

# The Institution of Engineers (India)

NEWSLETTER

# **STUDENTS' CHAPTERS**

Volume 98	SNL 2	January 2018
All India Students' Committee (AISC) Session 2017-18 Mr Sisir Kumar Banerjee, FIE, President Mr K C Sethi, Chairman Council Members Mr M Chinnaswamy Dr M Chowde Gowda Dr N K Dash Prof H B Goswami Mr J N Mistry Mr S S Mutha Mr G M N Parrikar Mr K Rajanikanth Mr B Brahma Reddy Members (Elected) Dr B L Shivakumar Dr (Ms) Shiena Shekhar Dr P Karuppuswamy Ms T P Mathubala Mr Krishna Prasanth Mr V Mothilal Ex-Officio Member Secretary & Director General, IEI	Editor, Printer and Publisher Maj Gen (Dr) S Bhattacharya, <i>VSM</i> (Retd) Technical Editor Dr S M Ali Assistant Technical Editor Ms Shubhasree Biswas Sett Editorial Assistance Mr Archan Basu Mr Zahid Hussain Mr K V Hariharan	The Institution of Engineers (India) as a body accepts no responsibility for statements made by individual authors. *** The Institution of Engineers (India) subscribes to the Fair Copying Declaration of the Royal Society. Reprints of any portion of this publication may be made provided that reference thereto be quoted. *** Published twice a year in the months of July and January. *** Secretariat : 8 Gokhale Road, Kolkata 700 020 <i>Tel</i> : (033) 2223 8311/14/16, 4010 6299 <i>e-mail</i> : studentchapter@ieindia.org <i>Web</i> : www.ieindia.org *** Printed at : M/s Jyoti Graphics, 6-D, Ramanath Majumder Street, Kolkata 700 009
Utilization of Existing Infrastructure of F Leonardo Souza Student Membership (SMIE) and Life-tin 48 <sup>th</sup> All India Students' Design Competit Report on Twenty-fifth IEI Convocation Reports from Engineering College Stud Reports from Polytechnic Students' Cha Best / Second Best/ Third Best Students Request of Quarterly Reports from Stud Fee Structure for Membership of Engine	ne Membership for Diploma E tion-2017 and Technicians'/Students' Co ents' Chapters apters s' Chapter 2016-2017 dents' Chapters	ingineers 6 7 onvention 8 10 13 15 15

16

16

16

Implementation of IVRS at IEI Headquarters Students' Chapter Activities

**Issuance of Associate Membership Certificate** 

# Utilization of Existing Infrastructure of Primary Schools for the Skill Development of Goa

### Leonardo Souza

Development of skills is closely linked to the existing and proposed infrastructure. The importance of infrastructure for sustained economic development is well recognized. High operational costs arising from unproductive and inadequate infrastructure can prevent the economy from realising its full growth potential regardless of the advancement on other fronts. More importantly, it can be found that infrastructure development in India has a momentous positive involvement toward growth than both private and public investments. Physical infrastructure covering transportation, power and communication through its backward and forward linkages facilitates growth. Social infrastructure including water supply, sanitation, sewage disposal, education and health, which are in the nature of primary services has a direct impact on the quality of life. Educational infrastructure is the least talked about subject. However it is of primary importance in the skill development needed for the economic development of the nation. The performance of infrastructure is largely a reflection of the performance of the economy. Infrastructure industries are measured by six key infrastructure and core industries (ie, electricity, crude oil, petroleum refinery products, coal, steel and cement) on the basis of the different parameters such as trends in growth of physical output in infrastructure sectors, telecommunications, power, ports, railways, civil aviation, and post. In the present paper we investigate the utility of existing infrastructure in Goa to provide the necessary skills for the economic growth in India. In this context, we study the possibility of the role of institute-institute-industry-interrelation and utility of pre-existing primary educational infrastructure facilities, to better the skills of people in Goa. There is unidirectional relationship from infrastructure development to output growth. From a policy perspective, there should be greater emphasis on infrastructure utility for skill development to sustain the high economic growth which the Indian economy has been experiencing for the last few years.

Keywords : Goa; Infrastructure for skill development; Investment; Output growth

### **INTRODUCTION**

Development of skills is closely linked to the existing and proposed infrastructure. The importance of infrastructure for sustained economic development is well recognized. High operational costs arising from unproductive and inadequate infrastructure can prevent the economy from realising its full growth potential regardless of the advancement on other fronts. More importantly, we find that infrastructure development in India has a momentous positive involvement toward growth than both private and public investments. Physical infrastructure covering transportation, power and communication through its backward and forward linkages facilitates growth. Social infrastructure including water supply, sanitation, sewage disposal, education and health, which are in the nature of primary services and has a direct impact on the quality of life. Educational infrastructure is the least talked about subject. However it is of primary importance in the skill development needed for the economic development of the nation. The performance of infrastructure is largely a reflection of the performance of the economy. Infrastructure

Leonardo Souza is the Lecturer, Agnel Polytechnic, Verna-Goa.

This paper was selected as the Best Paper in the Seminar Session of the Students' Convention held at Goa during October 28 - 29, 2017.

industries are measured by six key infrastructure and core industries (i.e., electricity, crude oil, petroleum refinery products, coal, steel and cement) on the basis of the different parameters such as trends in growth of physical output in infrastructure sectors, telecommunications, power, ports, railways, civil aviation, and post. In the present paper we investigate the utility of existing infrastructure in Goa to provide the necessary skills for the economic growth in India. In this context, we study the possibility of the role of institute industry interaction and primary educational infrastructure facilities already existing to better the skills of people in Goa. There is unidirectional relationship from infrastructure development to output growth. From a policy perspective, there should be greater emphasis on infrastructure utility for skill development to sustain the high economic growth which the Indian economy has been experiencing for the last few years.

#### NATIONAL DEVELOPMENT AND SKILL TRAINING

Equipping the workforce with adequate skills required for the today's and tomorrow's jobs is a strategic concern in the levels of national growth and development that all nations desire.

Today's trends in globalization are accelerating the diffusion of technology and the swiftness of innovation. Daily new

occupations are emerging and replacing others. Within each profession, required skills and competencies are developing and surfacing rapidly. Simultaneously the knowledge content of production processes and services is rising.

