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## Indian Education Congress

‘Opportunities in Skills Space’

28<sup>th</sup> April, 2012

New Delhi

Dilip Chenoy  
CEO&MD



N · S · D · C  
National  
Skill Development  
Corporation

# Agenda

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- **The opportunity landscape in the skills space**
- **NSDC initiatives – Creation and Funding**
- **NSDC: Promoting Social Entrepreneurs**
- **Sector Skill Council, Skill Gap Studies, Student Loans and Other International Interventions by NSDC in the Ecosystem**

# Agenda

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## The opportunity landscape in the skills space

# India - the land of extremes



# India: Land of World's Largest Young Population



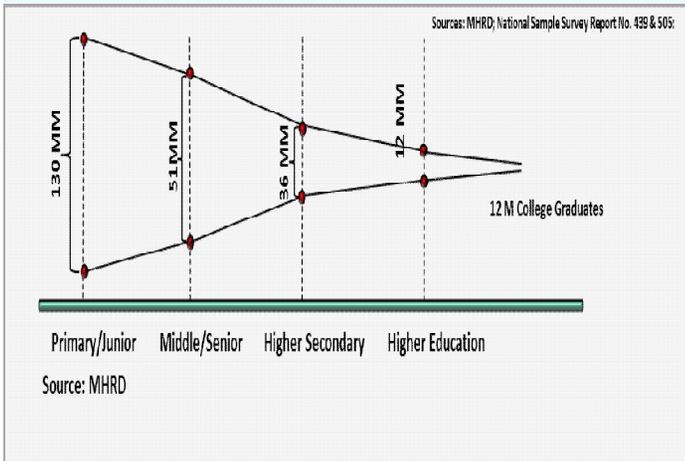
47.8% of India's population is below 29 years increasing to 49.9% in 2021

- Where the Population of rest of the world is relatively old, India has a great opportunity to harvest its **'Demographic Dividend'**
- India should ensure that working population are skilled to meet requirements of the industries.

# However, Plagued by Inadequately Skilled Manpower

1

## High drop outs in the education space



2

## Employability of the skilled a challenge

Only one in four engineering graduates in India is employable, based on their technical skills, English fluency, teamwork and presentation skills and of the 4 lakh odd engineering graduates, who graduate each year, only about

Skilling should Become a major Policy Focus going forward

3

## Very low enrolments for VET

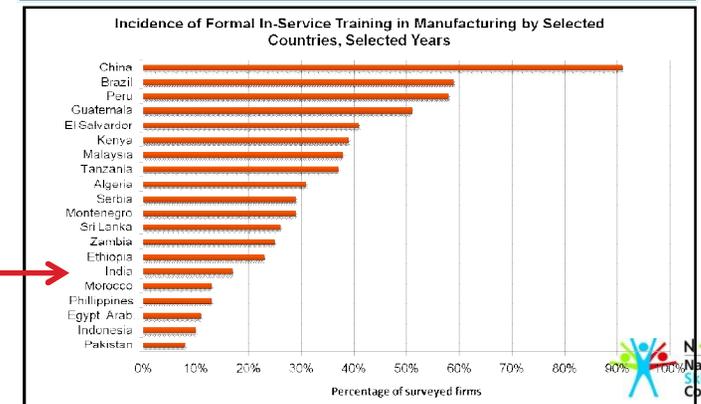
### Vocational education: How India compares

	Pop (million)	GDP (\$ per capita PPP)	Literacy (% over age 15)	Higher education (% of age group)	VET net enrolment (million)
USA	300	41,890	99	72.6	11.3
China	1,300	6,760	91	7.5	90
Germany	82	29,460	99	46.3	2.85
Japan	127	31,270	99	47.7	NA
Brazil	186	8,400	89	16.5	NA
Russia	144	10,845	99	64.1	2.28
<b>India</b>	<b>1,100</b>	<b>3,450</b>	<b>61</b>	<b>10.5</b>	<b>3.5</b>

