable scenario with respect to presence of staffing at the GTTC as captured below. However, non availability of experienced faculty to teach subjects has been shared as a significant challenge.

Year	Total staff=	Trainers = Number	Other depts.	Permane	Contractu
	Trainers+	of permanent	(Admin,	nt	al trainers
	Others	trainers +	Account etc. )	Trainers	(E)
	(A)=(B)+(C )	contractual	(C)	(D)	
		trainers			
		(B) = (D)+(E)			
2010 -11	9	7	2	3	4
2011 -12	10	8	2	4	4

2012 -13	10	8	2	4	4
2013 -14	11	9	2	4	5
2014 -15	11	9	2	4	5

The institution has infrastructure in place. There have been additions to infrastructure worth of Rs. 13 crore and a requirement of Rs. 4.75 crore is foreseen for approach roads, hostel etc.

The Institution is earning revenue of about Rs. 25 - 27 lakh by providing technical services by getting work orders from industries in their respective areas.

#### GTTC Mysuru

GTTC Mysuru in between 2010-11 and 2013-14 trained 208 trainees and placed 149 of these trainees achieving 72% overall placements between 2010-11 and 2013-14 for their long term flagship courses of DPDM and DTM intake. Additionally, the Institute also trained a total 953 trainees in the short term courses of CAD/CNC.

A detailed breakup of the same has been given below.

Year	Name of course	<b>Duration</b> of	Total	Total	Total number
		training	seats	number of	of placements
			available	persons	made
				trained	
2010-	DTDM Intake	4 years	55	58	42
11	DPM Intake	4 years	30	9	
	CAD/CNC	Short term		174	
2011-	DTDM Intake	4 years	55	48	44
12	DPM Intake	4 years	30	17	
12	CAD/CNC	Short term		98	
2012-	DTDM Intake	4 years	55	29	23
13	DPM Intake	4 years	30	4	
15	CAD/CNC	Short term		338	
2013-	DTDM Intake	4 years	75	33	40

Year	Name of course	Duration of training	Total seats available	Total number of persons trained	Total number of placements made
14	DPM Intake	4 years	30	10	
	CAD/CNC/Tu/ML/etc	Short term		343	

Source: Primary Survey, IMaCS Analysis

In 2011-12, the Institute had introduced new short term one month courses such as Unigraphics and CATIA.

The institute has a relatively stable scenario with respect to presence of staffing as captured below. However, a large portion of the staff is non teaching staff.

Year	Total staff=	Trainers =	Other depts.	Permane	Contract
	Trainers+	Number of	(Admin, Account	nt	ual
	Others	permanent	etc.)	Trainers	trainers
	(A)=(B)+(C	trainers +	(C)	( <b>D</b> )	( <b>E</b> )
	)	contractual			
		trainers			
		(B) = (D)+(E)			
2010 -11	76	16	60	10	6
2011 -12	74	17	57	11	6
2012 -13	80	17	63	11	6
2013 -14	66	15	51	8	7
2014 -15	67	15	52	8	7

Source: Primary Survey, IMaCS Analysis

The institution has infrastructure in place. There have been additions to infrastructure worth of Rs. 1.21 crore and a requirement of Rs 8 crore is foreseen to upgrade existing machines and incorporate digital training into the method of delivery.

The Institution is earning revenue of about Rs. 10 lakh per month (approximately Rs. 1.20 crore an year) by getting work orders from industries in the areas of CNC machines, TU etc.

# **GTTC Hospet**

GTTC Hospet, in the period from 2010-11 to 2013-14, trained a total of 246 weavers and placed 101 of these trainees. The placement percentage stands at 42%. The low number is attributed to a large number of trainees opting for higher education in the short term training courses. The total number of trainees trained in short term training in the period is 126. A detailed breakup of the same has been given below.

	Name of	Duration	Total	Total	Total	Reasons for
Year	course	of	seats	number of	number of	non
I eal		training	available	persons	placements	placement
				trained		
2010-11	DTDM Intake	4 years	30	33	30	Higher
2010-11						education
	Turner	4 Months	10	10	5	Higher
						Education
2011-12	Machinist	6 Months	8	8	4	Higher
2011-12						Education
	DTDM Intake	4 years	30	28	24	Higher
						education
	Machinist	06	15	15		
		Months				
	Turner	04	13	13		
		Months				Higher
2012-13	Turner	04	5	5		Education
2012-13		Months				
	Turner	04	20	20		
		Months				
	DTDM Intake	4 years	30	27	17	Higher
						education
2013-14	Tool Room	1 Year	10	10		Higher

Machinist					Education and
Turner	4 Months	10	10		Not interest
Turner	4 Months	10	10		searching for
Turner	4 Months	10	10		local job
CAD/CAM	4 Months	10	10		
CAD/CAM	4 Months	5	5		
DTDM Intake	4 years	30	27	21	Higher
					education

The institute has met its targets under the SCP/TCP program. The performance of the institute vis-a-vis the targets set for it has been captured below.

Year	Target number	Trainees	Trainee	Self	Other	Reasons for deviation
	of trainees	trained	S	employed	S	from targets
			placed			
2010-11						
2011-12	18	18	9		9	Higher Education
2012-13	53	53				Higher Education
2013-14	55	55				Higher Education

Source: Primary Survey, IMaCS Analysis

The institute has had a stable scenario with respect to teaching staff which seems to be adequate to handle the trainees' strength faced by the Institute.

Year	Total staff=	<b>Trainers = Number</b>	Other depts.	Permanent	Contractu
	Trainers+	of permanent	(Admin,	Trainers	al trainers
	Others	trainers +	Account etc.)	( <b>D</b> )	(E)
	(A)=(B)+(C	contractual	( <b>C</b> )		
	)	trainers			
		$(\mathbf{B}) = (\mathbf{D}) + (\mathbf{E})$			
2009 -10	-	-	-	-	-
2010 - 11	7	5	2	3	2
2011 -12	7	5	2	3	2

2012 -13	10	8	2	3	5
2013 -14	10	8	2	3	5

#### **GTTC Lingasugur**

GTTC Lingasugur, has to its credit the training of 652 trainees and placement of 101 trainees between 2010-11 to 2012-13. These placements have been recorded only in the long term courses but a large chunk of the trainees is contributed by trainees in the short term courses. A detailed breakup of the same has been given below.

Year	Name of course	Duration	Total	Total	Total number of
		of	seats	number of	placements
		training	available	persons	made
				trained	
2010-11	DTDM Intake	4 years	30	20	20
2011-12	DTDM	4 years	50	18	18
	TRM	1 year	11	NA	-
	Auto-CAD	40 days	0	26	-
	UG	60 days	0	22	-
2012-13	DTDM	4 years	50	22	22
	TRM	1 year	40	38	7
	Auto-CAD	40 days	-	82	-
	Pro-E	60 days	-	26	-
	UG	60 days	-	26	-
	Master-CAM	60 days	-	24	-
2013-14	DTDM	4 years	50	21	21
	TRM	1 year	40	21	13
	Auto-CAD	40 days	-	98	-
	Pro-E	60 days	-	39	-
	UG	60 days	-	81	-
	Master-CAM	60 days	-	88	-

The short term courses, namely, Auto-Cad, UG, Pro-E, Master-CAM, Solid Works And CNC-Milling are all new courses introduced in the years of study i.e. between 2010-11 and 2013-14.

The institute has met its targets under the SCP/TCP program.