To keep training relevant, institutional and financial arrangements must build solid bridges between the world of learning and the world of work. Bringing together business and labour, government and training providers, at the local, industry and national levels, is an effective means of securing the relevance of training to the changing needs of enterprises and labour markets.

We need to build solid bridges between the world of work and training providers in order to match skills provision to the needs of enterprises. Sustained dialogue between employers and trainers, coordination across government institutions, is very necessary. This is often done best at the district level where the direct participation of employers and workers together with government and training providers can ensure the relevance of training. Continuous workplace training and lifelong learning enables workers and enterprises to adjust to an increasingly rapid pace of change thus anticipating and building competencies for future needs.

It is vitally important to ensure broad access to training opportunities, for women and men, and predominantly for those groups facing greater difficulties, in particular youth, lower skilled workers, workers with disabilities, rural communities. The training strategy for strong, sustainable and balanced growth must address strategic issues as well as practical arrangements. It should provide a platform for further exchange of ideas and experiences among a wide range of institutions, enterprises, experts from all over the country.

Ultimately, each country's prosperity depends on how many of its people are gainfully employed and how productive they are, which in turn rests on the skills they have and how effectively those skills are used. Labour market information, employment services and performance reviews are steps to an early identification of skill needs. Skills are a foundation of decent work[1].

#### **Skill India Initiative**

India's rise in recent years is a most prominent development in the world economy. India has re-emerged as one of the fastest growing economies in the world. India's growth, particularly in manufacturing and services, has boosted the sentiments, both within country and abroad. The provision of quality and efficient infrastructure services is essential to realize the full potential of the growth impulses surging through the economy. India, while stepping up public investment in infrastructure, has been actively engaged in involving private sector to meet the growing demand [2].

### Skill India Mission

For the first time scince India's independence, Ministry for Skill Development & Entrepreneurship (MSDE) has been formed to focus on enhancing employability of the youth of the nation, through skill development. Skill India is an initiative of the Government of India. It was launched by Prime Minister Narendra Modi on 15th July 2015 with an aim to train over 40 crore people in India in different skills by 2022. The initiatives include National Skill Development Mission, National Policy for Skill Development & Entrepreneurship 2015, Pradhan Mantri Kaushal Vikas Yojana (PMKVY) scheme and the Skill Loan scheme.

### Vision

This mission was created with a vision to create an ecosystem of empowerment by skilling on a large scale at speed with high standards and to promote a culture of innovation based entrepreneurship which can generate wealth and employment so as to ensure sustainable livelihoods for all citizens in the country. The core objective of the entrepreneurship framework is to coordinate and strengthen factors essential for growth of entrepreneurship across the country [3].

### Key Thrusts of Skill India Mission

Common norms for skill development schemes across India notified to ensure standardization across all existing programs for skill development. The key areas of the mission are given below[4].

Curriculum for 251 job roles and content for 100 courses finalized

- Industry validation of standards
- 40 sector skill councils formed
- 4500+National occupation standards and 1661 qualification packs
- · Aimed at promoting excellence in vocational training
- Provide a benchmark for comparison amongst various institutes and trades
- Differentiating factor, increased market competition and quality improvement in institutions
- ISO 29990 certification of itis for international quality standards, recognition of trainees
- And certification at international level
- Revamp of Curriculum to include:
  - Workplace skill
  - Industry internship

• Empanelment of industries for conducting three weeks inplant training for trainee instructors National Body to certify skills across India being set up as part of skills eco-system

• Will standardize and improve assessments across the country

• AICTE has permitted to run ITI courses in 500 polytechnics across the country

- Long term skill development courses (itis) being provided with academic equivalence with
- Formal education, through bridge courses
- Efforts on for using sparable infrastructure of engineering colleges

• Incentives being provided under common norms for training in special areas

Women participation more than 40%

### Impact Assessment

For the purpose of undertaking impact assessment, annual as well as five year targets will be set for each stakeholder by the (policy implementation Units) PIU. Impact assessment will be undertaken to ensure that the targets are met well within the time frame. The stakeholders will also be subject to a quarterly review. With the help of the PIU, it will be easier to monitor the implementation of the policy initiatives and take corrective measures in case of non-compliance. A mid-term review of the policy will be undertaken based on impact assessment by a third party. The policy can be considered for review after five years, based on learnings from implementation of the policy [3].

#### The Economic Scenario of Goa

Goa situated on the west coast India has a scenic beauty and the architectural splendour of its temples churches and monuments makes it is a favorite spot for the tourists from all over. The state shows positive and high indicators in all economic activities. The population of Goa as per 2011 census is 14,58,545 constituting around 0.12% of the country's population. In Goa, 88.70% persons are reported to be literate[5].

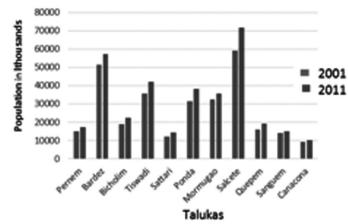
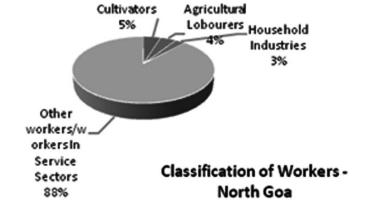


Figure 1 : Taluka wise distribution of population 2001-2011[5]





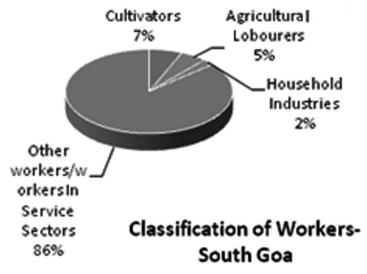


Figure 3 : District wise distribution of workers [2]

According to 2011 census, total workforce of the State is about 5,77,248, which constitutes 39.58% of the total population of the state. This means leaving out the children and youth there is still a great need for skill training to take India to the next stage of becoming a developed nation. There are 808 number of banking branches in the state as on 31.12.2016. The total 56 banks comprises of 26 public sector banks (491 branches), 15 private sector banks (153 branches) and 15 co-operative sector banks. About 96.65% of the ration cards are seeded with Aadhar.

The estimates of Gross State Domestic product and Net State Domestic Product are given below in Table 1 [2].