Source: The Human Development Report 2007-08; Unesco; iwatch

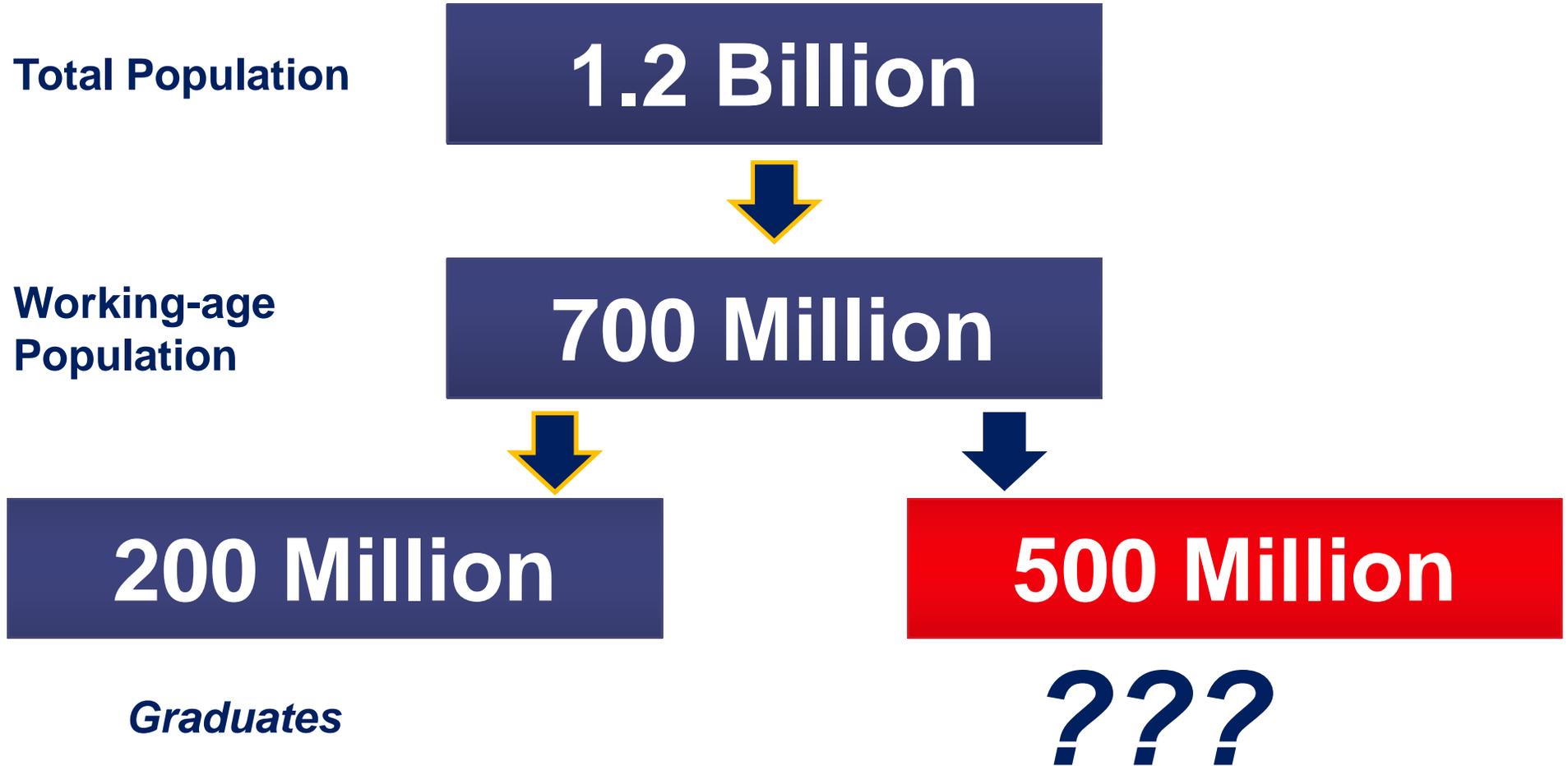
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## In service training levels very low in India



# The Big Question in 2022

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# Skills Shortages next 10 yrs estimated at 347 million

Industry	Incremental requirement (in million)
Building and Construction Industry	33.0
<b>Infrastructure Sector</b>	<b>103.02</b>
Real Estate Services	14.0
<b>Gems and Jewellery</b>	<b>4.6</b>
Leather and Leather Goods	4.6
<b>Organised Retail</b>	<b>17.3</b>
Textiles and Clothing	26.2
<b>Electronics and IT Hardware</b>	<b>3.3</b>
Auto and Auto Components	35.0
<b>IT and ITES</b>	<b>5.3</b>
Banking, Financial Services, and Insurance	4.2
<b>Furniture and Furnishings</b>	<b>3.4</b>

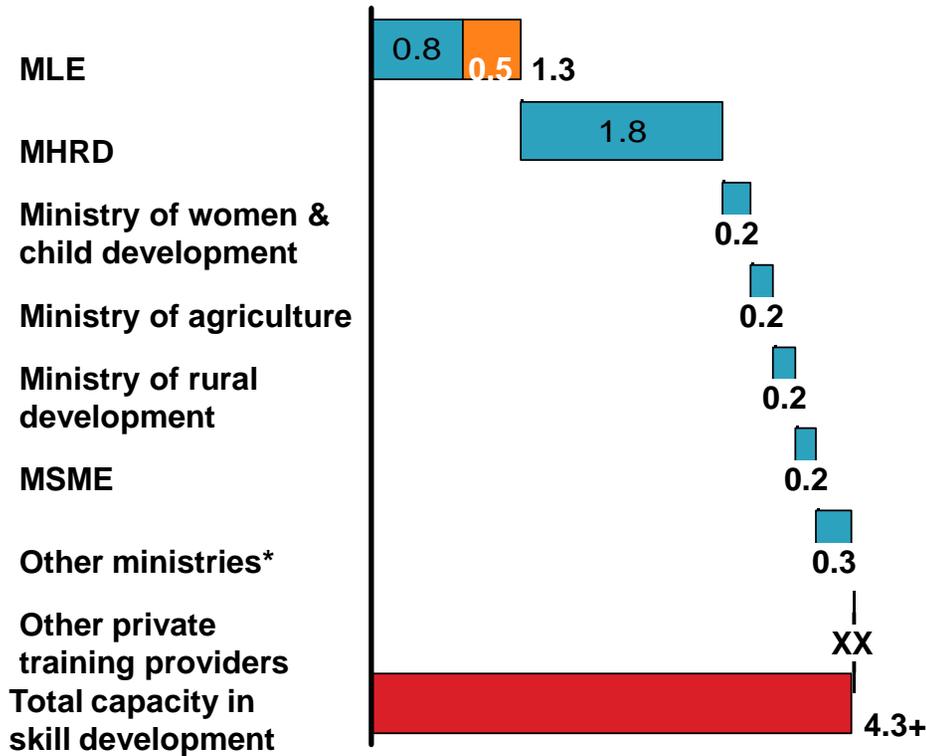
Industry	Incremental requirement (in million)
Tourism and Hospitality services	3.6
Construction Material and Building Hardware	1.4
Chemicals and Pharmaceuticals	1.9
Food Processing	9.3
Healthcare	12.7
Transportation and Logistics	17.7
Media and Entertainment	3.0
Education and Skill Development Services	5.8
Select informal employment sectors (domestic help, beauticians, security guards)	37.6
<b>Incremental</b>	<b>347</b>

