Skills for inclusive and sustainable growth in developing Asia-Pacific

Panel Session 6
Skills Development for the disadvantaged & for inclusive growth: The Role of Policy, Partnerships & Programs; Problems & Prospects

ADB International Forum | 12th December 2012
Prof (Dr) Mukti Mishra, President, Centurion University and Chairman Gram Tarang
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Defining Skills

Problems & Prospects: Stakeholder analysis
- Learner, Governance, Industry
- Prospects

Critical Issues in Skilling

A unique PPP model in skill training
- Partnerships & Programs at Centurion University, Gram Tarang & NSDC

Case Studies
- BPL School dropouts as Sewing machine operators
- Service Technician with Ashok Leyland
- Skills for Retail & Hospitality with Café Coffee Day
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Redefining & Revisiting Skills

An inherent or learned capacity to execute a particular task in a certain environment with the optimal use of resources.

- An ability either inherited or acquired through training & practice
- To achieve a pre-defined objective e.g. translation of the skill to create economic/social/cultural value
- Contextualized to the environment; tribal setting vs automated plant
- Often linked with optimal resource utilization & minimum time outlay

Revisited definition of skilling:
“Minimal resources resulting in optimal outputs/outcome” achieved through imparting Experience Based Learning, Hands on Knowledge, Practice Oriented Education
Dimensions of Skill Development

- **Economic**
  - Co-creation of value through resource optimization for sustainable livelihood

- **Environmental**
  - Creating consciousness of ecological sustainability

- **Technical**
  - Continuous capacity improvement & output optimization

- **Political**
  - Informed and better governance for economically healthy and socially responsible community

- **Social**
  - Self-reliance, independence and self-sufficiency through livelihoods from employment or self-employment
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Problem Description

- High dropout rates across the HRD system result in **16.6 million** dropouts every year with **12.8 million youth** need initial vocational training every year; existing Private & Public Institutional Capacity is **3.1 million**

- Lack of integration of formal education, vocational education & job market results in unemployment generation on one hand and, ironically, a skills shortage in the industry.

(Source: deispune.org)
## Five year matriculation results

<table>
<thead>
<tr>
<th>Year</th>
<th>Appeared</th>
<th>Passed</th>
<th>Failed</th>
<th>3rd Div</th>
<th>Total Failed + 3rd Division</th>
<th>Failure Rate %</th>
<th>% failed + 3&lt;sup&gt;rd&lt;/sup&gt; Division</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>3,59,018</td>
<td>1,88,451</td>
<td>1,70,567</td>
<td>78,217</td>
<td>2,48,784</td>
<td>48%</td>
<td>69%</td>
</tr>
<tr>
<td>2008</td>
<td>3,94,320</td>
<td>2,23,268</td>
<td>1,71,052</td>
<td>98,167</td>
<td>2,69,219</td>
<td>43%</td>
<td>68%</td>
</tr>
<tr>
<td>2009</td>
<td>3,77,716</td>
<td>1,93,012</td>
<td>1,84,704</td>
<td>91,883</td>
<td>2,76,587</td>
<td>49%</td>
<td>73%</td>
</tr>
<tr>
<td>2010</td>
<td>3,97,234</td>
<td>2,36,619</td>
<td>1,60,615</td>
<td>1,15,702</td>
<td>2,76,317</td>
<td>40%</td>
<td>70%</td>
</tr>
<tr>
<td>2011</td>
<td>4,23,758</td>
<td>2,91,588</td>
<td>1,32,170</td>
<td>1,47,287</td>
<td>2,79,457</td>
<td>31%</td>
<td>66%</td>
</tr>
</tbody>
</table>

- Matriculation level results reveal improvements in pass rate over the past 5 years
- However, 66% of youth are clearly not eligible for higher education and need an alternative education, preferably vocational skills
### Reasons for high dropout rates