#### Institute-Institute-Industry-Interrelationship

There needs to be an Institute-Institute-Industry-Interrelationship for the full impact of skill development to take place. Higher institutes can share knowledge phasewise to lower institutes and/or participants directly. Industry

Table 1: Quick estimates of state domestic product for 2015-16 (Rs	5.
in lakh)[5]	

Item	GSDP	NSDP
Current Prices	4500199	4065933
Constant Prices	3751984	3358438

can send workmen for compulsory/voluntary training to lower/higher level institutes as per requirements.

### Interrelationship not Interaction

Interrelationship signifies a permanent bond while interaction is a more transient one. The relationships between institutes of higher and lower learning and industry vis-à-vis skill education must be well defined vet amenable to minor modifications, without elaborate red-tape. Flexibility is the main pivot of the mechanism of skill education. All this needs Government intervention for the simple reason that in India and Goa too nothing is achieved unless there is a stimulus from the government that then translates into a concrete movement towards development. For this the government has to think out of the box. Today training is restricted by the funding from government and governmental agencies directly and indirectly. There is an absurd interference from the finance and revenue departments that want to rationalize everything in terms of cash for services variables that play marginal role in training. There is no gain without pain in this scenario. The insistence of a minimum number of participants to justify employing a trainer does not work in this case. The Government must be ready to train even as less as two participants per batch to get the movement going. Only then will the skill training initiative succeed.

### Industrial infrastructure in Goa

The most distinctive part of Goa's physical infrastructure development in recent years is the development of road network across the region. Goa is now endowed with one of the best roadway systems in India. All parts of Goa are linked by good roads. The road network consists of Expressways, National Highways, State Highways, Major District Roads, Other District Roads and Village Roads. All have hot-mixed surface thus making transportation of goods and services is very easy.

Ports have always played a crucial historical role in Goa. Goa was the primary port used by Arabs in historical times. The modern port at Vasco has helped in India's international trade and also in generating economic activity in the surrounding city. Goa's coastline has many ports and jetties. The annual aggregate cargo handling capacity of major ports increased. There was an impressive growth per annum in container traffic during the past years.

Dabolim Airport provides aeronautical services of pre-set performance standards to domestic and foreign travellers in addition to handling Cargo. There is a level playing field for all categories of airport operators and common user/ carrier segments of airports. Construction work at modern airport of international standards at Mopa is in progress. Policy initiatives have had a marked positive impact upon airline traffic. Air traffic has grown up substantially. Indian Railways which has world's second largest rail network also traverses Goa. It has been contributing to the development of the Goa's industrial and economic landscape for over 50 years. Of the two main segments of the Indian Railways, freight and passenger, the freight segment accounts for roughly two-thirds of traffic to Goa.

Urban infrastructure consisting of drinking water, sanitation, sewage systems, electricity, and gas distribution, urban transport, primary health services and environmental regulation also contributes to the development profile of Goa.

To promote small and medium scale industries there are Industrial Estates strewn across Goa.

### List of Infrastructure Found in Goa

- Infrastrusture
- Electricity
- 2 Roads and bridges
- 3 Railways
  - Ports

1

4

5

- Airports
- 6 Telecom
- 7 Irrigation
- 8 Water and sanitation
- 9 Storage
- 10 Gas
- 11 Industrial Estates
- 12 Proposed Industrial corridors and parks

#### Training Infrastructure in Goa

There are already exiting a number of engineering Colleges, Government technical schools, Industrial Training Institutes (skill development centres), and polytechnics in Goa. Besides this there are many other institutes that can be used for other non-technical skill development [6]. Governments tend to rely on business incubation centres but these are more for upper end entrepreneurs. The workforce still needs skill training especially theory mixed with proper practicals.

#### Table 2 : List of primary schools in Goa [6]

Taluka	Primary Schools
North	Goa District
Pernem	79
Bardez	72
Bicholim	90
Satari	109
Tiswadi	45
Ponda	131
Sou	th Goa District
Sanguem	113
Quepem	67
Canacona	70
Salcete	54
Murmugao	25
Total	855
Note : The number of schools	may vary as per recent Government policies.

Table 3 : List of other institutes in Goa [1]

Taluka	No.
Government Technical Schools	2
Industrial Training Institutes	11
Polytechnics	5
Engineering Colleges	5
Music Schools	
Medical and Nursing Colleges	
Catering Colleges	
Management Institutes	
Home Science College	
Kala Kendras	

### Modalities of Skill Training Interface

As primary schools are the most widespread infrastructure available to the Government it is an ideal place to conduct the process of skill training. They are usually idle for the latter half of the day and especially in the evening. This can be adventitiously be used by industry and even village panchayats to train workmen and unemployed youth with necessary skills.

In the Construction industry for example, the skilled and semi-skilled but untrained labourers (masons, painters, tilefitters, carpenters...) can be sent for basic training to these schools so they know the technical background and knowhow and proper tools to use. This will make them more efficient and reduce errors and wastages that can be recovered as savings by the companies employing them.

### Conclusion

The issue of skill development in India is significant both at the supply and demand level. This is because the country presently faces the twin challenges of non-employability of large sections of the presently educated workforce that possess little or no job skills as well as severe paucity of highly-trained, quality labour. The skill development ecosystem in India is distorted and skewed. It is based on an outdated formal education system which has little or no vocational training. The vocational training is both qualitatively and quantitatively in a rather dismal state. The higher education system is desperately trying to cope up with issues related to quantity versus quality. Given the current state of affairs in the educational system and the future requirements caused by rapidly emerging technologies, the challenges related to skill development in India are enormous.

The government of India has listed skill development as one of its priorities and started the Skill India initiative. It aims to enhance participation of youth, seek greater inclusion of women, disabled and other disadvantaged sections into the workforce, and improve the capability of the present system, making it flexible to adapt to technological changes and demands emanating from the labour market.

By making use of present infrastructure and proper instituteinstitute-industry-interrelationship one can speed up and widen the outreach of the Skill India Mission to maximize its applicability.

### REFERENCES

1. 'G-20 Training Strategy-A Skilled Workforce for Strong, Sustainable and Balanced Growth'. *International Labour Office*, Geneva, November 2010.

2. P De. 'International Infrastructure Development in East Asia-towards Balanced Regional Development and Integration.' *ERIA Research Project Report 007-2*, Chiba: IDE-JETRO, 2008, pp.105-130.

3. 'National Policy for Skill Development and Entrepreneurship.' Ministry of Skill Development and Entrepreneurship, Government of India, 2015.