Source: IMaCS analysis

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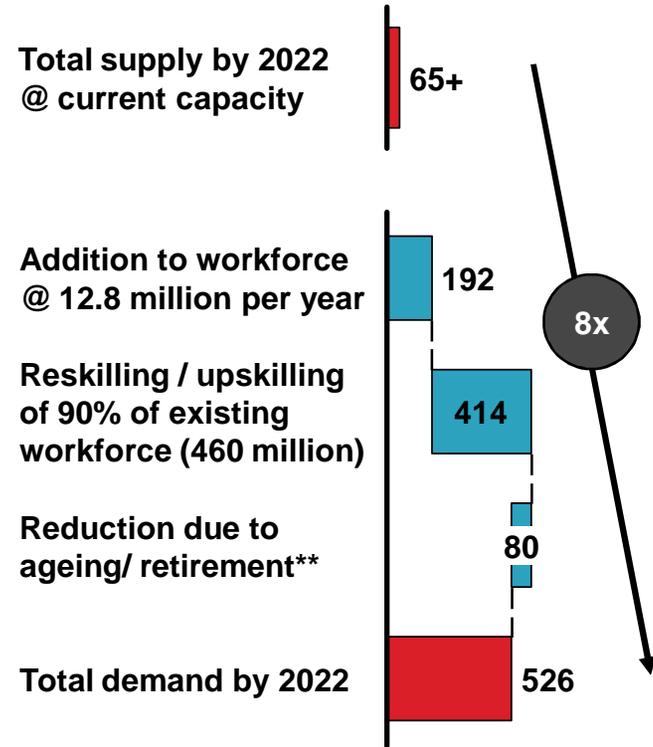
# Current Landscape needs drastic capacity addition to meet future demand

Current capacity in skill development under various schemes, 2008-09



**Business opportunity of ~ 1 20 Bn USD**

Eight-fold increase in capacity is required to meet aspiration



Privately owned ITCs

\*Includes ministry of housing and urban poverty alleviation, textile, health and family welfare, food processing industries, and others

\*\*Assuming that the existing workforce in the age group of 45-59 will not be re-skilled

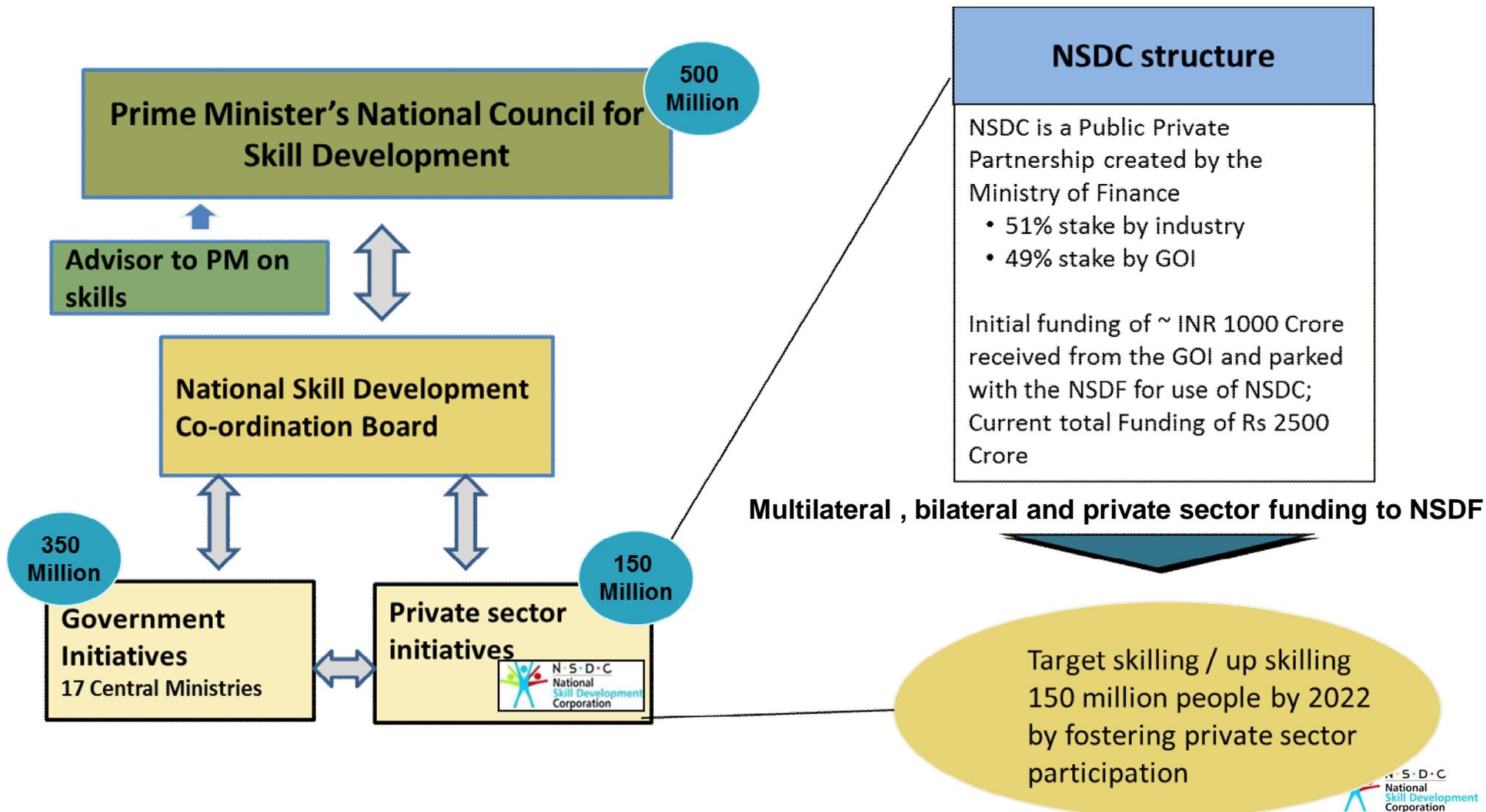
\*\*\*Assuming training fee of Rs 2000 per student for the total demand estimated