Institute	Year	Target number of	Actual	People
		trainees		placed
GTTC Lingasugur	2010-11	-	-	-
GTTC Lingasugur	2011-12	-	-	-
GTTC Lingasugur	2012-13	55	55	
GTTC Lingasugur	2013-14	115	115	

Source: Primary Survey, IMaCS Analysis

Break up of trainees trained across categories of SC/ST/BC/Minorities/Women

Year	Institute	SCs	STs	BCs	Minorities	Women
2010-	GTTC Lingasugur	4	1	22	2	0
11						
2011-	GTTC Lingasugur	6	1	26	1	1
12						
2012-	GTTC Lingasugur	6	2	32	3	1
13						
2013-	GTTC Lingasugur	0	3	25	4	6
14						

Source: Primary Survey, IMaCS Analysis

The Institute is managing its courses mostly through contractual trainers. This may be something that may need attention in the future.

Year	Total staff=	Trainers = Number	Other depts.	Permane	Contractu
	Trainers+	of permanent	(Admin,	nt	al trainers
	Others	trainers +	Account etc.	Trainers	(E)
	(A)=(B)+(C	contractual trainers	)	( <b>D</b> )	
	)	$(\mathbf{B}) = (\mathbf{D}) + (\mathbf{E})$	( C )		

2009-10	5	5	0	2	3
2011 -12	5	5	0	1	4
2012 -13	11	9	2	4	5
2013 -14	15	12	3	2	10
2014 -15	9	6	3	1	5

There have been additions to infrastructure worth of Rs. 1.12 crore and a requirement of Rs. 19 lakh is foreseen for canteen, water filter and a machinery requirement.

#### GTTC Kalaburagi

GTTC Kalaburagi has to its credit the training of 301 trainees and placement of 275 trainees recording 91% overall placements between 2010-11 and 2013-14. These are numbers only long term 4 year courses of Diploma in tool and die making and Diploma in precision manufacturing. A detailed breakup of the same has been given below.

Year	Name of	Duration	Total seats	Total number	Total number of
	course	of	available	of persons	s placements made
		training		trained	
2010-11	DTDM Intake	4 years	50	40	5 -
2011-12	DTDM	4 years	50	50	50
2011-12	DPM	4 years	30	30	) 30
2012-13	DTDM	4 years	60	58	3 58
2012-13	DPM	4 years	30	30	) 30
2013-14	DTDM	4 years	60	55	5 55
2013-14	DPM	4 years	35	32	2 32

Source: Primary Survey, IMaCS Analysis

The Institute has introduced Certificate Course in Tool & Die Technicians (2 years) and Certificate Course in Tool Room Machinist (1 year). However, the numbers for these were not available.

The institute has met its targets under the SCP/TCP program.

Institute	Year	Target number of trainees	Actual	People placed
GTTC Kalaburagi	2010-11	-	-	-
GTTC Kalaburagi	2011-12	23	23	15
GTTC Kalaburagi	2012-13	70	70	45
GTTC Kalaburagi	2013-14	32	32	25

Break up of trainees trained across categories of SC/ST/BC/Minorities/Women

Year	Institute	SCs	STs	BCs	Minorities	Women
2010-						
11	GTTC Kalaburagi	11	1	33	4	1 (Min)
2011-						
12	GTTC Kalaburagi	14	2	54	5	5(SCs)
2012-						
13	GTTC Kalaburagi	18	1	65	5	01(SC)
2013-						
14	GTTC Kalaburagi	13	6	69	4	3

Source: Primary Survey, IMaCS Analysis

The institute has also had a relatively stable scenario with respect to presence of staffing at the GTTC as captured below. Also, the staff is 100% of the sanctioned staff strength. Thus, the institution is poised to meet its foreseen teaching demands.

Year	Total staff=	Trainers = Number	Other depts.	Permane	Contractu
	Trainers+	of permanent	(Admin,	nt	al trainers
	Others	trainers +	Account etc. )	Trainers	(E)
	(A)=(B)+(C )	contractual	(C)	(D)	
		trainers			
		(B) = (D)+(E)			
2010 -11	17	14	3	1	13
2011 -12	19	16	3	1	15

2012 -13	17	14	3	1	13
2013 -14	17	14	3	1	13
2014 -15	19	14	5	2	12

#### **GTTC Bengaluru**

GTTC Bengaluru has to its credit the training of 353 trainees and placement of 237 trainees recording 67% overall placements between 2010-11 and 2013-14. These are numbers only long term 4 year courses of Diploma in tool and die making and Diploma in precision manufacturing. A detailed breakup of the same has been given below.

Year	Name of	Duratio	Total	Total	Total	<b>Reasons for non</b>
	course	n of	seats	number of	number of	placement
		training	availabl	persons	placements	
			e	trained	made	
2010-11	DTDM	4 years	75	65	35	Higher
						Education
	DPM	4 years	30	22	20	Higher
						Education
2011-12	DTDM	4 years	75	60	45	Higher
						Education
	DPM	4 years	30	25	15	Higher
						Education
2012-13	DTDM	4 years	75	62	40	Higher
						Education
	DPM	4 years	30	26	15	Higher
						Education
2013-14	DTDM	4 years	75	68	52	Higher
						Education
	DPM	4 years	30	25	15	Higher
						Education

#### Source: Primary Survey, IMaCS Analysis

In the past few years, the GTTC has not introduced any new courses. The performance of the Institution against SCP/TSP is captured as below.

Year	Number of trainees trained						
	SCs	STs	BCs	Minorities	Women		
2010-	15	2	72	2	3		
11							
2011-	15	4	56	4	3		
12							
2012-	12	4	42	4	1		
13							
2013-	17	3	68	6	1		
14							

Source: Primary Survey, IMaCS Analysis

The GTTC committed that Syllabi is being revised once in five years. There is a placement centre at the Institution to facilitate the placement process. The Institute though has a much higher number of instructors than other GTTCs, has expressed the need for more instructors since as per AICTE norms Staff student ratio of 1:20 should be maintained. The relevant section of AICTE norms has been attached as the next Annexure.

Number of	As per	Actual
staff	AICTE	
Teaching	31	6
Non	31	15
Teaching		

Source: Primary Survey, IMaCS Analysis

Good infrastructure is being maintained at GTTC Bengaluru with additions to the same having been made in the years 2010 to 2014.

S.No.	Description of infrastructure added	Expenditure incurred (in Rs	Year
		lakh)	
1	Machinery and Equipments upgraded	450.00	2010-11

2	New Training Block constructed	402.00	2013-14
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Source: Primary Survey, IMaCS Analysis

### GTTC, Tumakuru

The long term training course such as DTDM at GTTC, Tumakuru was started as recently as 2010-11 and therefore has its first batch passing out in 2014-15. A total of 21 trainees have been trained in this first batch with an intake of 30 students. All of them have been placed. In this initial batch there were 20 trainees from special categories with 10 from SC, 5 from ST and 5 from the minority segment. A tool and die technician course of 2 years/months (?) was imparted to 5 students in 2011-12.

The GTTC intends to revise its syllabus as per industry needs once every four years. The Institute does not as yet have a placement centre. The staffing at the GTTC has been stable for the past years of operation as can be seen from the information below.

Year	Total staff= Trainers+ Others (A)=(B)+(C)	Trainers = Number of permanent trainers + contractual trainers (B) = (D)+(E)	Other depts. (Admin, Account etc.) ( C )	Permanent Trainers (D)	Contractual trainers (E)
2009 -10	8	6	2	3	3
2010 -11	9	7	2	4	3
2011 -12	6	5	1	2	3
2012 -13	10	8	2	3	5
2013 -14	10	8	2	3	5

Source: Primary Survey, IMaCS Analysis

Infrastructure at the GTTC is in place with a workshop building. However, a further requirement of training block, hostel block and canteen block.