4. 'Skilling India Transforming India'. *National Skill Development-Brochure/Size, Ministry of Skill Development and Entrepreneurship,* Government of India, 30.05.16.

5. Government of Goa, *Economic Survey of Goa*, 30-09-2013, Directorate of Planning, Statistics and Evaluation, Porvorim - Goa, 2017.

6. Government of Goa, *List of Recognised Educational Institutions in Goa,* 30-09-2013, *Directorate of Education, Statistics Section,* Porvorim - Goa, 2014.

### Membership for undergraduate B Tech Students: Student Membership (SMIE)

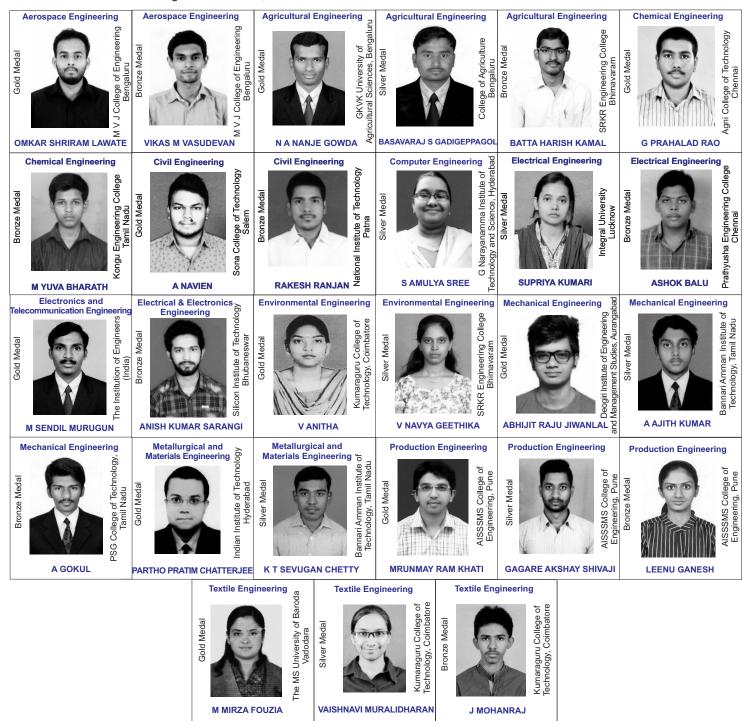
The Council at its 689th meeting held at Ahmedabad approved a new grade of membership - Student Membership (SMIE) - meant for undergraduate students pursuing BE/B.Tech (AICTE approved) or equivalent qualification and will be valid for six years w.e.f. the date of enrolment. For further details, please visit our website **www.ieindia.org.** In case of any further query regarding Student Membership please contact (033)40106246/ (033)40106225/ (033)40106251/ (033)40106302.

### Diploma Engineers can become life-time members of IEI

To attract diploma engineers who do not desire to appear in Section A and B examination conducted by the Institution, the Council, at its 694th Meeting held in Aurangabad during March 25-26, 2017 decided that Diploma Engineers from approved AICTE / State Board of Technical Education can also become life-time members of our Institution under Non-corporate category under the grade **Associate Member Technologist (AMTIE)** and **Member Technologist (MTIE)**. They will enjoy all the benefits and rights of Non-Corporate Members. For further details, please visit our website **www.ieindia.org.** In case of any further query please contact (033)40106246/ (033)40106225/ (033)40106251/ (033)40106302.

### 48<sup>th</sup> All India Students' Design Competition - 2017

National Design and Research Forum (NDRF) of The Institution of Engineers (India), Bengaluru conducted 48th All India Students' Design Competition – 2017. The Institution of Engineers (India) congratulates the following students' representing various engineering colleges, who were awarded medals and certificates during Twenty-fifth IEI Convocation and Students'/Technicians' Convention held at Goa during October 28-29, 2017.



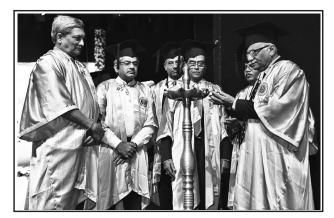
In addition to the above awardees, Deepak Thakur, Silver Medal, Aerospace Engineering, Indian Institute of Engineering Science and Technology Shibpur, West Bengal; Shekhar Dilip Borhade, Gold Medal, Architectural Engineering, Bharati Vidyapeeth College of Architecture, Navi Mumbai, Maharashtra; Udiksha Nagaraj Kapini, Silver Medal, Architectural Engineering, RV College of Architecture, Bengaluru, Karnataka; Khushwant Fatnani, Silver Medal, Chemical Engineering, IIT-Gandhinagar, Gujarat; Lokesh Puri Goswami, Silver Medal, Civil Engineering, NJR Knowledge Campus, Kaladwas, Tamil Nadu; Krishna R Dixit, Gold Medal, Computer Engineering, B M S College of Engineering, Bengaluru, Karnataka; Siva Kumar S, Gold Medal, Electrical Engineering, R M K College of Engineering, Chennai, Tamil Nadu; Naman Gupta, Silver Medal, Electronics and Telecommunication Engineering, BITS, Pilani, Rajasthar; Sarang Agarwal, Bronze Medal, Environmental Engineering, National Power Training, New Delhi; Pendem Sri Pragna, Bronze Medal, Metallurgical and Materials Engineering, IIT Hyderabad, Telangana; also received (in absentia) their Design Awards in respective Disciplines of Engineering.

### **Report on Twenty-fifth IEI Convocation and Technicians'/Students' Convention**

The Twenty-fifth IEI Convocation and Technicians'/ Students' Convention was organized by Goa State Centre of IEI during October 28-29, 2017. The theme of the Technicians'/Students' Seminar and Technical session held along with the Twenty-fifth IEI Convocation was "Role of Engineers Towards Skill India Mission". The theme was contemporary to the present tasks of the engineers that emphasises job creation and development of skills and resources. Shri Rahul Khaute, Honourable Minister of IT and Revenue, Goa graced the occasion as Chief Guest of Technicians'/Students' Seminar and Technical Session. Altogether, 3133 candidates (1347 candidates of Summer 2016 and 1786 candidates of Winter 2016) who passed Sections A and B examination in ten engineering disciplines during 2016 were given certificates in present and in absentia during Convocation. A large number of Student members of Engineering Colleges and Polytechnics attended the event of Twenty-fifth IEI Convocation and Technicians'/Students' Convention.