# Agenda

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## NSDC initiatives – Creation and Funding

# Government's Co-ordinated Action in Skills Space



# The Right Steps Taken – We ‘Create’



- **Principal Mission to Connect all the Stakeholders : Industry, training providers & Students.**
- **The success lies in the advocacy efforts. NSDC team actively advocates skill development participating in more than 15 seminars/conferences in a month i.e 200 conferences a Year!**
- **The team actively seeks out sector specific proposals meeting more than 70 Corporates in a month.**
- **NSDC team helps to build up proposals, keeping the main focus on ‘Sustainability & Scalability’**

**Outcome : 89971 students trained under industry certified courses , 71513 students placed creating impact on 2,86, 052 people\***

**From 3 proposals approved in 2009 , we have approved 57 proposals...Young Entrepreneurs are approaching us with their Innovative Business Models.**

\*(considering an average person sustains a family of 4 )

# The Right Steps Taken – We ‘Fund’



- Every business takes 3-4 years to become profit making.
- Thus, NSDC provides ‘Patient Funding’ with a modest interest rate of 6% and 3 year moratorium.
- Reduces risk by providing ‘Patient Capital’
- Improve returns by providing viability gap funding.
- A structure of 75:25 funding model ensures commitment by Promoters
- Rs 1500 crore funding from NSDC would result these organizations in leveraging more than Rs 80,000 crore over next 10 years

**Milestone Based Funding : NSDC Disbursement in tranche form, funding only on achieving the targets, ensuring proper utilization of capital.**

**Funding Big Scale Projects , Medium Scale and Start ups, thus maintaining a Diverse Portfolio**

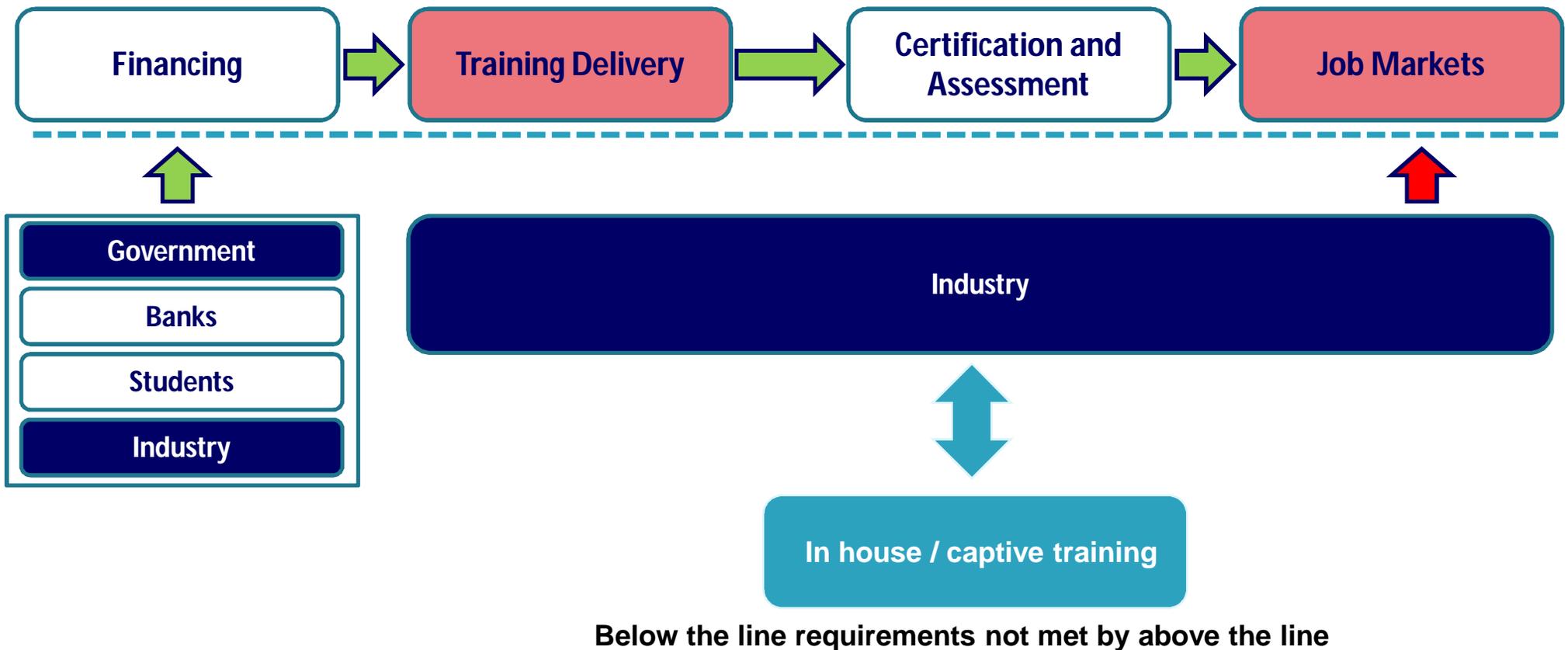
# The Right Steps Taken - We 'Enable'