Centre specific Status report for SCP/TSP training programmes

### **SCP TRAINING PROGRAMMES - 2013-14**

S. N	GT&TC Centres	Course	Duration	No. of Candidate s on roll	Course Start Date	End Date
1	Hassan	CNC - Milling	06 months	1	09.12.2013	07.02.201 4
2	Hassan	Miller -2 Turner -1	04 months	3	06.11.2013	05.02.201 4
3	Lingasugu r	CNC Milling	06 months	10	12.12.2013	11.06.201 4
4	Lingasugu r	Turner-15, Miller-15, CAD–CAM-15	04 months	45	12.12.2013	14.04.201 4
5	Hospet	Turner /CAD–CAM	04 months	10	05.11.2013	04.02.201 4
6	Belagavi	Turner / CAD-CAM	04 months	46	13.11.2013	12.02.201 4
7	Mysuru	CNC – Milling	06 Months	5	18.11.2013	17.05.201 4
8	Mysuru	CAD-CAM-4, Turner-1, Grinder-2, Miller -1	04 months	8	18.11.2013	17.03.201 4
9	Bengaluru	CAD – CAM	04 Months	6	04.12.2013	03.04.201 4
1 0	Hubballi	Miller	04 Months	15	11.11.2013	10.02.201 4
1 1	Kolar	CNC Milling	06 months	5	06.11.2013	05.05.201 4
1 2	Kolar	Turner	04 months	11	06.11.2013	05.03.201 4
1 3	Kalaburag i	CNC - Milling	06 months	10	14.01.2014	13.07.201 4
1 4	Hospet	Tool Room Machinist	12 months	10	05.11.2013	04.12.201 4
1 5	Kolar	Tool Room Machinist	12 months	10	06.11.2013	05.11.201 4
1 6	Lingasagu r	Turner /CAD–CAM	04 months	5	15.07.2014	14.11.201 4
			Total	200		

Allotted 200 Candidates: Rs. 69.42 lakh for training 200 candidates

TSP TRAINING PROGRAMMES - 2013-14

S.	GT&TC	Course	Duration	No. of	Course	End
Ν	Centres			Candidates on	Start	Date
				roll	Date	
1	Hassan	CNC - Milling	06	1	09.12.20	07.02.201
			months		13	4
2	Lingasugu	CNC Milling	06	15	16.12.20	15.06.201
	r		months		13	4
3	Lingasugu	Turner-15,Miller-15,	04	45	16.12.20	15.04.201
	r	CAD–CAM-15,	months		13	4
4	Hospet	Turner /CAD–CAM	04	10	5.11.201	04.02.201
			months		3	4
5	Belagavi	CNC Milling	06	6	13.11.20	13.04.201
			months		13	4
6	Belagavi	Turner/Grinder/CAD	04	35	13.11.20	12.02.201
			months		13	4
7	Mysuru	CNC Milling	06	1	18.11.20	16.05.201
			months		13	4
8	Mysuru	CAD–CAM- 4 / Tuner	04	5	18.11.20	17.03.201
		-1	months		13	4
9	Harihara	Turner	04	6	14.11.20	13.03.201
			months		13	4
10	Kalaburag	Miller	04	7	14.01.20	13.05201
	i		months		14	4
11	Bengaluru	CAD – CAM	04	4	04.12.20	03.04.201
			months		13	4
12	Kolar	Turner	04	6	06.11.20	05.03.201
			months		13	4
13	Kalaburag	CNC – Milling	06	5	14.01.20	13.07.201
	i		months		14	4
14	Belagavi	Tool Room Machinst	12	26	13.11.20	12.11.201

			months		13	4
15	Harihara	Tool Room Machinist	12	10	14.11.20	13.11.201
			months		13	4
16	Humnaba	Tool Room Machinist	12	12	06.11.20	05.11.201
	d		months		13	4
17	Kolar	Tool Room Machinist	12	3	06.11.20	05.11.201
		<b>`</b>	months		13	4
18	Lingasugu	CNC Milling	06	42	15.07.20	14.01.201
	r		months		14	5
19	Lingasugu	Turner-15, Miller-15,	04	4	15.07.20	14.11.201
	r	CAD-CAM-15,	months		14	4
20	Belagavi	Turner/Grinder/CAD	04	25	15.07.20	14.11.201
			months		14	4
21	Bengaluru	CAD /CAM	04	17	14.07.20	13.11.201
			Months		14	4
22	Hospet	Tuner / Cad CAM	04	15	14.07.20	13.11.201
			Months		14	4
23	Hubballi	Cad CAM	04	5	14.07.20	13.11.201
			months		14	4
			Total	305		

### Allotted 305 Candidates

Grant Released under SCP : 69.42 lakh for training 200 candidates

TSP : 119.544 lakh for training 305 candidates

Total : 188.964 lakh

# Status of SCP TRAINING PROGRAMMES - 2012-13

Sl.N o	GT&TC Centres	Course	Duration	Candidat es	Course Start Date	End Date
1	Kalaburagi	CNC - Milling	4 months	50	10.09.201 3	09.01.2014

2	Lingasugur	Tuner	4 months	37	30.09.201	29.01.2014
					3	
3	Belagavi	CNC - Milling	4 months	40	17.06.201	30.10.2013
					3	
4	Humnabad	Tuner	4 months	34	08.07.201	08.10.2013
					3	
5	Hospet	CNC - Milling	4 months	33	01.07.201	30.10.2013
					3	
6	Hubballi	CNC – Milling	4 Months	30	30.09.201	29.01.2014
					3	
7	Gundlupet	CNC - Milling	4 Months	30	04.09.201	03.01.2014
					3	
8	Kalaburagi	CNC-Milling	6 months	30	14.09.201	14.03.2013
					2	
9	Hospet	Machinist	6 months	15	01.10.201	31.03.2013
					2	
10	Harihar	CNC-Turning	6 Months	9	01.10.201	31.03.2013
					2	
11	Humnabad	Turner	4 months	5	15.01.201	14.05.2013
					3	
12	Gundlupet	Machinist	4 months	14	22.01.201	22.07.2013
					3	
13	Lingasgur	Turner	4 months	27	25.02.201	24.06.2013
					3	
			Total	354		

### TSP TRAINING PROGRAMMES - 2012-13

SI.N	GT&TC	Course	Duration	Candidat	Course	End
0	Centres			es	Start	Date
					Date	
1	Hospet	Machinist	4 months	5	01.07.201 3	30.10.2013
2	Humnabad	Tuner	4 months	10	08.07.201	08.10.2013

					3	
3	Belagavi	CNC – Turner	4 months	10	08.07.201	08.10.2013
					3	
4	Hubballi	CNC -	4 months	15	30.09.201	29.01.2014
		Milling			3	
5	Gundlupet	CNC -	4 months	5	04.09.201	03.01.2014
		Milling			3	
6	Harihar	CNC -	4 months	6	01.10.201	31.03.2013
		Turning			2	
7	Humnabad	Turner	4 months	5	15.01.201	14.05.2013
					3	
8	Lingasgur	Turner	4 Months	19	25.02.201	24.06.2013
					3	
			Total	75		

- Total Candidates -SCP / TSP : **429**
- Grant released for the year 2012-13 is **120.75 lakh** (82.4604)
- > Total Grant Released for the year 2012-13 is Rs. 120.78 lakh

### SCP TRAINING PROGRAMMES - 2011-12

Sl. No	GT&TC Centres	Course	Duratio n	No.of Candidates	Course Start Date	End Date
1	Hospet	Turner	4 months	10	30.11.201 1	03.03.201 2
2	Kalaburag i	CNC Milling	4 months	13	10.02.201 2	11.06.201 2
3	Humnaba d	Turner	4 months	10	03.11.201 1	03.03.201 2
4	Hassan	Turner / Miller	4	07	23.01.201	22.05.201

			months		2	2
5	Harihar	Turner / Miller	4	14	19.02.201	18.06.201
			months		2	2
6	Harihar	Web Designing	4	30	08.02.201	08.05.201
			months		2	2
7	Jagalur	Computer Hardware	6	25	09.04.201	09.10.201
		Specialist	months		2	2
8	Sagar	Web Designing	4	25	16.04.201	09.10.201
			months		2	2
			Total	144		