<table>
<thead>
<tr>
<th>#</th>
<th>Reason for dropouts</th>
<th>Rural</th>
<th>Urban</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Child not interested in studies</td>
<td>37.20%</td>
<td>37.40%</td>
</tr>
<tr>
<td>2</td>
<td>Unable to cope</td>
<td>16.40%</td>
<td>13.70%</td>
</tr>
<tr>
<td>3</td>
<td>Parents not interested in studies</td>
<td>12.50%</td>
<td>8.80%</td>
</tr>
<tr>
<td>4</td>
<td>Financial constraints</td>
<td>11.20%</td>
<td>15.80%</td>
</tr>
<tr>
<td>5</td>
<td>Other reasons</td>
<td>10.40%</td>
<td>10.50%</td>
</tr>
<tr>
<td>6</td>
<td>Participation in other economic activities</td>
<td>6.10%</td>
<td>5.30%</td>
</tr>
<tr>
<td>7</td>
<td>Attend to domestic duties</td>
<td>3.70%</td>
<td>3.90%</td>
</tr>
<tr>
<td>8</td>
<td>To work for wage/salary</td>
<td>2.50%</td>
<td>4.60%</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>100 %</strong></td>
<td><strong>100 %</strong></td>
</tr>
</tbody>
</table>

Source: Economic & Political Weekly

- Indicates fundamental issues if 40% of our youth are either unable to cope with the education system or are not interested
- Structural & design problems in formal education & vocational education sector
India has under **10,000 VET schools**, China has **500,000 VETs**
## Industry Perspective

### Manpower Shortage
- Shortage of manpower across industry
  - Industrial trades: ITIs & Polytechnics not producing enough technicians
  - Services sector: Limited trades in formal vocational education system

### Quality of workforce
- Skill gaps in graduates of existing ITIs/Polytechnics/colleges:
  - Lack of adequate infrastructure, latest technologies
  - Poor quality of trainers, no industry exposure; Archaic curriculum, not revised since 60’s

### Attrition
- Poor working conditions & low wages not attracting youth; Obsession with externalizing the cost
- Lack of Empathy: Unmet aspirations of youth for career progression and higher education

### Regulatory Framework
- Existing Labour law makes it difficult to manage workforce, therefore
- Apprentice act: a complete failure
- Subsidy schemes creating a shadow minimum wage & comfort level in the village
## Limited opportunities for career progression

### Blue Collar

<table>
<thead>
<tr>
<th>School Dropouts</th>
<th>ITI</th>
<th>Diploma</th>
<th>Advanced Diploma</th>
<th>Professional Degree</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Job Role</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fitter/Helper</td>
<td>ITI Fitter / Machine Operator</td>
<td>Machine Operator / Production Supervisor</td>
<td>CNC Programmer / Design CAD /CAM</td>
<td>Operations Manager</td>
</tr>
<tr>
<td><strong>Employment Opportunity</strong></td>
<td>SME</td>
<td>Manufacturing Sector, PSUs</td>
<td>Manufacturing Sector, PSUs</td>
<td>Specialized Industries: Auto etc</td>
</tr>
<tr>
<td><strong>Starting Monthly Income (INR)</strong></td>
<td>2,000 – 3,000</td>
<td>4,000 – 5,000</td>
<td>6,000 – 8,000</td>
<td>8,000 - 10,000</td>
</tr>
<tr>
<td><strong>Monthly Income after 5 Years (INR)</strong></td>
<td>5,000 – 6,000</td>
<td>8,000 – 12,000</td>
<td>12,000 – 14,000</td>
<td>30,000+</td>
</tr>
</tbody>
</table>

### Grey Collar

### White Collar

**Career Ceiling for School Dropouts**

- Nearly impossible for a dropout to have a career progression into a white collar job, however skilled he may be;
- Upskilling & career pathing would mean higher salary payouts which is against the basic industrial mindset of treating labour as a factor of input and not as an asset.
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Global skills shortage

By 2020, India will have a surplus of 47 million people in the working age group, whereas the world as a whole will have a shortage of 56 million.