- Approved 10 Sector Skill Councils, 11 are in pipeline
- Developing National Occupational Standards for 20 high growth sectors, study for dimensioning of Trainers
- Marketing Campaign to advocate Skill Development
- Enabling Vocational Loans for Students
- Developing Labour Market Information System
- Quality Assurance through ensuring alignment of training partners course curriculum with the Sector Skill Councils

**TOWARDS CREATIVE CAPITALISM** : An approach where Governments, Businesses, and Non profits work together to stretch the reach of market forces so that more people can make a profit by benefit, or gain recognition, doing work that eases the world's inequities.

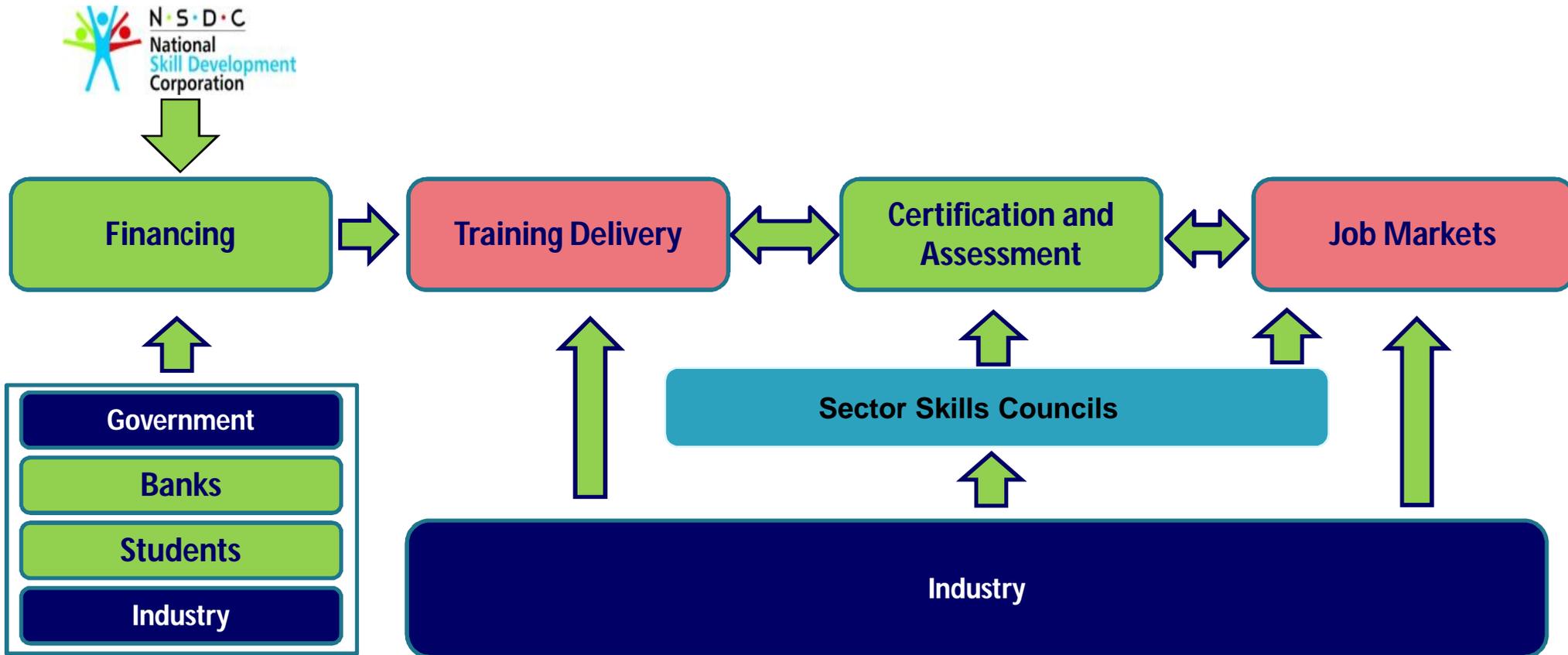
# Current ecosystem: quantity, quality and qualification mismatch



