

# **Skilling & Vocationalization of Education in Goa**

**Revitalizing the whole ecosystem**

STRUCTURE OF PRESENTATION:

A.UNDERSTANDING ACTIONABLE SPACE

B.STRATEGY AND STEPS TAKEN

## UNDERSTANDING ACTIONABLE SPACE - UNIQUE ASPECTS OF THE GOAN SITUATION:

- Goa - The smallest State in India --- Total area 3702 square kilometres.
- Fourth smallest by population – Total population approximately 1.457 million as per 2011 Census.
- Impressive Socio-economic indicators.
- Ranks 4<sup>th</sup> in the Country, with regard to literacy rate.
- Has the highest per capita income.
- 8% -9% economic growth in the last few years.
- Population growth of the State for the last decade stands at 8.2% as against 17.6% for the Country
- Total Fertility Rate 1.7 - less than replacement rate

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## UNDERSTANDING ACTIONABLE SPACE – SKILL GAP STUDY:

The Skill Gap Study conducted in 2013 indicated:

- Incremental human resource requirement across all sectors during the XII plan at 100k and at 126k during XIII plan respectively.
- Meagre addition of 40k workers during 2012 to 2017 and 50k during 2017 to 2022 to the Work Force.
- Lower Labour Force Participation Ratio (LFPR) reflecting lesser inclination for semi skilled jobs
- Aspiration of the youth towards the service/hospitality sector.

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## UNDERSTANDING ACTIONABLE SPACE – SKILL GAP STUDY (CONTD.):

- IT & ITeS, along with Retail, also occupied youth mind space.
- Estimated skill gap over 2012-17 at 80k and over 2017-22 at 104.8k
- Indicates huge manpower deficit across sectors
- Particularly severe at the semi-skilled level indicating inward migration.
- Need for revamp of the skilling and vocational training structure in the State.

## UNDERSTANDING ACTIONABLE SPACE – AVAILABLE CAPACITIES:

- Approximately 13,500 students pass out at 12<sup>th</sup> std. level.
- Adequate opportunities for higher education available at a very nominal fee.
- 9,500 seats available in general degree courses (BA, B.Sc, B.com etc.) colleges.
- 2,000 seats in professional colleges (Engineering, Medical, Pharmacy, Nursing, etc.).
- 1,000 seats available in NIT Goa, BITS Goa and IIHM Goa for students.

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## UNDERSTANDING ACTIONABLE SPACE – AVAILABLE CAPACITY (CONTD.):

- 1,100 seats in various diploma courses.
- Vocational Training and Skill Development Courses through 17 ITIs.
- Intake Capacity of approximately 3,391 seats.
- 52 Private Institutes with 3,400 seats intake capacity.
- Five Govt. Polytechnics conducting Skill Development Courses for 3,000 trainees per annum.

## UNDERSTANDING ACTIONABLE SPACE – CHALLENGES & CONSTRAINTS (CONTD.)

- Capacity partially utilized due to low perception of skill courses in the Society in general and aspirations of the youth for various other options, in particular
- Uncertainties of Employment space for semi skilled work force
- Anxiety of Parents to keep all options open particularly at 8<sup>th</sup>, 10<sup>th</sup> & 12<sup>th</sup> standard level



## **STRATEGY AND STEPS TAKEN:**

1. Making 'Skilling' aspirational.
2. Reinvigorating the Vocational And Skill Education.
3. Collaboration with the Industry.
4. Catching them young.
5. Providing a multiple option path with Vertical linkages/mobility.
6. Overarching the system with Institutes of excellence and providing for more specialized courses at PG level.

## **STRATEGY AND STEPS TAKEN** (contd.)

### **1. Making 'Skilling' aspirational:**

#### **A.IMPROVING ADMISSION INTAKE**

- Existing approved strength in many trades remained unutilized perhaps due to lower inclination of the students.
- Simultaneously additional Institutes/Capacities were proposed in view of the recommendations of Skill Gap Study and also owing to demands from various areas
- Steps initiated included:
  - Redesigning the admission advertisements highlighting the importance of skilling and vocational education as a career choice and Giving wide publicity to these courses.
  - Providing dedicated transport at various places, facilitating students to attend centralized counseling sessions.
- These two simple interventions resulted in substantially increased intake for ITIs for 2015-16, more than 35% over the previous year.