Total Surplus or deficit of skilled human resources in million
Source: US Census Bureau; BCG analysis
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## Critical Issues in Skilling

### Think & Job Readiness
- Currently producing degree holders (think ready) without jobs (not job ready),
- Need to work towards jobs with or without degrees but the aim is equity and equality – job appropriate to degree and competency

### Asymmetric Information
- Linkage of skilled youth with jobs
- Portals linking government + training partner + industrial partner + Industry Associations/bodies could reduce asymmetry

### Multi – Skilling
- Redefining division of labour and competitive advantage for the individual
- Employability through combining Driving with Mechanic, Fitter with Electrician, Welding with Powder Coating, Data Entry with Hardware with Networking

### Educational Nimbleness
- Update program curricula with industry inputs & faculty and Trainers need regular exposure to the industries through Industry association/bodies like CII, FICCI, SIAM, PHD Chamber,

### Scalability & Sustainability
- Industry Academia Partnerships; Trainee loans to be repaid from salary
- Blended revenue model: $1/3 \times 1/3 \times 1/3$

### Vertical Mobility
- Continuous education & learn while you earn schemes with study centres @ workplace
- NVEQF implementation

### Entrepreneurship through skilling
- Skills training & poverty alleviation via Nano – Mini- Micro and Small Enterprises
- Technical, Financial: raising capital & working capital management, Sales & marketing
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A unique PPP model in skilling

Centurion University, a one of its kind State University, provides knowledge & infrastructure support and is the accreditation body for all skill training programs. Provides career pathing opportunities to help up-skill youth and give them “learn while you earn” options through continuous education.

An social entrepreneurial outreach of Centurion University to act as Implementation Arm for its School of Vocational Training, GTETS will offer University accredited Certificate, Diploma programs across various sectors for enhanced employability of youth in partnership with NSDC.

NSDC, true to its mandate of promoting skill development by catalyzing creation of organizations involved in vocational training, provides funding as well as support through quality assurance, information systems, industry linkages and train the trainer academies.

National Institute of Open Schooling

MHRD Directive: It is envisaged that 15% of the secondary enrolment would be through open distance learning

NIOS provides the missing link for mainstreaming school dropouts by allowing them a flexible means of completing their secondary education.

Shaping Lives ... Empowering Communities Through Skill Training
### Key Government Partnerships & Projects

<table>
<thead>
<tr>
<th>Partnership</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>NSDC</strong></td>
<td>• Partner for Skill Development &amp; Vocational Training across all trades of Manufacturing &amp; Service Sector <strong>45,000 Trainees by 2020</strong></td>
</tr>
<tr>
<td><strong>Ministry of Rural Development, Govt. of India</strong></td>
<td>• Employment linked Skill Training for BPL youth under SGSY in Fitter, Machine Operator, Welder, Sewing Machine Operator, Data Entry Operator, Retail Salesperson <strong>10,000 Beneficiaries by 2012</strong></td>
</tr>
</tbody>
</table>
| **Government of Odisha** | • Partner of Panchayati Raj Dept for implementing SGSY, NRLM & TRIPTI training programs  
• Partner of OSEMS in Skill building, Partner of OSFDC for SC ST youth & SUDA for Urban Poor under SJSRY |
| **CTTC & Government of Odisha** | • Sanctioned a 4 Crore grant to setup Mini Tool Room in Paralakhemundi where we will train local tribal youth on high end machines like CNC, PLC etc. |
| **Ministry of Labour, DGE&T** | • 5 NCVT Affiliated ITCs | Certified Vocational Training Provider | Fitter, Welder, Electrician, Welder, Plumber, Diesel Mechanic, Computer Operator, Computer Hardware **Capacity 1,000 Per annum** |
| **Government of Andhra Pradesh** | • Partner of Employment Generation & Marketing Mission, Dept of Rural Development for providing training & employment  
• 2,400 beneficiaries 2011 |
| **CRPF** | • Training partner of CRPF to provide skill training & entrepreneurship development programs for tribal youth across Orissa |
## Key Industry Partnerships