The Convocation was held at Kala Academy, Campal, Panaji, Goa. It started with a traditional welcome song followed by a welcome address by Mr Gurunath M N Parikkar, Chairman, Goa State Centre of IEI and lighting of the lamp by dignitaries present at the occasion.

Shri N B Vasoya, President, IEI then delivered his Presidential address. He emphasized the unique opportunity given to the working officials who cannot attend regular engineering courses but are enterprising enough to follow up their career objectives through selfstudy and appear in the examination being conducted by the Institution. He mentioned that The Institution has kept the standard of its examinations comparable with the requirements of the profession on the changing global scenario. He emphasized that during last 10 years, over



Lighting the traditional lamp being lit in presence of dignitaries



President, Er N B Vasoya address

32,000 students have passed Sections A&B Examinations of the Institution and some of them are holding senior positions in Govt., semi-Govt., public and private sector organizations and industries. Er Vasoya expressed his happiness and pride that Mr delivering his Presidential Manohar Parrikar, Honourable Chief Minister of Goa was

present in the function as Chief-Guest to inaugurate the Convocation. He congratulated the Shri Gurunath M N Parrikar, Chairman, Organizing Committee and Chairman, Goa State Centre of IEI, Shri Deepak Karmalkar, Co-chairman, Organising Committee and Honorary Secretary, Goa State Centre, Shri Chandrashekhar G Prabhudessai, Secretary, Organizing Committee for making wonderful arrangements for the event.

Mr Manohar Parrikar, Honourable Chief Minister of Goa, in his address complimented IEI for encouraging professional engineers, academicians and research workers and providing a vast array of technical and professional expertise. Mr Parrikar also complimented the graduate engineers and encouraged them to become



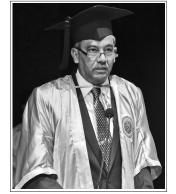
experts in their respective fields. He also appealed to the engineering students to welcome the changes and keep themselves equipped with new technologies and industries. During his speech, Mr Manohar Parrikar enlightened the students with his practical experience in the field of Mechanical

The Chief-Guest, Mr Manohar Parrikar delivering his speech

Engineering on how to address a problem and tackle different situations. Mr Parrikar, in his speech evoked the Student members to come up to the expectations of the society.

The Guest-of-honour, Dr Dr B K Mishra, Director, IIT, Goa then presented the Institution Trophies to Jharkhand Technicians' Chapter, Jamshedpur Technicians' Chapter (in absentia), Durgapur Technicians' Chapter and Nashik Technicians' Chapter as Best, Second Best and Third Best Technicians' Chapter (jointly shared) respectively amongst all Technicians' Chapters of IEI for the session 2016-2017. The Chief-Guest also presented Dr Amitabha Bhattacharya Memorial Trophies with certificates and requisite cheques for Engineering colleges to the Department of Civil Engineering, R.M.K. Engineering College, Tiruvallur, Tamil Naidu, Department of Mechanical Engineering, Mepco Schlenk Engineering College, Sivakasi, Tamil Nadu and Department of Mechanical Engineering, K.L.N. College of Engineering, Sivagangai, Tamil Nadu as Best, Second Best and Third Best Engineering College Students' Chapter for the session 2016-2017. Thereafter, the Chief-Guest presented Dr Amitabha Bhattacharya Memorial Trophies with certificates and requisite cheques for Polytechnics to GRG Polytechnic College, Coimbatore, Tamil Nadu, Sandip Foundation's Sandip Polytechnic, Nashik, Maharashtra and Arasan Ganesan Polytechnic College, Sivakasi, Tamil Nadu as Best, Second Best and Third best Polytechnic Students' Chapter respectively for the session 2016-2017. The President, IEI presented the Awards and Prizes to the members, who secured Highest/Second highest/Third highest marks in Section A and Section B examinations in different engineering disciplines and the 47th All India Students' Design Competition Awards-2017 for promoting the advancement of engineering and technology in the country. Finally, six awards, which were adjudged by panel of Judges on the previous day (28 October 2017) for presenting their technical papers in the Technicians'/ Students' Convention, were also given by the President on 29 October 2017.

Maj Gen S Bhattacharya, Secretary and Director General, IEI announced the names of the various awardees and also the names of more than 300 Technician/Senior Technician members who attended the Convocation in person to receive their certificates. The certificates of passing Sections A and B examinations were presented to



delivering his address

all Technician / Senior Technician members present by Er N B Vasoya, President of IEI. The convocation was concluded by Maj Gen S Bhattacharya, Secretary and Director General, IEI with a vote of thanks.

The programme, All-India Technicians'/Students' Secretary and Director General Seminar was on held on 28 Oct 2017 at Kala Academy,

Campal, Panaji, Goa on the theme mentioned before, 'Role of Engineers towards Skill India Mission". The Chief Guest for the occasion was Shri Rahul Khaute, Honourable Minister of IT and Revenue, Goa. It was presided over by Shri. Gopal A. Parsekar, Commissioner, Labour & Employment of Goa. During his address, Shri Parsekar advised the budding engineers to follow ethics in professional life, maintain quality in work and use their professional knowledge for the benefit of society. The Student members of the Engineering Colleges and Polytechnics attached to various Engineering Colleges Students' Chapters of IEI presented technical papers that invoked interest in the audience comprising Students of Engineering Colleges and Polytechnics, Senior engineers, Guests and other Delegates. Altogether fifteen technical papers were presented and discussed based on the above-mentioned theme and on diverse field of engineering that covered various engineering disciplines. The programme ended with a vote of thanks proposed by Er. Deepak Karmalkar, Honorary Secretary, Goa State Centre. Altogether six papers were adjuged for prizes by panel of experts for which the prizes were awarded on 29 Oct 2017 during the prize distribution ceremony. The name of prize winners with their title of papers under various categories is given below.