Adapted from a presentation made by Nimesh Mehta at ISB

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# Ecosystem to align the 3Q's with employment



Adapted From a presentation made by Nimesh Mehta at ISB

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# 1. Exciting Entrepreneurs: Highlighting, the demand supply gap

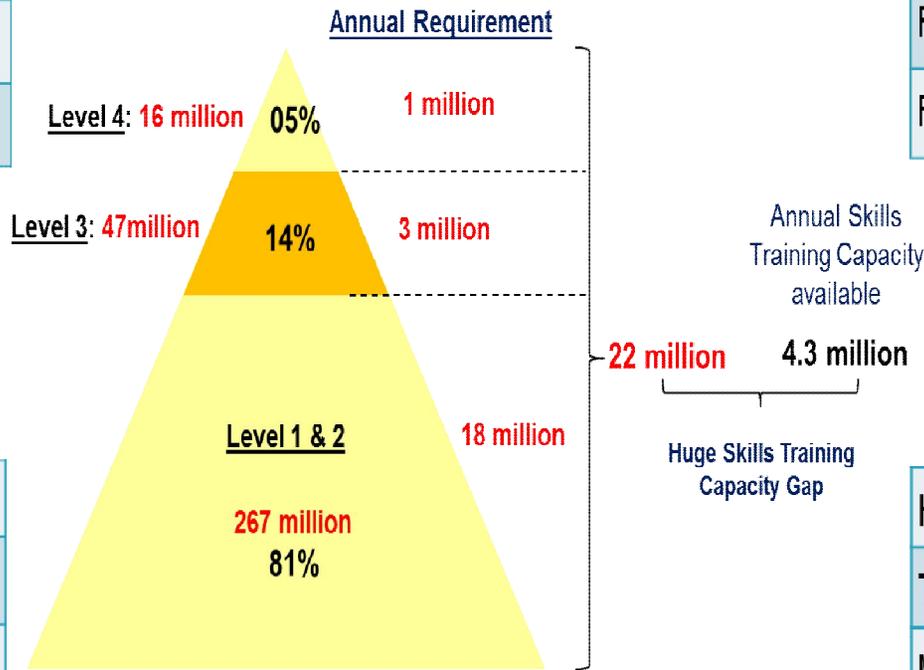
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Education and Skill Development Services	5.8
Select informal employment sectors	37.6

**Estimated Skill Gap in each sector in India (in millions)**



**Total Requirement: 347 million new skilled persons (2008-2022)**

Need a heading for t

## 2. Exciting Entrepreneurs: To Make It Sustainable and Invite The Best to Participate

- Response to the market needs
- Develop a strategy
- Create a knowledge base
- Excite entrepreneurs by bringing out the opportunity

- Go beyond the training, address issues of the ecosystem
- Develop partnerships, move beyond a pure funding relationship
- Focus on outcomes

- Share the risk
- Provide patient capital
- Develop non intrusive robust monitoring programmes
- Trust and transparency in the system
- Eco system to support the organization