<table>
<thead>
<tr>
<th>Company</th>
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</tr>
</thead>
</table>
| Ashok Leyland                    | • Training and incubation centre exclusively for service engineers for Ashok Leyland dealerships  
• **Capacity of 1200 trainees per annum** |
| Café Coffee Day                  | • Training partner for Hospitality Associates, Pilot batch of **100 trainees** will complete a 12 month certificate course in Hospitality Management while they work at Bangalore next year |
| TVS Sundaram Fastners            | • Training partner for CNC Operator trainees in a work integrated learning program, 200 trainees will complete a 15 month certificate course in CNC Operations while they work at Chennai Plant |
| TATA ASAL                        | • Tata subsidiary requirement of sheet metal workers, welders  
• 500+ trainees to date |
| Vedanta, JSPL                    | • Training partner for project displaced families: 40 Beneficiaries trained & employed at Vedanta; In principle go ahead to train 400+ displaced youth for JSPL |
| Apparel Export Units             | • Cotton Blossom, K Mohan, Texport among the many export houses recruiting regularly  
• **2,400 trainees to date** |
| Lanco                            | • Partner for turnkey execution of new Lanco ITI at Mahakalpada, Orissa including NCVT affiliation, setup of machine equipment & training delivery |
# Innovations driving Scalability & Sustainability

## Trainee Mobilisation
- **Formal Channel:** PD > BDO > Sarpanch with job melas & counselling camps conducted at Panchayat level,
- **Informal Channel:** Agents & NGO partners engaged for mobilisation on a commission basis

## Revenue Model
- 1/3 x 1/3 x 1/3: 1/3\(^{rd}\) of training cost to be borne by student, 1/3\(^{rd}\) by industry partner; balance to be funded through govt. scheme;
- APL candidates to pay for themselves, microfinance assistance available, amount to be recovered after they start work

## Post Placement Management
- Gram Tarang will assist migration of workers from village to the workplace
- Temping model will be explored, with Gram Tarang obtaining contractor license for payroll, mess and hostel management of the trainees at the work location

## Career Pathing: Continuous Education
- Trainees will be automatically enrolled into a joint certification program to be launched by Industry Partner & Centurion University
- After 2 years of work experience, trainees to be tested, certified & individual career paths will be mapped to become supervisors, technical experts, trainers
Benefits of a Production cum Training Model

- Learn while you earn
- Experiential Based, Hands on Training
- Live work environment for Practicing the theory
Production at a Glance

**Auto Components**
Mass production of auto components like bush, pin, bearings etc.

**Machining, Tools & Dies for SME**
Machine Components, Tools, Dies, Fixtures for SME sector

**Fabrication**
Fabrication of sheds, grills, railings, shutters, doors etc.

**Powder Coating**
School, College, Office & Home Furniture like beds, desks, chairs, tables etc.

**Electrical Equipment**
Fans, Stabilizers, Inverters, Motor Winding

**Apparel Manufacturing**
School & College Uniforms: T Shirts, Shirts, Trousers etc.
Production of High Precision Parts for John Deere (Subcontracted by Uniparts)
FABRICATION AND POWDER COATING PRODUCT PORTFOLIO

- Beds & bunk beds for homes, hostels & dormitories
- School and college desks & benches (1 seater to 4 seater)
- Office furniture: tables, book racks and cabinets
- Cupboards, panel boards, storage cabinets
- Gates, grills and railings
Sample Output
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Sewing Machine Operator Program

**Objective:** Provide thorough technical training, build cognitive & practical abilities & develop social & behavioral traits of candidates to make them employment ready for the apparel industry.

**Philosophy:**
- Region & candidate centric customized 1 month residential training program with NSDC/MoRD certification
- Leverage existing field networks for scalability, sourcing competence and cost optimization
- Industry partnership to **customize programs** for specific requirements

**Modular approach:**
- **Level A:** Technical Skills training for 6 hours per day
  - 6 Hrs per day in workshop with at least 1 Hr for learning trade theory, tests, assessments
- **Level B:** Soft Skills consist of communication, time management, self management & team work
  - 2 Hrs per day: Communication, Presentation, Team work – through simulations, extra curricular activities
- **Level C:** On the job training through on-site mentor who reinforces learning from work experience through classroom counseling sessions
  - On the Job Training or Reinforcement of work experience through counseling sessions
- **Other Modules** will also be included on AIDS awareness, Hygiene, financial planning for self and family; stress management through Yoga & meditation
Sewing Machine Operator Training
Post Placement Services
Fitters @ TATA ASAL, Pune
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Solution: Skill Development Centre @ Gram Tarang

RECRUITMENT, PLACEMENT, PROVISION OF EQUIPMENT, CURRICULUM & TRAINING OF TRAINERS
Ashok Leyland recruits ITI MMV graduates from ITIs across the Hindi speaking belt of the country and sends them to the Skill Development Centre (SDC) for a 4 month training. Ashok Leyland then places the trainees at various dealerships across the country. Also provides curriculum & ToT program.