	TECHNICAL SESSION	
Name of Author	Title of Paper	Prize
Mr S Surya Kumar	Producing High Effective Solar Energy Using Integrated Panels	First
M Bharathi and M Siva	Plastic Formwork	Second
R Rahul, N Venu Charan, S Chatterjee, D Shyam Prasad, and Narmala Raju	I-Shaped Printed Antenna for Radio Tele-Communications	Third
	SEMINAR SESSION	
Name of Author	Title of Paper	Prize
Leonardo Souza	Utilization of Existing Infrastructure of Primary Schools for the Skill Development of Goa	First
Manoj Kumar Lenka	Developing a method to enhance skills in every individual in India	Second
S Surya Kumar	Skill India : Opportunities and Challenges	Third

### **REPORTS FROM ENGINEERING COLLEGE STUDENTS CHAPTERS**

# Budge Budge Institute of Technology, Kolkata (West Bengal)

The Students' Chapter of the Department of Electrical and Electronics Engineering conducted a seminar on 'Trends in Power Generation and Utilisation' (23 May 2017) wherein Mr Kashmir Lal Mallik, Chairman, The Institution of Engineers (India), West State Centre, Mr Jagannath Gupta, Chairman, Budge Budge Institute of Technology, Kolkata and other dignitaries were present.

Department of Electronics and Communication Engineering Students' Chapter of the college organized a Seminar on 'Advanced Applications of Electronics and Communication Engineering' on 22 May 2017.



Mr. Kashmir Lal Mallik delivering the lecture during a seminar

# Sri Ramakrishna Engineering College, Coimbatore (Tamil Nadu)



A view of the dias during its inauguration

Department of Mechanical Engineering Students' Chapter of the college was inaugurated by Dr M Senthiklumar, Honorary Secretary, The Institution of Engineers (India), Coimbaotre Local Centre. The Chapter conducted three lectures, namely, (i) How to prepare for UPSC Examination, (ii) Maths Made Easy, and (iii)Programmable Logic Controller, delivered by Mr Murugaraja, Director, Cracking IAS Academy, Chennai, Mr T Suresh, Head, training, Maths Made Easy, Coimbatore and Mr S Manickaraj, Director, MELS Indcosys Solutions LLP, Coimbatore, respectively. They also organized a symposium on 'TANTRA 2K17', a technical event 'TECHFEISTA', two day training on 'Computational Fluid Dynamics using Open Foam', a technical quiz, and a workshop on 'Dismantling and Mantling of Engine and Gear Box, during the period April 2018 - September 2018.

#### BNM Institute of Technology, Belagavi (Karnataka)



Lighting of the lamp during the inauguration function

Mechanical Engineering Department Students' Chapter of the college conducted two technical visits, (i) Valvo International Company on 26 May 2017 and (ii) M/s Vishnu Forge Industries Limited on 06 Sep 2018.

# Mukesh Patel School of Technology, Management and Engineering, Dhule (Maharashtra)

Inaugural function of Civil Engineering Department Students' Chapter of Mukesh Patel School of Technology, Management and Engineering was held on 03 Aug 2017.

### Potti Sriramulu Chalavadi Mallikharjuna Rao College of Engineering and Technology, Vijayawada (Andhra Pradesh)

An industrial visit to 'Efftronics System Private Limited' on 05 Aug 2018 was organized by Department of Electrical and



Electronics Engineering Students' Chapter of the college.

Department of Electrical and Electronics Engineering Students' Chapter of the same college conducted a

Dr. H S Kristle Nathan delivering the lecture

IEI-SNL

lecture on 'Role of DVR's and Static Exciters in Super Critical Thermal Power Plant' delivered by Mr B Raju, Assistant Divisional Engineering, KTPS, Paloncha, Andhra Pradesh on 20 Jul 2017 and a technical visit to Dr Narla Tata Rao Thermal Power Station, Ibrahimpatnam on 06 Jul 2017.

Amrutvahini College of Engineering, Ahmednagar (Maharashtra)



A view of students during technical quiz competition

A technical quiz competition was conducted by the Department of Information Technology Students' Chapter on 07 Jul 2017.

### PES's College of Engineering, Phaltan (Maharashtra)



Dr. P. D. Kumbhar being felicitated during guest lecture

Department of Mechanical Engineering Students' Chapter was inaugurated on 01 Sep 2017. Mr Rajendrakumar Saraf was the Chief Guest on the occasion. A lecture was also organized on the day on the topic 'Science and Engineering of Listening' delivered by Mr Rajendrakumar Saraf.

### Guntur Engineering College, Guntur (Andhra Pradesh)



Memento being presented to Er. K. S Kavin

Department of Electrical and Electronics Engineering Students' Chapter celebrated 226th birthday of Sir Michael Faraday on 22 Sep 2017.

# Christian College of Engineering and Technology, Bhilai (Chattisgarh)



A view of the audience during the seminar

Department of Mechanical Engineering Students' Chapter of the college conducted Annual General Meeting on 07 Apr 2017, a seminar on 'Mechanical Engineering' on 13 Apr 2017 and a technical quiz on 15 Sep 2017.

# GITAM Institute of Technology and Management, Visakhapatnam (Andhra Pradesh)



A view of the lighting of the lamp

The Students' Chapter of Mechanical Engineering Department celebrated Engineers' Day on 15 Sep 2017, wherein Cdr (Dr) P K Kulakarni and Dr K Venkatasubbaiah, were Cheif Guest and Guest-of-Honour, respectively.

# Datta Meghe Institute of Engineering, Technology and Research, Wardha (Maharashtra)

Annual General Meeting of Civil Engineering Department Students' Chapter was organised on 29 Aug 2017.

### Shroff S R Rotary Institute of Chemical Technology, Bharuch (Gujarat)



A Seminar on 'Entrepreneurship Awareness' was organised by Department of Mechanical Engineering Students' Chapter in association with Centre for Entrepreneurship Development, on 05 Aug 2017. A two-day

A view of students during Industrial visit

workshop was also conducted on 'Experimental Exposure on various Types of Internal Combustion Engines' during 12-13 Apr 2017.

Department of Electrical Engineering Students' Chapter of the College organised four lectures, namely, (i) Awareness about The Institution of Engineers (India) Students' Chapter, (ii) Substation Design and Basi Knowhow, (iii) Operation and Maintenance of Induction Motor, and (iv) Office Ethics, delivered by Mr Manish Mishra, Assistant Professor, Department of Electrical Engineering of the College, Mr P B Mehta, CEO, Persotech Solutions, Vadodara, Mr Ajay Mahajan, DGM, Electrical, Birla Copper, Dahej, Mr Krishnamurthy, Assistant Manager, Plant Engineering, Electrical, WEAC Alloys Limited, Ahkleshwar, and Ms Mamta Shah, HR Manager, Hubach India, respectively.