# TSP TRAINING PROGRAMMES - 2011-12

Sl	GT&TC	Course		No.of	Course	End
.N	Centres		Duratio	Candidates	Start	Date
0			n		Date	
1	Mangalore	Turner	6	10	06.02.201	07.08.201
			months		2	2
2	Gundlupet	CNC Milling	6	20	01.02.201	01.08.201
			months		2	2
3	Humnaba	Turner	6	10	03.11.201	03.06.201
	d		months		1	2
4	Kalaburag	CNC Milling	6	10	06.02.201	06.08.201
	i		months		2	2
5	Malebenur	Computer Hardware	6	25	09.04.201	09.10.201
		Specialist	months		2	2
6	Thirthalli	Web Designing	4	25	09.04.201	09.10.201
			months		2	2
			Total	110		

Total Candidates - SCP / TSP : 254

Total Grant released for the year 2011-12 is Rs. 85.26 lakh

Sl	GT&TC	Course	Duratio	No.of	Course	End
.N	Centres		n	Candidat	Start	Date
0				es	Date	
1	Humnaba	Computer Hardware	6	21	10.11.201	09.05.201
	d	Specialist	months		0	1
2	Mangalore	Mobile Phone Servicing	4	21	10.02.201	10.06.201
			months		1	1
3	Belagavi	Mobile Phone Servicing	4	20	14.02.201	13.06.201
			months		1	1
		Computer Hardware	6	10	14.02.201	13.08.201
		Specialist	months		1	1
4	Kolar	Mobile Phone Servicing	4	30	21.02.201	13.06.201
			months		1	1
5	Bidar	Web Designing	4	19	10.11.201	09.05.201
			months		0	1
6	Sedam	Mobile Phone Servicing	4	30	05.09.201	04.01.201
			months		1	2
7	Aland	Mobile Phone Servicing	4	23	05.09.201	04.01.201
			months		1	2
8	Chittapur	Mobile Phone Servicing	4	28	05.09.201	04.01.201
			months		1	2
9	Chincholi	Mobile Phone Servicing	4	27	05.09.201	04.01.201
			months		1	2
10	Yadgir	Mobile Phone Servicing	4	11	05.09.201	04.01.201
			months		1	2
11	Bagalkot	Web Designing Course	4	12	12.10.201	18.02.201
			months		1	2
			Total	252		

# TSP Training Programmes - 2010-11

Sl.	GT&TC	Course	Duratio	No.of	Course	End
No	Centres		n	Candidat	Start	Date
				es	Date	
1	Humnaba	Computer Hardware	6	09	10.11.201	09.05.201
	d	Specialist	months		0	1
2	Mangalore	Mobile Phone Servicing	4	17	10.02.201	10.06.201
			months		1	1
3	Kalaburag	Interior Design	4	32	01.07.201	30.10.201
	i		months		1	1
4	Bidar	Web Designing	4	11	10.11.201	09.05.201
			months		0	1
5	Aland	Mobile Phone Servicing	4	7	05.09.201	04.01.201
			months		1	2
6	Chittapur	Mobile Phone Servicing	4	2	05.09.201	04.01.201
			months		1	2
7	Chincholi	Mobile Phone Servicing	4	3	05.09.201	04.01.201
			months		1	2
8	Surpur	Mobile Phone Servicing	4	30	05.09.201	04.01.201
			months		1	2
9	Yadgir	Mobile Phone Servicing	4	19	05.09.201	04.01.201
			months		1	2
10	Gokak	Web Designing Course	4	30	12.10.201	18.02.201
			months		1	1
11	Bagalkot	Web Designing Course	4	48	12.10.201	18.02.201
			months		1	2
			Total	208		

Total Candidates : SCP / TSP : 460

Total Grant released for the year 2010-11 is Rs. : 132.48 lakh

# Annexure C: Funds released and its utilization by GTTCs

## 2013-14: Funds released and expenditure

S.No.	Centre and Purpose	Fur	UC submitted on	
		Funds released	Expenditure	
1	Training Grants	50.00	50.00	29/07/2013
2	OTACA – MSME	750.00	592.66	20/12/2013
3	Specialised Skill Development Programme [Bengaluru,	550.00	550.00	19/12/2013
	Mysuru, Kolar]			
4	Training Grants	25.00	25.00	19/12/2013
5	Special Skill Development	275.00	275.00	23/01/2014
	Programme [Bengaluru, Kolar & Mysuru]			
6	Sponsored Training Programme	50.42	50.42	10/02/2014
	DIC SCP/TSP			10,02,201
7	Sponsored Training Programme	79.00	79.00	10/02/2014
	DIC SCP/TSP			
8	Special Skill Development	375.00	128.25	04/04/2014
	Programme[Humnabad &			
	Kudalasangama]			
9	SDP for Civil works at	100.00	41.25	04/04/2014
	Kanakapura			
10	SDP for Civil works at	100.00	87.50	04/04/2014
	Kalaburagi			
11	Sponsored Training Programme	40.55	-	-
	DIC SCP/TSP			
12	Sponsored Training Programme	19.00	-	-
	DIC SCP/TSP			
13	Training Grants	375.00	375.00	-

	Total	2788.97	2254.08	
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Source: DIC Annual Report 2013-14

### **2014-15: Funds released and expenditure**

### Grants allocated and released from Government under Special Development Programme

### [SDP] (Amount in lakh INR)

S.No.	Centre and Purpose	Fu	nds	Remarks
		Allocated	Released	
1	Kudalasangama Training	162.50	121.87	In progress
	block			
2	Kudalasangama	137.50	68.75	Lab equipments were procured worth
	Procurement of Lab			Rs.65.90lakh. Tender was called for
	equipment			procurement of remaining
				equipments
3	Kalaburagi-Training block	175.16	131.37	Foundation work under progress
4	Kanakapura Additional	100.00	75.00	In progress
	class rooms			
5	Kanakapura-Hostel	44.00	44.00	In progress
6	Humnabad-Training Block	300.00	293.00	Civil work under progress. Electrical
				under progress
7	Humnabad Workshop	50.00	37.50	Construction work under progress
	building			and has completed upto lintel level
8	Gundlupet Workshop	225.00	225.00	Completed
	building			
9	Lingasugur-Hostel	74.84	74.84	Foundation work under progress
10	Gowribidanur	231.00	231.00	8 acres of land amounting to
	Developmental works			Rs.100.00lakh purchased. Tender
				called for construction of buildings.
Total		1500.00	1302.33	

Source: DIC Annual Report 2014-15

Special Development Programme [SDP] - Common Facility Centre (CFC) Amount Rs. in lakh

Centre and Purpose	Funds		Remarks		
	Allocated	Released			
Kalaburagi - Infrastructure	60.00	30.00	Tendering process under progress for		
Facility for Common			procurement of machinery &		
Facility Centre			equipments		

Source: DIC Annual Report 2014-15

# Annexure D: Financial progress of KILT

SI.	Programmes	Yearly Target Achi		Achiever	nent as on	Note
Ν				28.	03.14	
0		Ph	Fin	Phy	Fin	
		У	In Rs.		In Rs. lakh	
			lakh			
1	a) 6 Month	40	8.26	20	4.14	Rs. 8.26lakh has been
	Training					released from the Govt.
						towards training
						programmes under SCP.
						Training programme was
						started for 20 students on
						Leather Garment
						Manufacture from first
						week of January
	b) 3 Year	45	141.7	14	70	Rs.141.70 lakh has been
	Diploma					released from the Govt. The
	course					balance amount of Rs.71.70
						lakh will be spent towards
						shifting of KILT campus to
						the new building at Ullal
						Upanagar for interior
						decoration & other
						expenditures
2	Income from					
	Institute					