INFRASTRUCTURE & CERTIFICATION
Centurion University provides knowledge & infrastructure support and will also be the accreditation body for all skill training programs. Centurion Vocational Education Qualifications Framework will provide career pathing opportunities to help up-skill youth and award Diplomas after 3 years of employment.

PROGRAM IMPLEMENTATION & MANAGEMENT
Responsible for the execution of the training, hiring & training of trainers, day to day management of the centre in terms of trainee registration, training delivery, managing the workshop, classrooms, dormitories for accommodation & mess facility. Will eventually take over the end to end implementation of the program from Ashok Leyland after a hand holding.
Program Structure

Infrastructure: GTETS will provide the hard infrastructure Ashok Leyland will provide all the soft infrastructure like Trucks, Engines, Chassis etc.

Course Content: Predominantly developed by Ashok Leyland and includes multimedia content from OEMs of different parts (e.g. brake, steering etc)

Faculty: Trainers are typically diploma holders with experience and many are ex servicemen hired from the Armed Engineering Services and have been trained at the Ashok Leyland Training facility in Chennai.

Training Duration: 24 Months of training, 4 months foundation training at Centurion University and 20 months diploma program at dealership

Training Fee: Foundation Program to be paid by AL, Diploma to be paid for by candidate
Some Images from the Ashok Leyland program
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Why

**Hiring & Recruitment**
- Address CCD’s need to hire & train workforce to keep pace with the growth of retail outlets across the country

**Skill Training**
- New recruits need training on customer service, production & merchandising
- Systems approach of 6 levels of CCD certifications to help track & manage certification levels resulting in a consolidated certificate course in retail management

**Manage Attrition**
- Continuous education model to be used as a retention tool with trainees working towards a diploma in retail management and eventually a bachelors degree in retail management
Skill Training Centre @ Centurion University

PROVIDES EQUIPMENT, CURRICULUM, TRAINING OF TRAINERS, OJT & PLACEMENT
CCD recruits 12th Pass students & graduates across the country and puts them through 6 levels of internal certifications linked to their career growth Plan. CCD is looking at partnering with CUTM & Gram Tarang to setup a VTC at Jatni and provide for equipment, curriculum, ToT and provide OJT & Placement opportunity.

INFRASTRUCTURE & CERTIFICATION
Centurion University will partner with CCD to replicate the VTC at Chikmagalur. Will provide knowledge & infrastructure support and will also be the accreditation body for all skill training programs. A unique model in skill training will provide career pathing opportunities to help up-skill youth and award Diplomas after 2 years of employment.

PROGRAM IMPLEMENTATION & MANAGEMENT
Gram Tarang, a social entrepreneurial outreach CUTM is responsible for the execution of the training, hiring & training of trainers, day to day management of the centre: trainee registration, training delivery, managing the lab, classrooms, dormitories for accommodation & mess facility. Will eventually take over the end to end
Program Overview

Foundation Program

• 12th Pass Graduates mobilized from
  - Phase I: Orissa, AP
  - Phase II: Bihar, Jharkand, West Bengal, North East
• Foundation Course as per curriculum followed @ SGVG Vocational Training College, Chikmaglur
  - Production
  - Service
  - Barista
• OJT & Placement Opportunity with CCD

Certificate Course in Retail Management

• 6 Levels of Certification in CCD specific Retail Education linked with career growth path
  - L1: English Speaking Basics
  - L2: Hotshot
  - L3: Customer Service
  - L4: Brew Master
  - L5: Food Basics
  - L6: SOP

Diploma in Retail Management

• Continuous education for trainees through a combination of:
  - Distance learning
  - e-learning/self learning
  - Assignments
  - On the job training & job appraisal
  - Assessments & Certification

BBA in Retail Management

3 Months

12 Months

24 Months

36 Months
WALK-IN to get skilled for your Dream JOB

Training & Internship Program

Cafe Coffee Day

a lot can happen over coffee