# Sri Vasavi Engineering College, Tadepalligudem (Andhra Pradesh)

Department of Mechanical Engineering Students' Chapter of the college organised a technical visit to M/s Vardhaman Agro and Iron Industries, Penugonda on 29 Jul 2017.

Technocrats Institute of Technology and Science, Bhopal (Madhya Pradesh)



Student receiving prize during debate competition

Department of Mechanical Engineering Students' Chapter conducted a debate competition on 13 Apr 2017.

### Asansol Engineering College, Asansol (West Bengal)



Department of Electrical Engineering Students' Chapter organised a project exhibition cum contest on 15 May 2017 and publish a wall magazine cum e-news letter 'Tadit Samwad' on 18 Apr 2017.

A view of the guest speech

Amaljyothi College of Engineering, Kanjirapally (Kerala)

Department of Mechanical Engineering Students' Chapter



A view of the audience during the seminar

conducted two lectures, namely, (i) What do Industries Expect from a Fresh Graduate Engineer on 19 Apr 2017, and (ii) Mechanical Engineer's Role in Industry on 20 Apr 2017, delivered by Mr K Jayachandran, DGM (Production), FACT, Aluva, Kerala and Mr R Dileep, DGM (Maintenance), FACT, Aluva, Kerala, respectively.

#### Bhilai Institute of Technology, Durg (Chattisgarh)



#### A view of audience during technical paper presentation competition

Department of Electronics and Telecommunication Engineering Students' Chapter organized a quiz competition on 12 Aug 2017.

# Priyadarshini College of Engineering, Nagpur (Maharashtra)

Department of Electrical Engineering Students' Chapter of the college conducted a committee meeting on 25 Sep 2017, wherein office bearers were nominated for the post of President, Vice President, Secretary, Joint Honorary Secretary, Treasurer and Executive Members were elected.

### Vishwakarma Government Engineering College, Ahmedabad (Maharashtra)

Department of Mechanical Engineering Students' Chapter, Civil Engineering Students' Chapter, Electrical Civil Engineering Students' Chapter, Chemical Civil Engineering Students' Chapter, Computer Civil Engineering Students' Chapter and Electronics and Communication Engineering Students' Chapter jointly organised Annual General Meeting.

# Shri Vidya College of Engineering and Technology, Virudhunagar (Tamil Nadu)

Department of Mechanical Engineering Students' Chapter organised Annual General Meeting on 21 Sep 2017 chaired by Dr G Baskaran, Dr S Sankaralingam and Mr S



A view of the dais during workshop on effective ideas for quality research with case studies in solar energy

Rathinavel, President, Principal and Adviser, IEI Students' Chapter, respectively. Mr Rathinavel narrated about the different activities to be carried out in near future.

# Sri Krishna College of Technology, Coimbatore (Tamil Nadu)

Department of Mechanical Engineering Students' Chapter conducted Annual General Meeting on 05 Jul 2017, two committee meetings, a lecture on 'Campus to Corporate' delivered by Mr Sampath Kumar, Training Head, Roots Industries India Limited, Coimbatore on 19 July 2017 and three technical visits to (i) M/s Prakash Gears, Coimbatore, (ii) Pem Industries, Mysore and (iii) Mold Well Products India Limited, Coimbatore.

# Maharana Pratap University of Agriculture and Technology, Udaipur (Rajasthan)



**Prize distribution during quiz competition** Department of Electrical and Electronics Engineering Students' Chapter organised a quiz competition, lecture, film show and celebrated technical week.

# Gyan Manjari Institute of Technology, Bhavnagar (Gujarat)

Department of Mechanical Engineering conducted Annual General Meeting on 28 Sep 2017, in which Prof Harsh Bhatt informed the students about the various seminars, workshops and other events under IEI Student' Chapter can carried out in near future.

### Dr Sivanthi Aditanar College of Engineering, Tiruchendur (Tamil Nadu)

Computer Science and Engineering Students' Chapter conducted Annual General Meeting on 04 Aug 2017, wherein difference committee members were elected. The Chapter also organized a technical quiz competition on 11 Aug 2017, 07 Sep 2017 and PRO-So contest on 12 Sep 2017.

### Jain College of Engineering, Belagavi (Karnataka)



View of the lecture on GATE awareness Program

Department of Electrical and Electronics Engineering Students' Chapter celebrated 'Teachers Day' on 05 Sep 2017, debate competition on 14 Sep 2017, celebrated 'Engineers Day' on 15 Sep 2017 and a lecture on 'GATE Awareness Program' on 23 Sep 2017.

# SVKM's Narsee Monjee Institute of Management Studies, Shirpur (Maharashtra)

Department of Civil Engineering Students' Chapter celebrated 'Engineers Day' on 15 Sep 2017 and conducted a quiz competition on 13 Sep 2017.

### **REPORTS FROM POLYTECHNIC STUDENTS' CHAPTERS**

#### Government Polytechnic Khurd, Pune (Maharashtra)



Er. Ankush Palwe, Assistant Engineer (I), PWD delivering lecture

Government Polytechnic Khurd, Pune Students' Chapter organised a lecture on 'Civil Engineering Structures, Construction, Practices and Maharashtra PWD Work Procedures' delivered by Mr Ankush Palwe, Assistant Engineer, PWD on 21 Jul 2017.

### College of Engineering Phaltan, Satara (Maharashtra)

College of Engineering Phaltan, Satara Students' Chapter conducted a event named CAD-War(2-D).

#### Government Polytechnic Karwar (Karnataka)



View of participants during celebration of Engineers' Day

Government Polytechnic Karwar Students' Chapter celebrated Engineers' Day. A lecture was organized on the topic 'Role of Engineers in a Developing India'. ER Nagaraj V Josh, Consultant, Civil Engineer, Karwar, was the Chief Guest and delivered lecture on the topic.