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## **STRATEGY AND STEPS TAKEN** (contd.)

### **Making 'Skilling' aspirational (Contd.):**

#### **B. IMPROVING PERCEPTION**

- All the Institutes are supervised and guided in all respects by Institute Managing Committees, consisting of Industry Captains ,who are generally well known for their career growth. This has lent perceptible credence to ITIs.
- The World Youth Skill Day celebrated in collaboration with CII Goa and other Industry Organizations:
  - Industry Representatives and Students in large numbers attended the function graced by the Dy. Chief Minister of the State.
  - World Youth Skill Day Function held at Vigyan Bhavan and the speech of Hon"ble Prime Minister of India was also telecast live on the occasion.
- Alumni associations are proposed to be constituted in each ITI and regular meetings/ interactions of these entities are likely to infuse the Institutes with new vibrancy.
- Brand Ambassadors, preferably Ex-ITians, who are well known in the profession and have excelled in their careers are being appointed for each of the Institutes. This alone would contribute substantially to make skilling an aspirational choice.

## STRATEGY AND STEPS TAKEN (contd.)

### **2. Re-invigorating the Vocational and Skill Education:**

- Skills-based training in the State is being offered through:
  - 10 Government Industrial Training Institutes, and
  - 7 Institutes in the Private Sector.
  
- Nine Government Institutes have been upgraded into Centres of Excellence through central grants received under different schemes.
- The remaining tenth ITI being upgraded, under PPP mode, with support from Industry partner, i.e. M/s. Zuari Agro Chemicals Ltd.
- Institute Managing Committees, consisting of Industry Captains actively contribute in updating of Course Curriculum to render these suited to the felt needs of the Industry
- The upgradation of the Institutes have witnessed vastly improved infrastructure, which is now being leveraged for Capacity building of the trainers and upscaling of intake capacity of the Institutes through multi-entry, multi-exit curriculums.
- To further consolidate these gains and sustain the quality initiatives, all the ten Govt. ITIs are being taken up for ISO Certification.

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## STRATEGY AND STEPS TAKEN (contd.)

### Re-invigorating the Vocational and Skill Education (Contd...)

- Leveraging CSR initiatives to compliment these efforts:
  - Four of the Govt. ITIs permitted to partner with Siemens Pvt. Ltd. for improvement of course curriculum, capacity building of Instructors through 'train the trainer' programmes and up gradation of training equipment in terms of hardware and software support to be given by Siemens under their CSR initiative.
  - Hyundai India to partner with the Panaji Government ITI in the Automobile sector .
- A new Model ITI being established at Porvorim, under a centrally funded scheme which will add another 500 plus seats to the existing capacity.
- Also in the pipeline is a new Institute for the newly created Dharbandora taluka.
- The Greenfield airport at Mopa, which is a PPP initiative, has incorporated capacity building of Pernem Govt. ITI as an integral part of the project, in order to cater to the skills requirement of the Greenfield Airport.
- A Regional Vocational Training Institute for Women is also being established by the Central Govt. in the State.
- 05 acres of land and a ready to move in building is being handed over to the Central Govt. for commencing the Institute from the ensuing academic session. This will further add about 500 plus seats to the existing capacity and would also train the Trainers.

## STRATEGY AND STEPS TAKEN (contd.)

### **3. Collaboration with the Industry:**

- The Goa Shipyard Ltd was awarded a defence project worth 32,000 crores requiring large manpower at the technician level.
- In view of the emerging opportunity, a series of interactions were held with The Goa Shipyard for upscaling its Apprenticeship Training Programme to partly meet the manpower requirement for the project.
- Last year, the Shipyard has taken 100 ITI pass outs under the Apprenticeship Programme to meet their requirement of skilled manpower.
- The Shipyard anticipates progressive manpower requirement of 1,500 skilled technicians over the next 5 years, which is intended to be sourced from the local ITIs.
- The collaboration with Goa Shipyard is being expanded further for capacity building of Vasco Govt. ITI and for introduction of new trades in emerging areas.
- Extensive interactions with Industries for increasing the coverage of the Apprenticeship Training Programme
- Apprenticeship Training Programme earlier having with an intake capacity of about 1700 seats covering 80 odd industries extended to 250 industries providing 3000 seats

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## STRATEGY AND STEPS TAKEN (contd.)