# Status of Proposals

As on March 30<sup>th</sup> , 2012

**Number of proposals approved**

**Training organisations**

**Sector skills councils**

**57**

**46**

**11**

**Agreement signed**

**Training organisations**

**Sector skills councils**

**37**

**34**

**3**

**Disbursed (no of proposals)**

**Training organisations**

**Sector skills councils**

**33**

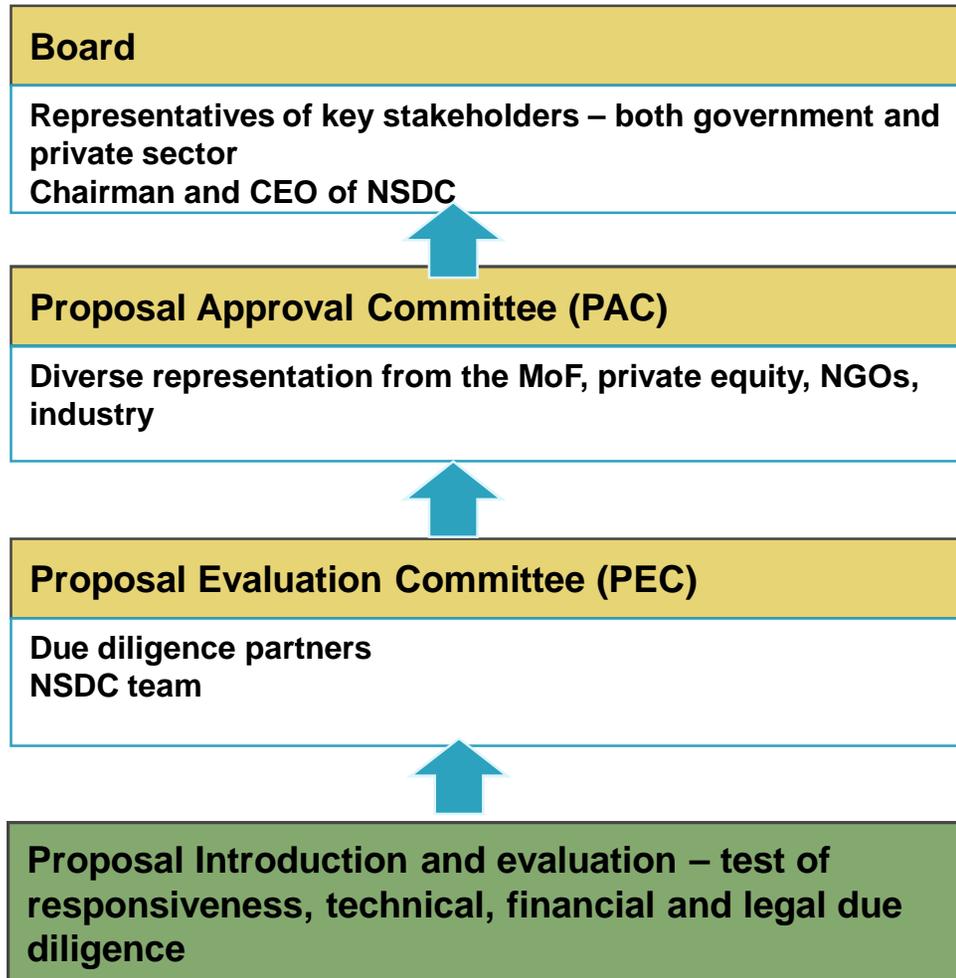
**29**

**4**

**Total commitment till date**

**Rs 1356.42 Crore**

# Robust process designed to ensure rapid turnaround in the process



## Roles and responsibilities

- Final approval of proposals recommended by the PAC
- Recommend the proposal for approval by the Board or,  
• Consider proposal not worthy of further consideration
- Form a view on the proposal based on discussions after financial, technical and legal due diligence for discussion at the PAC
- Detailed evaluation of worthy proposals  
• Financial, technical and legal due diligence on the proposals

Turnaround of  
< =3 months  
targeted for  
proposals

# Our 46 Partners till Date : Running Company Owned Centres and Franchise Model

Training providers

In the education business

In unrelated businesses



Start ups

Large established corporates

# Industry is at a nascent stage with very few players of scale

## Leaders (e.g. NIIT)

- Top players which control ~ 50-60 % of market
- Wide geographic reach, healthy range of courses offered, typically across industries
- Strong connect with industry for placements

## Aspirants (e.g. India Can)

- Companies with wanting to scale existing operations
- Current focus on particular sectors

## Boutique firms (e.g. Redwood Edge)

- Largely individual dependent
- Looking for opportunities to expand



**Huge demand for a brand of credibility and repute in this space**

# Agenda

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## NSDC: Promoting Social Entrepreneurs

# Skill development attracting entrepreneurs



- **Co Founded by two IIM-A graduates, Ms Surga ( Ex Goldman Sachs and E&Y employee) & Mr Sreeraman (ex Microsoft employee & co founder of BrewHaHa entertainment.**
- **Training in Retail & BFSI sector.**
- **Plans to scale up training and cover 10 states targeting 10<sup>th</sup> & 12<sup>th</sup> Pass outs.**



- **Founder members are from IIT Madras and ex employees of IBM & Nvidia. They share a common belief of skill development, employability and social inclusion.**
- **The company uses technology based system in place for training and assessment. Currently training in IT, ITES and BFSI.**
- **Offers low cost technology solutions such as iPEARL & 10X Tracks learning relevant to Indian situation, bridging geographical barriers**

# NSDC Partner : B-ABLE innovations to reach the last mile

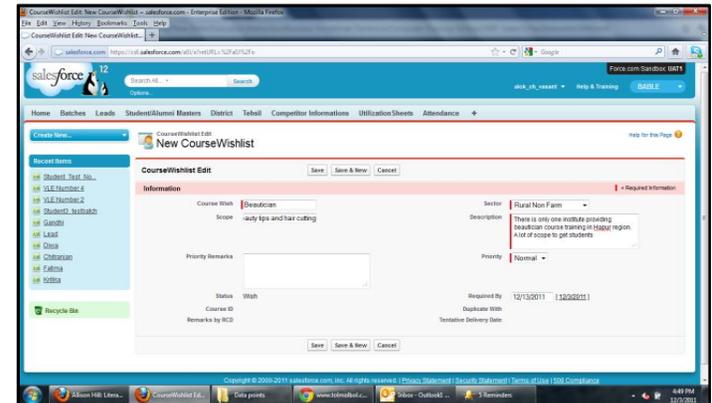


**Mobile Vans for training**

**Delivering training programs through Web-ex**



**Common Service Centers as training centres providing basic digital literacy at the doorstep of the rural population**



**Enabling technology : ERP & CRM Solutions to manage processes**



# NSDC Partner : Gras Academy Connecting with the Industry



**Mock Job Interviews**



**Corporate Training**

**Successful Job Drive for placements : Few Participating companies**



**Guest Lectures by Industry Experts**

# IRRs of 25% possible through developing innovative models

## Innovative models need to be developed

...