## 2013-14: Financial performance and progress report of KILT

SI.	Programmes	Yearly Target		Achieve	ment as on	Note
Ν				28.	03.14	
	programmes					
	01) Service	-	2.5	-	1.37	Amount spent in the current
	charge /					year
	Admn, fees					
3	Development					
	programmes					
	(Expenditure)					
	01) Newly	50	0.3	25	0.04	
	developed					
	Designs					
	02) Production:	50	3	-	1.28	
	Training/practic	0				
	al					
4	Construction of	-	300	-	-	Funds will be utilized
	New					towards construction
	building at Ullal					& released to KIADB against
	Upanagar					the progress

Source: DIC Annual Report 2013-14

## 2012-13: Financial performance and progress report of KILT

S.No.	Programme	Annu	al target	Achievement		Remarks		
	S	Phy	Fin	Phy	Fin			
			In Rs.		In Rs.			
			lakh		lakh			
1	6 Months	32	5.96	32	5.96	Rs.5.96	lakh	released
	Training					from the gove	rnment	
	(SCP) (TSP)							

2	3 Years	45	69.5	10	69.5	Rs.69.50	lakh	released
	Diploma					from the gove	ernment	
	Course							
3	Production :	500	3	120	1.8			
	Training /							
	Practicals							

Source: DIC Annual Report 2012-13

# **Annexure E: AICTE Norms for Faculty Requirements and Cadre ratio**

Norms for Faculty requirements and Cadre Ratio for Technical Institution

#### 7.1 Faculty Requirements and Cadre Ratio (Diploma / Post Diploma)

	Faculty : Student ratio	Principal / Director	Head of the Department	Lecturer	Total
	1.00	A	В	С	D
Engineering / Tech / Pharmacy / Architecture & Town Planning Applied Arts & Crafts, HMCT	1:20		1per Department	S / 20	A + B + C

7.1 a S = Sum of number of students as per Approved Student Strength at all years

## Faculty Requirements and Cadre Ratio (UG)

7.2

	Faculty : Student ratio	Principal / Director	Professor	Associate Professor	Assistant Professor	Total
	100 million (1990)	А	В	С	D	A+B+C+D
Engineering / Technology	1:15	1	<u>S</u> 15xR - 1	S 15xR×2	S 15xR×6	<u>S</u> 15
Pharmacy	1:15	1	<u>S</u> -1 15xR	S 15xR×2	S 15xR×6	<u>S</u> 15
Architecture & Town Planning	1:10	1	$\frac{S}{10xR}$ - 1	$\frac{S}{10xR} \times 2$	S 10xR×6	<u>S</u> 10
Applied Arts & Crafts	1:10	1	S 10xR-1	S 10xR×2	S 10xR×6	<u>S</u> 10
HMCT	1:15	1	<u>- S</u> 15xR - 1	<u>S</u> ×2 15xR	$\frac{S}{15xR} \times 6$	<u>S</u> 15

7.2 a S = Sum of number of students as per Approved Student Strength at all years, R = (1+2+6)

	Faculty: Student ratio	Principal / Director	Professor	Associate Professor	Assistant Professor	Total
		А	В	С	D	A+B+C+D
*Engineering / Technology	1:12	-	S 12xR	S 12xR	S 12xR	<u>S</u> 12
*Pharmacy	1:12	-	<u>S</u> 12xR	S 12xR	S 12xR	<u>S</u> 12
*Architecture & Town Planning	1:10	$\sim 1$	S 10xR	S 10xR	S 10xR	<u>S</u> 10
*Applied Arts & Crafts	1:10	- 10-0	S 10xR	S 10xR	S 10xR	<u>S</u> 10
*HMCT	1:12	-	S 12xR	S 12xR	S 12xR	<u>s</u> 12
<sup>#</sup> MBA / PGDM	1:15	1, 50	<u>S</u> 15xR -1	S 15xR×2	S 15xR×6	<u>S</u> 15
<sup>#</sup> MCA	1:15	1	S 15xR -1	S 15xR×2	$\frac{S}{15xR} \times 6$	<u>S</u> 15

#### 7.3 Faculty Requirements and Cadre Ratio (PG)

7.3 a S = Sum of number of students as per Approved Student Strength at all years \*R = (1+2), #R = (1+2+6)

### 8.0 Appendix 8: Faculty Cadre and Qualifications

8.1 Faculty Cadre and Qualifications shall be as per the All India Council for Technical Education (Pay Scales, Service Conditions and Qualifications for the Teachers and other Academic Staff In Technical Institutions (Degree) Regulations, 2010, All India Council for Technical Education (Pay Scales, Service Conditions and Qualifications for the Teachers and other Academic Staff In Technical Institutions (Diploma) Regulations, 2010 and subsequent amendments in these Regulations issued by AICTE from time to time.

# Annexure F: List of stakeholders covered during primary survey

#### Institutions

S.No	Organisation	Contact	Designation	Address

1	DIC	Mr. Abdul Aziz	Additional	Department of
			Director	Industries &
				Commerce
				South Block, Khanija
				Bhavana
				RaceCourse Road,
				Bengaluru - 560001
2	DIC	Mr. Gopalarao		Department of
				Industries &
				Commerce
				South Block, Khanija
				Bhavana
				RaceCourse Road,
				Bengaluru - 560001
S.No	Institute	Contact	Designation	Address
1	Karnataka Institute of	Mr. B. Ramesh	Director	Karnataka Institute of
				Lasthar Tashnalagu
	Leather			Leather Technology
	Leather Technology(KILT)			(A Govt. of Karnataka
				(A Govt. of Karnataka
				(A Govt. of Karnataka Institution)
				(A Govt. of Karnataka Institution) Ullal Upanagar, Near
2		Shri S.Y.Shirali	Chief	(A Govt. of Karnataka Institution) Ullal Upanagar, Near B.M.T.C. Bus Stop
2	Technology(KILT)	Shri S.Y.Shirali	Chief Manager	(A Govt. of Karnataka Institution) Ullal Upanagar, Near B.M.T.C. Bus Stop Bengaluru 560 056.
2	Technology(KILT)	Shri S.Y.Shirali		<ul> <li>(A Govt. of Karnataka</li> <li>Institution)</li> <li>Ullal Upanagar, Near</li> <li>B.M.T.C. Bus Stop</li> <li>Bengaluru 560 056.</li> <li>No.437/A, Hebbal</li> </ul>
2	Technology(KILT)	Shri S.Y.Shirali	Manager	<ul> <li>(A Govt. of Karnataka</li> <li>Institution)</li> <li>Ullal Upanagar, Near</li> <li>B.M.T.C. Bus Stop</li> <li>Bengaluru 560 056.</li> <li>No.437/A, Hebbal</li> <li>Industrial area</li> </ul>
2	Technology(KILT)	Shri S.Y.Shirali Mr. Halaswamy	Manager	<ul> <li>(A Govt. of Karnataka</li> <li>Institution)</li> <li>Ullal Upanagar, Near</li> <li>B.M.T.C. Bus Stop</li> <li>Bengaluru 560 056.</li> <li>No.437/A, Hebbal</li> <li>Industrial area</li> <li>Mysuru –570016</li> </ul>
	Technology(KILT)		Manager (Project)	<ul> <li>(A Govt. of Karnataka</li> <li>Institution)</li> <li>Ullal Upanagar, Near</li> <li>B.M.T.C. Bus Stop</li> <li>Bengaluru 560 056.</li> <li>No.437/A, Hebbal</li> <li>Industrial area</li> <li>Mysuru –570016</li> <li>Karnataka.</li> </ul>

				044
4	Karnataka State Coir	Shri. H.	MD	Ground floor, V.I.T.C
	Development Corporation	Ramakrishne		Building ,Kasturba
	Ltd. (KSCDC)	Gowda		Road, Bengaluru -560
				001,
5	Karnataka German Multi	Mr.Kotaiah	Director	CoE Building,
	Skill Development			Kaushlya Bhavan
	Centres(KGMSDC)			Campus,
				Behind Govt. ITI (W)
				ITI,
				Bannerugatta Road,
				Bengaluru - 560 029.