### Collaboration with the Industry (Contd...)

- To attract the semi-skilled and unemployed youth of the State towards the Apprenticeship Training Programme, the monthly stipend of apprentices is being enhanced by means of a proposed new scheme, as equal to the minimum wages payable to a semi-skilled worker over the entire period of apprenticeship, which may range from a year to three year.
  
- Organizing 4 annual Placement Fairs at major industrial estates namely Verna, Kundaim, Tivim and Bicholim in collaboration with the various local Industrial organizations to facilitate the skilled workforce towards gainful employment :
  - All ITI passed out who are still unemployed are invited to these placement fairs, where they're interviewed by various industries and offered job opportunities if found fit.
  - In addition, 04 Apprenticeship Bharti Melas are also being organized to facilitate Apprenticeship Training placements in designated trade/s of their choice.
  - The annual placement fair has been able to offer job placements to about 65% of the ITI pass outs this year besides the Apprenticeship Bharti Melas have helped the Dept. to improve its utilization of Apprenticeship seats from about 500 to 1000 plus.

## **STRATEGY AND STEPS TAKEN** (contd.)

### **4. Catching them young:**

- In addition to the Vocational stream offered at 10+2 level, NSQF courses were introduced in four sectors from the academic year 2014-15 in 38 Government High Schools.
- The number of Government schools offering NSQF compliant courses increased to 76 from the academic year 2015-16 and another 11 sectors of NSQF added .
- The Vocational courses offered at Std. IX<sup>th</sup> and Std. X<sup>th</sup> are deemed to be NSQF Level-1 and Level-2 compliant. These courses are now being extended to Sr. Secondary level.
- Overwhelming response. Since the last two years, approximately 7000 children have opted for these NSQF compliant courses to acquire the relevant skills.
- Govt. aided schools have also requested for extension of the scheme to their students.
- This initiative not only provides the students an exposure to the skill courses thereby facilitating choosing skill as a career option, but also lays foundation for future migration of the vocational education system of the state to NSQF architecture.
- It is pertinent to add that even the recruitment rules of the Central/State Government administration and public sector undertakings are required to be revised to incorporate the NSQF qualifications.

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## **STRATEGY AND STEPS TAKEN** (contd.)

### ***Catching them young (Contd....)***

- Goa Board in partnership with NSE has introduced the module on Financial Literacy for students XI Commerce in 27 Higher Secondary Schools.
- The Module includes topics on the Banking Sector and Financial Markets.
- The advanced module shall be introduced for class XII in the next academic year.
- The successful completion of the module entails grant of certificate jointly by NSE and the Board and is expected to facilitate the employment of students.
- To further supplement the effort, the Board, together with NISM and the Department of Education, has planned workshops to train teachers, so that units on financial literacy are introduced in the subjects of mathematics and social science for the students of classes IX and X also from the next academic year.

## **STRATEGY AND STEPS TAKEN** (contd.)

### **5. Providing a multiple option path with Vertical linkages/mobility:**

- Most of the students are not very clear about their carrier choice at the stage of 8<sup>th</sup> or 10<sup>th</sup> standard. Parents also face the same dilemma
- Perception of skill/vocational courses otherwise not being so good, students hesitate to opt for full-time, formal/structured skilling courses at that stage.
- It was accordingly considered to provide a multiple option path to ITI students with Vertical linkages/mobility to various streams of Higher Education, as follows:
  - Students who after passing 8<sup>th</sup> standard have completed a recognized ITI course of one or two year duration and passed NCVT/SCVT examination and on their own volition appear and pass the examination conducted by the Goa Board of Secondary and Higher Secondary Education, in the subjects Language I & Language II, prescribed by the Goa Board, shall be considered to have passed SSC examination.
  - Similarly, those students who after passing Std X have completed a ITI course of 2 years duration from a recognized centre and passed NCVT/SCVT examination with prescribed syllabus and on their own volition have appeared and passed the examination conducted by the Goa Board in the subjects, i.e.: Language I / Communication Skills in English and Language II, prescribed by the Goa Board, shall be considered equivalent to have passed H.S.S.C. examination