### Government Polytechnic, Belgaum (Karnataka)



A view of students during the video show

Government Polytechnic Belgaum Students' Chapter organized a committee meeting, ten seminars, namely, (i) Computer Aided Process Planning, (ii) Application of Hydraulic and Pneumatic Engineering, (iii) Working of Thermal Power Plant and Role of Mechanical Engineers in TPP, (iv) Programmable logic Controllers and Industrial Automation, (v) Introduction to Earth Quake Engineering, (vi) Root Cause Analysis and Problem Solving Techniques, (vii) Motor Vehicle Act - 1988, (viii) Advanced Application of Casting Profess, (ix) Career Oriented Opportunities, and (x) How to activate Sixth Sense. The Chapter also conducted orientation programme, awareness programme and celebrated 'Engineers' Day' on 15 Sep 2017 on the theme 'Role of Students in National Development'.

# Periyar Centenary Polytechnic, Thanjavur (Tamil Nadu)

Periyar Centenary Polytechnic, Thanjavur Students' Chapter conducted five lectures, namely, (i) Industrial Refrigeration and Air Condition, (ii) Internal Compression



A view of trainees during the technical visit

Engine, (iii) Communication Skill, (iv) FPGA and CPLD Devices, and (v) Signals and Systems, delivered by Mr N Abu Hanifa, Assistant Professor, Department of Mechanical Engineering, Periyar Maniammai University, Thanjavur; Mr P Srinivasan, Assistant Professor, Department of Mechanical Engineering, Periyar Maniammai University, Thanjavur; Mr B K Balaji, HRD Trainer, REN Academy, Thanjavur; Mr A Appas, Managing Director, Asqursystem, Trichy; and Ms C Narmada, Assistant Professor, Department of Electronics and Communication Engineering, Periyar Maniammai University, Thanjavur, three technical visits to (i) IICPT, Thanjavur, (ii) TNPL, Pugalur, Karur, and (iii) PMU, Vallam thirteen seminars, six group discussions, ten aptitude tests, twelve technical quiz competition and campus interviews.

### P A C Ramasamy Raja Polytechnic College, Rajapalayam (Tamil Nadu)



A view of the audience during classroom seminar

P A C Ramasamy Raja Polytechnic College, Rajapalayam Students' Chapter conducted one committee meeting, fourteen lectures, nine short-term courses, sixteen group discussions, eight technical quiz competitions, sixty-two technical visits, three film shows, seven display of technical information and one campus interview.

Reports from Engineering College Students' Chapter and Polytechnic Students' Chapter for the period April 2017 - September 2017, received at Headquarters up to 31 Dec 2017 are included.

### Presentation of Trophies, Prizes and Awards at the Twenty-Fifth IEI Convocation

Based on entries received from various Technicians' Chapter operating under the State/Local Centres of IEI and also from a large number of Students' Chapters attached to Engineering Colleges/Polytechnics in the country, the following awards were presented in numerous categories. The trophy, certificate and cash award of ₹20,000/-, ₹15,000/- and ₹10,000/- were given to Best, Second Best and Third Best Chapters (of various categories):

### **Engineering College Students' Chapter Award**

Best Engineering College Students' Chapter Award :

Department of Civil Engineering

### **R M K Engineering College**

Tiruvallur, Tamil Nadu

Second Best Engineering College Students' Chapter Award :

Department of Mechanical Engineering

Mepco Schlenk Engineering College

Sivakasi, Tamil Nadu

Third Best Engineering College Students' Chapter Award :

Department of Mechanical Engineering

### K L N College of Engineering

Sivagangai, Tamil Nadu

### **Polytechnic Students' Chapter Award**

Best Polytechnic Students' Chapter Award :

### **GRG Polytechnic College**

Coimbatore, Tamil Nadu

### Second Best Polytechnic Students' Chapter Award :

Sandip Foundation's Sandip Polytechnic

Nashik, Maharashtra

Third Best Polytechnic Students' Chapter Award :

Arasan Ganesan Polytechnic College

Sivakasi, Tamil Nadu

### **Request of Quarterly Reports from Students' Chapters**

IEI invites Quarterly reports of the Technical discourses that has been carried out in each quarter of the year from all the Students' Chapters under its aegis so that the consolidated brief of such reports can be included in the next issue of The Institution of Engineers (India), Newsletter for wide circulation and publicity of such discourses among the Engineeing fraternity.

Fee Structure for Membership of Engineering College Students' Chapters				
One time Membership Fee for Students of	Subscription, Rs	Share of Students' Chapter, Rs	<b>Share of Hqs</b> , Rs	
First Year	400	300	100	
Second Year	305	230	75	
Third Year	210	155	55	
Fourth Year	115	80	35	
Fee Structure for Polytechnic Students' Chapters				
One time Membership Fee for Students of	Subscription, Rs	Share of Students' Chapter, Rs	<b>Share of Hqs,</b> Rs	
First Year	305	230	75	
Second Year	210	155	55	
Third Year	115	80	35	

### **IMPLEMENTATION OF IVRS AT IEI HQS**

In order to give better and prompt service to our T/ST and Corporate members, the Institution has implemented **Interactive Voice Response System (IVRS)** at its Headquarters.

Existing T/ST/Corporate members of the Institution interested to know the roll number/examination results/payment details or any other queries related to Examination/Membership may dial the number **033 4015 5400**.

Members are to key-in 7 digit membership number and first 11 digits of the reference number received through sms or letter from IEI (as applicable) and follow the instruction as sounded by the system.

### STUDENTS' CHAPTER ACTIVITIES

• Over 1 600 Students' chapters function at various engineering colleges/polytechnics. Chapters conduct a variety of technical activities, such as, seminars, industrial visits, group discussions, technical quiz competitions, workshops, model/poster competition and film shows throughout the year.

• Annual Students' Convention with a Seminar on a topical subject and Technical Session to provide a platform for presentation of technical papers and building fellowship and opportunities for networking with peers and senior members to the Institution.

### **ISSUANCE OF ASSOCIATE MEMBERSHIP CERTIFICATE**

Pursuant to the decision of the Council, Technician (T) / Senior Technician (ST) members, after passing Section B examination, would be eligible to become Associate Member (AM) directly. In order to transfer their membership grade from T / ST to Associate Member, they are required to apply for the same with a demand draft of ₹1800/- (US \$ 100 for overseas candidates) in favour of 'The Institution of Engineers (India)' payable at Kolkata. This is applicable for all candidates who have registered in Section B prior to July'13, with a fee of Rs. 3000/- only. Candidates who have remitted Rs. 4800/- towards Section B Registration, will receive their AM certificates automatically within two months of passing Section B.