# GTTCs

S.No.	GTTC	Contact person	Designation
1	Bengaluru Urban	Mr. Halaswamy	Managing
			Director
2	Bengaluru Urban	Mr. Rajkumar	Chief Examiner
3	Tumakuru	Mr. Ramesh Babu	Principal
4	Mangalore	Mr. Geeta Krishna	Principal
5	Mysuru	Mr. K.L.Prakash	Principal
6	Hospet, Bellary	Mr. Shanmugaswamy	Principal
7	Lingasugur,	Mr. Rajkumar	Principal
	Raichur		
8	Kalaburagi	Mr. Jayaraj	Principal in-
			charge

## ATIS

S.No.	Institute	Person	Designation
1	ATI - Tumakuru	Mr. Nagaraju	DIC
		Ms. Nandini	Deputy Director
2	ATI Bannadka(Mudbidri) -	Mr. Somappa Naik	Deputy Director
	District Industries Centre,	Mr. Satyanarayana	Asst. Director
	Yeyyadi, Mangalore		
3	ATI-Nelamangala	NGO representatives	
4	ATI - DIC – Mysuru	M.Shivashankar	JD
5	ATI - DIC – Kalaburagi	Dodda Basvaraju	JD
6	ATI – Raichur	Mr. M. Lamani	Deputy Director
7	ATI - DIC - Chikkaballapura	Shri B H Siddappa	JD

# **Companies/Beneficiaries**

Sl. No.	COMPANY NAME	Contact Person
1	Larsen & Toubro ( L & T )	R.Y.Bhavsar (HR)
	A-9 / A-10, Gate.No.03.	
	MIDC AHMEDNAGAR – 414111	
2	Motherson Automotive Technology & Engineering (	Narayanarao ( asst Manager)
	Bengaluru Unit)	
	Plot.No.11, Bidadi Industrial Area,	
	2nd Phase Sector - 1, Ramnagara Taluk Bengaluru –	
	562109	
3	INDO US MIM TECH PVT LTD	Shivakumar.K.
	# 45 (P) KIADB Industrial Area Doddaballapur -	
	561203	
	Stop Name- MedicineCircle or	
	Factory Circle	
4	Kishore Industries	Anand Chordiya
	C-33, MIDC Waluj	
	Aurangabad - 431136 (MH)	

Sl. No.	COMPANY NAME	Contact Person
5	TOOL COMP SYSTEMS PRIVATE LIMITED No.14-	MD (M.Shyam Bhat) /
	В,	N.Prabhakara
	KIADB Industrial Area, 2nd Phase Kumbalagodu	
	Kengeri Hobli,	
	BENGALURU - 560074	
6	Teknic Toolings	Biju Thomas ( Manager Partner)
	Survey .No.232/1, Near Rupee Bank Gavhanevasti.	
	Pune - Nasik Highway BHOSARI PUNE - 411039	
7	SPARK TOOL ENTERPRISES	Salvi / Ajit panchal / Tool Room
	(Spark Plastomech India Pvt Ltd )	
	No. S - 156 , MIDC Bhosari,	
	PUNE - 411026 (uttam.salvi@sparkplastomech.com)	
8	TERMINAL TECHNOLOGIES INDIA (P) LTD	Manojkumar (8550995081)
	Gate.No.312/2, Nanekarwadi Chakan Taluk	
	KHOD PUNE- 410501	
9	AMN Technology Services	Sri.B.N.Anand Teertha
	No.7, Shrirama Nagar, Magadi Road,	Cell No.9845204429
	Kamakshipalya, BENGALURU - 560079	
10	G-Force Aerospace Engineering (P) Ltd. Office	Anand .R. Ranganath
	# 43, 1st Floor Sy.No.112/4, 14th Cross	
	Doddanna Industrial Area. Near Peenya Second Stage	
	Bengaluru - 560091	
11	TYCO ELECTRONICS CORPORATION INDIA (P)	Ravikannans
	LTD No.22 B,	
	Whitefield Road Doddenakundi 2nd Phase Rajpalya	
	Mahadevapura BENGALURU - 560048	
12	SPECTRUM TOOL ENGINEERS (P) LTD	MD/ Sudharshan
	No. 25, Pete Channappa Industrial Estate	Tool Room Incharge
	Kamakshipalya, Magadi Main Road BENGALURU -	
	560079	

Sl. No.	COMPANY NAME	Contact Person
	sudarshan@spectrummoulds.com	
13	PRIDE TECHNOLOGIES	MD. Sharanu
10	Sector. No . 10, Plot.No. 133,	
	PCNTDA Bhosari,	
	PUNE - 411026	
14	ADEPT TECHNOLOGIES	VEERABHADRA RAO
17	PLOT.NO. 7 - 8- 305, GOUTHAM NAGAR	
	FEROZGUDA, SEC - BAD – 500011, HYDERABAD	
15	INCITE CAM CENTRE	Hema Malani K.R(9845742947)
15		110111a Walalli K.K(9043742947)
	A 12-1, 1st Main Road, @nd Stage,Peenya Industrial	
	Area,	
1.6	Bengaluru- 560058	
16	PRABHA INDUSTRIES (PRBHA DYTECH), 86/1,	NAVEENA KUMAR] (HR)
	KUMBALGOD INDUSTRIAL AREA, PHASE 2ND,	PH.N0.080-28437391
	BENGALURU — 560074	FAX 080-28437258
	02-06-2014 TO 06-06-2015	sumansharma@prabhadytek.com
		satishkamath@prabhadytek.com
17	UCAL FUEL SYSTEMS LIMITED, PLOT No. 7,	SHUBHA SHREE
	TOOL ROOM UNIT, B-22, SIDCO INDUSTRIAL	044-47400190/139
	ESTATE, MARAIMALA1 NAGAR — 603209	9940386894
	02-06-2014 TO 06-06-2015	Email:hrd_p8@ucalfuel.co.in
		toolstore_p7@ucalfuel.co.in
18	VINEIL HITEK TOOLING COMPANY PVT. LTD.,	MR. KESHAV.N.MANAGE (MD)
	S. No. 42/2 GAT NO. 166, BEHIND GAGANGIRI	PH. NO. 020-27692985
	MAHARJ MATH, SHAYOG NAGAR, TALWADE	FAX 020-27692935
	ROAD, PUNE — 412114	Email: hitekpune@sify.com
	02-06-2014 TO 06-06-2015	