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## **STRATEGY AND STEPS TAKEN** (contd.)

### **Providing a multiple option path with Vertical linkages/mobility (Contd....)**

- The Goa Board of Secondary and Higher Secondary Education has already approved the proposal.
- Requisite amendments in the Goa University regulations for considering the academic equivalence granted to ITI courses as entry qualifications for its graduate courses are already under process.
- Goa University has also issued ordinance for B.Voc degree courses to offer graduate course in Vocational Skills.
- There is also a provision for seamless upward mobility for passouts of 10+2 std. vocational education and ITI graduates to enter into engineering diploma courses,
  - The total reserved seats for vertical mobility of candidates passing from Vocational Education are 178, of which 72 seats are for candidates passing from Vocational Stream at 10+2 level and 106 seats are for ITI graduates.
  - These reservations provide direct entry to the candidates from Vocational Stream into the 2<sup>nd</sup> year of the 3 year Engineering Diploma courses.
  - Additionally, the diploma engineering graduates are offered similar opportunities of direct entry into the 2<sup>nd</sup> year of 4 year engineering degree courses. About 246 numbers of seats are reserved under this policy.

## STRATEGY AND STEPS TAKEN (contd.)

### 6. *Overarching the system with Institutes of excellence and providing for more specialized courses at PG level:*

- Institutions of Excellence and Higher Education have always been supported and encouraged in Goa particularly with a view to leverage their resources, both human and capital for quality improvements and for providing a 'pull factor' to drive for excellence.
- Birla Institute of Technology, Goa Institute of Management and Institute of Hotel Management are some of the notable examples.
- NIT Goa has been functioning in the State for the last 6 years. Its growth has been stunted due to lack of land and physical infrastructure. The matter was pursued vigorously and an area of 115 acres has already been acquired and allocated for NIT on 29<sup>th</sup> March, 2016.
- It has also been given additional 5 acres for starting a start-up center for the benefit of local industry. The resources of this Institution of eminence could be accessed in future by other technical Institutions for capacity building of their manpower and technical support.
- NIT Goa has also been designated Nodal Institute for implementation of Rashtriya Avishkaar Abhiyan and Unnat Bharat Abhiyan in the state.
- Land for permanent campus and Buildings for temporary campus of the IIT allotted to the State has been identified and offered to MHRD to make it functional/operational from 2016-2017.

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## STRATEGY AND STEPS TAKEN (contd.)

### *Overarching the system with Institutes of excellence and providing for more specialized courses at PG level (Contd...)*

- The Govt. is waiting for the site selection committee of the IIT to formally approve the site, as well as, the temporary premises, from which it can start its operation from 2016-2017.
- Similarly, efforts are also being made to establish an IIIT in the State.
- The National Institute of Water sports has been allotted land in Panaji. Presently, it imparts specific skill development short term courses in Water sports. The Institute is further contemplating to start degree level courses also.
- Continuous updation at the post-graduation and doctoral level of Professional Education:
  - ME in Industrial automation and RF engineering has already been started.
  - Further, ME in Structural Engineering is likely to commence from current academic year. There are also plans to start ME in IT this year.
  - PhD in Mechanical, Electrical and Electronics was started last year, along with PhD in 3 Pharmacy branches, namely Pharmacognosy, Pharmacy analysis and pharmacology.

**Thus every effort is being made by the State to establish an inter-linked vocational and professional education system with pathways for seamless movement from modular skill development curriculum to the highest level of professional education**

**THANK YOU**