

## 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 in Leather Technology course as of now is yet to achieve full enrolment with capacity utilisation during the review period ranging between 13% 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 un-organised 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 its 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-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.

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 within 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

- 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 in 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*.