Sl. No.	COMPANY NAME	Contact Person
19	Camtex Services	H.K. Nanjundaiah
	#146/14/2, NIE, Sajjepalya Village, Malagala Main	Proprietor
	Road, Bengaluru - 560091	Mobile: 9341247121/9741117121
	02-06-2014 TO 06-06-2015	Telefax: 080-23581552
		E-mail:
		camtekservices@rediffmail.com
		camtekservices@gmail.com
20	Alumnus of KILT having industry experience and	Ms. Dimple and Mr. Praveen
	currently working with KILT Bengaluru	
21	STANLEY LIFESTYLES LIMITED,	Mr. Vinod
	Bengaluru	
22	VBL INNOVATIONS	Mr. Gurumurthy, Manager
	Peenya Industrial Estate	Production
	Bengaluru	
23	Karthik Moulds and Dies	Mahesh Kumar
	Unit no. 9, Blue Chip Industrial Estate,	Mobile: 09987093286
	Estate No. 3, Wallv Phata, Sativall Road, Vasal (East),	Email:
	Thane - 401202	karthikmouldsanddies@vsnl.net
	03-06-2013 to 31-05-2014	
24	Indo-US MIM Pvt Ltd,	Mr. Shivakumar K.
	#45 (P), KIADB Industrial Area, Hoskote, Bengaluru	Dy. Manager (HR)
	02-06-2014 to 06-06-2015	080-22048600
		Mobile: 9008100759
25	Indo-US MIM Pvt Ltd,	Mr. Shivakumar K.
	#45 (P), KIADB Industrial Area, Doddaballapur -	Dy. Manager (HR)
	561203 Bengaluru	080-22048600 extn. 696
	02-06-2014 to 06-06-2015	Mobile: 9740016032
		Email: shivakumar.k@indo-

Sl. No.	COMPANY NAME	Contact Person
		mim.com
26	Laveena Engineering , 6/1A, 428/488, Arundaya	Ph. No. 080-23480612
	School Road, Sunkadakatte, Vishwaneedam Post,	Email: laveenaengg@dataone.in,
	Bengaluru	laveenaengg@gmail.com
	02-06-2014 to 06-06-2015	
27	M/s Tyco Elctronics Corporation Pvt.Ltd, 22B,DE	Smt. Nagarathna CK
	Park,rd Phase, Doddanakundi Indl Area, Whitefield	
	Road,Bengaluru	
28	M/s. CIMITRIX SYSTEMS PVT.LTD 320,	Shri. Yatish B N
	8th cross, 4th Phase, Peenya Indl area	
	BENGALURU-58	
29	M/s MELGIRI TOOLS & AUTOMATIONS.	Shri Ravi.P.H
	No.84,12th Cross, 4th Phase, Peenya Indl. Area	
	Peenya,BENGALURU-560058	
30	TAFE	Mr.Manohara
	TRACTORS & FARM EQUIPMENT LIMITED	
	Engineering Plastics & Tool Room	
	Plot.No. 1, KIADB Industrial Area Doddaballapur	
	Bengaluru	

# Annexure G: Questionnaire used for Survey of beneficiaries (Industry)

### Evaluation study of Specialized Skill Development Institutions (SSDIs) of Industries and Commerce Department

### Questionnaire for Beneficiaries (V2. 11May15)

#### Name of the Beneficiary:

#### Address:

#### Name of the respondent:

 Which of the institutes have you have recruited students from, towards **INTERNSHIP/APPARENTICESHIP** during the current/previous year?(Note: Applicable to Institutes which are under Department of Industries and Commerce)

S. No.	Name of institute	Branch/Location	Courses	No. of students recruited
1				
2				
3				
4				
5				

2. Which are the institutes you have recruited students for **JOB/Work** during the previous/current year (Note: Applicable to Institutes which are under Department of Industries and Commerce)

S. No.	Name of institute	Branch/Location	Courses	No. of students recruited
NU.	mstitute	Branch/ Location	Courses	Techuiteu
1				
2				
3				
4				

3. Which are the **OTHER** institutes (Private of otherwise) you recruit from which offer similar courses as the institutes mentioned in the above questions?

S. No.	Name of institute	Branch/Location	Courses	No. of students recruited
1				
2				
3				
4				
5				

4. What is the salary/stipend being offered to the students?

S.		
No.	Role/Course	Salary/ Stipend Range (in Rs.)
1	Internship	
2	Apprenticeship	
3	Permanent Work	

5. How do you rate the quality of students from the institutes (1 to 5, 1- Very Poor, 2: Poor, 3- Average, 4- Good, 5. Excellent)

S.	Name	of		Communication Skills	Technical Understanding
No.	institute		<b>Branch/Location</b>	(Rating 1 to 5)	(Rating1 to 5)
	(GTTC/ATI)				
1					
2					
3					
	Other Institutes				
1					

S. No.	Name of institute	Branch/Location	Communication Skills (Rating 1 to 5)	Technical Understanding (Rating1 to 5)
2				
3				

6. How do you compare the trainees from GTTCs/ATIS with the below mentioned category of recruits?

S.No	Category for Comparison	Comparison of Trainees from GTTCs/ATIs
		(1. Poor- 2. Same 3. Better)
1	Untrained recruits	
2	Recruits from other institutes who has completed similar courses	

- 7. Do you send staff from your organisation for training/skill upgradation to GTTCs or ATIs? If yes, kindly provide details.
- 8. Do you give frequent feedback to the institutes about the quality of recruits? If yes, what is the frequency of providing feedback?
- 9. Has the institute taken the necessary corrective measures based on your feed back?
- 10. What are the key concerns you have with respect to the institutions on the following areas?

S. No.	Areas	Institute/ Branch	Concern/Remarks
	Infrastructur		
	e(IT,		
	workshop , Tools etc)		
1	Tools etc)		

S. No.	Areas	Institute/ Branch	Concern/Remarks
	Training		
2	Capacity		
3	Courses		
4	Course Coverage		
	Placement Co-		
5	ordination		
6	Others		

11. What are the key concerns you have with respect to the students recruited?

12. Has the quality of students improved over the last 5 years?

Improved  $\Box$ 

Remained same  $\Box$ 

Declined  $\Box$ 

13. Do you have any suggestions to strengthen the institutions? If yes kindly enumerate.

14. Do you wish to provide any other inputs on the institutes?

# **Annexure H: Questionnaire used for Survey of Institutions**

Evaluation study of Specialized Skill Development Institutions (SSDIs) of Industries and Commerce Department

**Questionnaire for Training Institutions** 

Name of the Institute:

Address:

Name of the respondent:

### 1. FUNDING:

1. Please update the total sanctioned amount and actual amount disbursed in different year under different heads

S.No	Head	Sanctioned		s. lakh)			
		Amount(in Rs.	2010-11	2011-12	2012-13	2013-14	Remarks
		lakh)					

Total			

### **COURSES OFFERED**

15. What are the short/long duration training programmes undertaken by these institutions? And what is the duration of these training programmes? Year wise details to be furnished in the following table .

Data for year 2010-2011

					Total		Number o	of
S.			Total	Total number	number of		persons helpe	d
No		Duration of	seats	of persons	placements	Reasons for non	for se	lf
	Name of course	training	available	trained	made	placement	employment	

6			Tatal	Total www.hav	Total		Number	of
S.			Total	Total number	number of		persons	helped
No		Duration of	seats	of persons	placements	Reasons for non	for	self
	Name of course	training	available	trained	made	placement	employmer	nt

Data for year 2011-2012

S. No	Name of course	Duration of training	Total seats available	Total number of persons trained	Total number of placements made	Reasons for non placement	Numberofpersonshelpedforselfemployment

S.			Total	Total number	Total number of		Number persons hel	of ped
No		Duration of		of persons	placements	Reasons for non		self
	Name of course	training	available	trained	made	placement	employment	

# Data for year 2012-2013

S. No	Name of course	Duration of training	Total seats available	Total number of persons trained	Total number of placements made	Reasons for non placement	Numberofpersonshelpedforselfemployment
•		training	avaliable	trained	made	placement	employment

# Data for year 2013-2014

S.			Total	Total number			Number of persons helped
No		Duration of		of persons		Reasons for non	
•	Name of course	training	available	trained	made	placement	employment

16. Please list any new courses added or upgraded between the years 2010-11 and 2013-14 years?

S.No.	Name of the course	Duration
1		
2		
3		
4		
5		
6		
7		
8		
9		
10		

- 17. Have you identified the skill requirement of the districts before conducting the training programme? IF yes, which are they? If no, state reasons.
- 18. Which are the courses in which you compete with private institutions? For these courses, please share the total number of seats and total intake for the current year.

S.No.	Name of course	Total number of seat available	Actual intake
5.110.		seat available	
1			
2			
3			
4			
5			

2010-       11       2011-       20								Number	of persons			
YearSCsSTMinori tiesSCs+ST s+BCs+ MinoritiSCs+S s+Hino s+MinoSCs+ST s+BCs s+Mino2010- 11IIIIIII2011- 12III								helped	d for self			
YearSCsSTBCsMinori tiesS+BCs+ MinoritiesTs+BC s+Mino ritiesSCs+STs+BCs+ MinoritiesWomen2010- 11II	N	Numb	er of tr	ainees tra	ined	Trainees	s placed	empl	oyment	Reason for n	on placement	
YearSCSTMinori tiesMinoriti esS+Mino ritiesSCs+STs+BCs+ MomenWomen2010- 11III <td></td> <td></td> <td></td> <td></td> <td></td> <td>SCs+ST</td> <td></td> <td>SCs+S</td> <td></td> <td></td> <td></td> <td></td>						SCs+ST		SCs+S				
YearSCssBCstiesWomenesWomenritiesWomenMinoritiesWomen2010- 11 $1$						s+BCs+		Ts+BC				
2010-       11       2011-       20		ST		Minori		Minoriti		s+Mino		SCs+STs+BCs+		
2011-     12	SCs	S	BCs	ties	Women	es	Women	rities	Women	Minorities	Women	
2011-     12												
12												
2012- 13												
13												
2013-												
14												

19. Performance of Institutions in terms of imparting training to SCs/STs/BCs/Minorities/Women Beneficiaries

20. How the institutions have performed under SCSP and TSP during 2010-2014? What were the targets set under SCSP and TSP during 2009-2013? Have the targets set been met or not? If not, Reasons thereof.

Year	Target number of trainees	Trainees trained	Trainees placed	Self employed	Others	Reasons for deviation from targets
2010-11						
2011-12						
2012-13						
2013-14						

21. Are the training modules, syllabi and curricula revised in these institutions? If yes, what is their frequency of revision? How frequently do you think the syllabi has to be revised?

- 22. Do the Institutions help the candidates for self employment? If yes, what type of help is rendered to them? (Technical, financial/bank linkages, Accounting linkages, etc.)
- 23. Is there a placement centre at the institutions?

 $\Box$  Yes  $\Box$  No

If yes, what is the procedure adopted to place the candidates in the industries?

If not, what help is given by these institutions to get employment after training is imparted?

24. Is the institution giving multi skill training to their trainees? If not, is it desirable to do so?

STAFFING

25. How many people are employed at the centre? Please share the numbers under the following heads for the past five years.

	(A)=(B)+(C)	(B) = (D)+(E)	(C)	(D)	(E)
			Other		
			depts. Like		
	Total staff=	Trainers = Number of	Admin,		
	Trainers+	permanent trainers +	Account	Permanent	Contractual
Year	Others	contractual trainers	etc.	Trainers	trainers
2009 -10					
2010 -11					
2011 -12					
2012 -13					

2013 -14							
----------	--	--	--	--	--	--	--

26. What is the Sanctioned staff for the organization versus how many are actually working – teaching, non teaching/others (like administrative employees, accounts, security etc.)?

Number of staff	Sanctioned	Actual
Teaching		
Non Teaching		
Total		

27. What is the plan of action for filling the vacancies, if any?

### INFRASTRUCTURE

28. Has there been any addition to your infrastructure during the years 2010-2014?

- □ Yes
- $\square$  No

If yes, please provide the following details.

		Expenditure incurred (in Rs	
S.No.	Description of infrastructure added	lakh)	Year
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			

29. Is there a requirement of up gradation of infrastructure at your institution? What would be the kind of up gradation and what will be the funding and time required to implement these up gradations?

		Estimated Expenditure(in	Rs.
S.No.	Description of infrastructure needed	lakh)	
1			
2			
3			
4			
5			
6			
7			

30. Do you have any collaboration/association with KGMSDC?

 $\Box$  Yes  $\Box$  No

If yes, please provide details on services provided by KGMSDC

If no, kindly provide reasons.

31. Are the Institutions providing technical service by getting work orders from the industries in their respective areas?

 $\Box$  Yes  $\Box$  No

If yes, what is the type of service provided and to which industry?

If not, why not?

- a. No demand for service
- b. People are providing better service

- c. Manpower insufficient
- d. Others\_\_\_\_\_

### OTHERS

- 32. What are the current challenges do you face in conducting training in terms of :
  - a. Availability of staff:
  - b. Demand/relevancy of a course:
  - c. Placement:
  - d. Availability of funds:
  - e. Any specific insights on specific courses (e.g.: which course needs to be wound up, Introduced or upgraded)
- 33. How do you spread awareness/ create publicity for the courses at your institution to attract enrolments?
  - □ Pamphlets
  - □ Advertisements in newspaper
  - $\Box$  Tie ups with any related institutes
  - $\Box$  Conducting workshops
  - □ Others, please specify\_\_\_\_\_

If not, what are the reasons \_\_\_\_\_

- 34. Is there a time bound structured review of the performance of trainings done at the institutional and district level? If yes, what have been their main recommendations and what action has been taken there upon?
- 35. What are your suggestions towards strengthening the institution?

## Annexure I: List of secondary sources referred

- 1. Annual reports of DIC, 2011,2012,2013,2014,2015
- 2. Websites of the Institutions surveyed
- 3. DIC website
- 4. Collateral shared by various Institutions
- 5. Auditors' Report To The Shareholders Of Karnataka State Coir Development Corporation Ltd

# Annexure J: Functions of a placement cell

### 1) Objectives of Placement Cell

- To provide opportunities for placement of students towards achieving cent percent placements
- To centrally manage placement activities for all courses.
- To organize campus recruitment for the students with industries and various organizations of repute from all over India.
- To prepare students for campus recruitment by arranging training in aptitude tests, group discussions, preparing for technical and HR interviews through professional trainers.
- To provide career counselling by inviting guest speakers from industries and alumnus
- To enter into tie-up arrangements with reputed industries for campus recruitment.

## 2) Key Functions

- To prepare brochures for departments and send to prospective recruiters
- To organise on-and-off campus interviews
- To organise training programmes like Personality Development Programmes, interview facing skills, mock aptitude tests, group discussion training and mock interviews for students
- To organise industrial visits
- To organising Faculty Development Programmes, collaborating with industries
- To facilitate Industry Institute Interactions by inviting experts for lectures in the areas of latest technology, emerging industries, new projects, roles available etc.
- To collect feedback from the recruiters and to co-ordinate with management on corrective actions on the feedback if any,
- To organize the workshops on entrepreneurship
- To sensitise students regarding various competitive examinations
- To guide students who desire to pursue higher education
- To provide inputs on updation of pedagogy based on industry inputs
- Maintain relations with Alumnus of the institute

### 3) Documentation:

- Master list of recruiters containing the name of the organisation, contact person, contact details, areas of operations/sector, latest salaries offered(Maximum, minimum, average)
- Placement records of previous batch
- Master list of alumnus and their position and contact details
- Master of experts in different areas
- Brochure of the institute with the updated details
- Feedback register to register the feedback of organisations, alumnus along with action taken report
- Training/workshop register for recording internal trainings, industrial visits conducted

**Annexure K: Reference Images from Survey**