- **Increased revenue**
  - Employer driven standards and strong accreditation system differentiating high quality play, ensuring employers participation to pay placement fees
  - Channelization of fragmented flow of funds from the government, multi-lateral agencies, and industry associations
- **Reduced costs**
  - Shorter duration courses customized to the industry requirements, lowering the overall costs
  - Better operations through hub and spoke model and multiple shifts to reduce overall costs
  - Ready-to-use curriculum and consolidated train-the-trainer programs, bringing down training overheads
  - Support from state government, leveraging public infrastructure to lower capex investment

## ... to make the economics attractive for private play

	<u>Current large-scale model</u>	<u>Large scale economically attractive model</u>
<b>Training capacity, #</b>	50,000/ yr	500,000/ yr
<b>Cost, Rs./student</b>	~8,000	~4,000
<b>IRR, %</b>	~10%	~25%
<b>Breakeven period</b>	~8 years	~3 years
<b>Capex</b>	~Rs.250 cr	~Rs.1,000 cr
<b>NPV</b>	~Rs.-30 cr	~Rs.450 cr

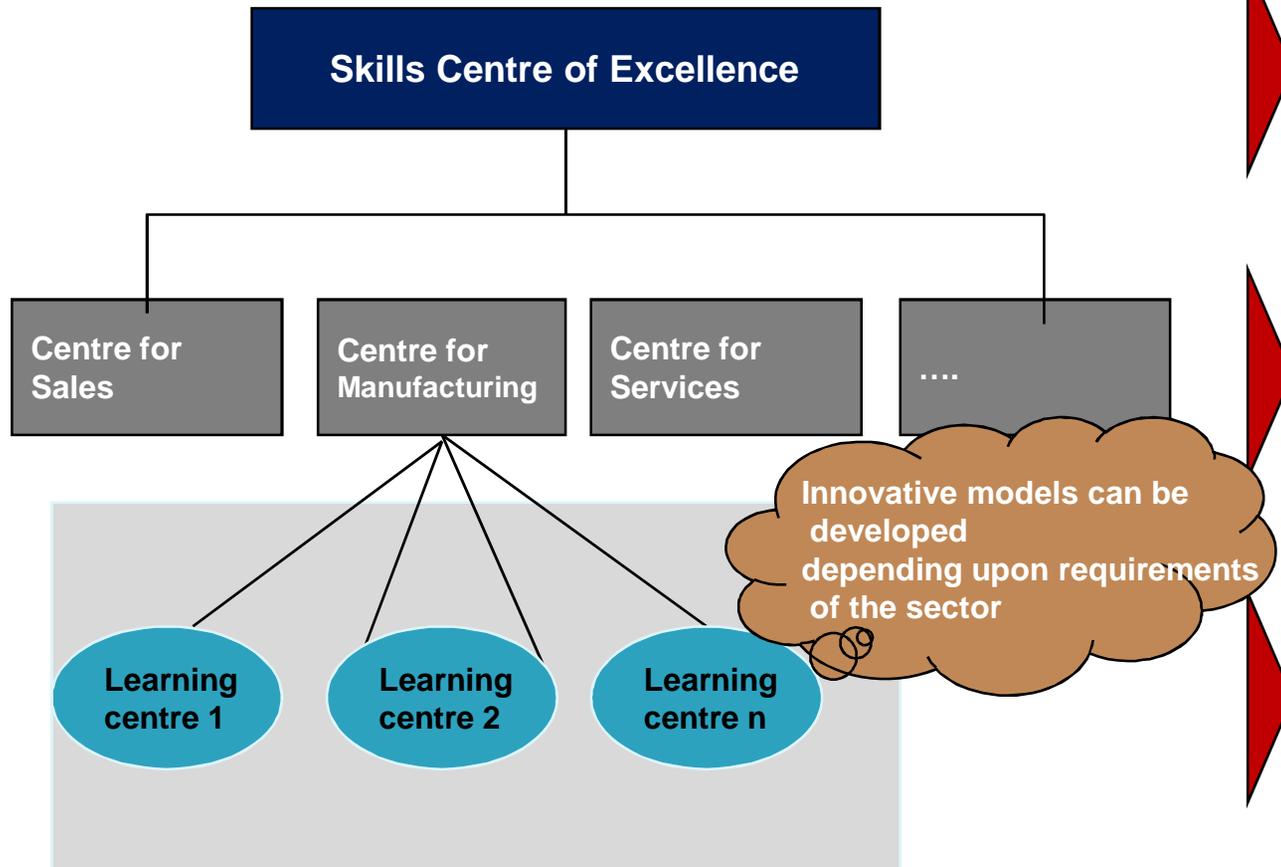
# Summary : The Indian context makes a foray into this space very attractive

	Current	Implications for players
Industry Potential	Rs 1 Lakh Cr	<ul style="list-style-type: none"> <li>+ Rapid growth</li> <li>+ Opportunities across all spaces</li> </ul>
Current capacity	4.3Mn; Need to increase 8x	
Structure of industry	Very unorganised Few large players	<ul style="list-style-type: none"> <li>+ Need for a brand of credibility</li> <li>+ First mover advantage</li> </ul>
Examples of business models	Limited in India	<ul style="list-style-type: none"> <li>- Limited examples of successful business models in India</li> <li>= Globally models of scale have been seen</li> </ul>
Regulations	Unregulated	<ul style="list-style-type: none"> <li>+ Allows a player to participate on their own terms</li> </ul>
Investment climate	High focus	<ul style="list-style-type: none"> <li>+ Both government and private equity money chasing this space</li> </ul>

# Different business models can be built

## Illustrative

### Option 1



### Key activities

Research and development of content  
Methodology  
Train the trainer  
Overall strategy and management

Sector specific centres of excellence  
Focus on sector requirements  
Regarded as best in class training centres for a particular sector/function

Learning centres (owned) dispersed all over the country for sector/functional expertise

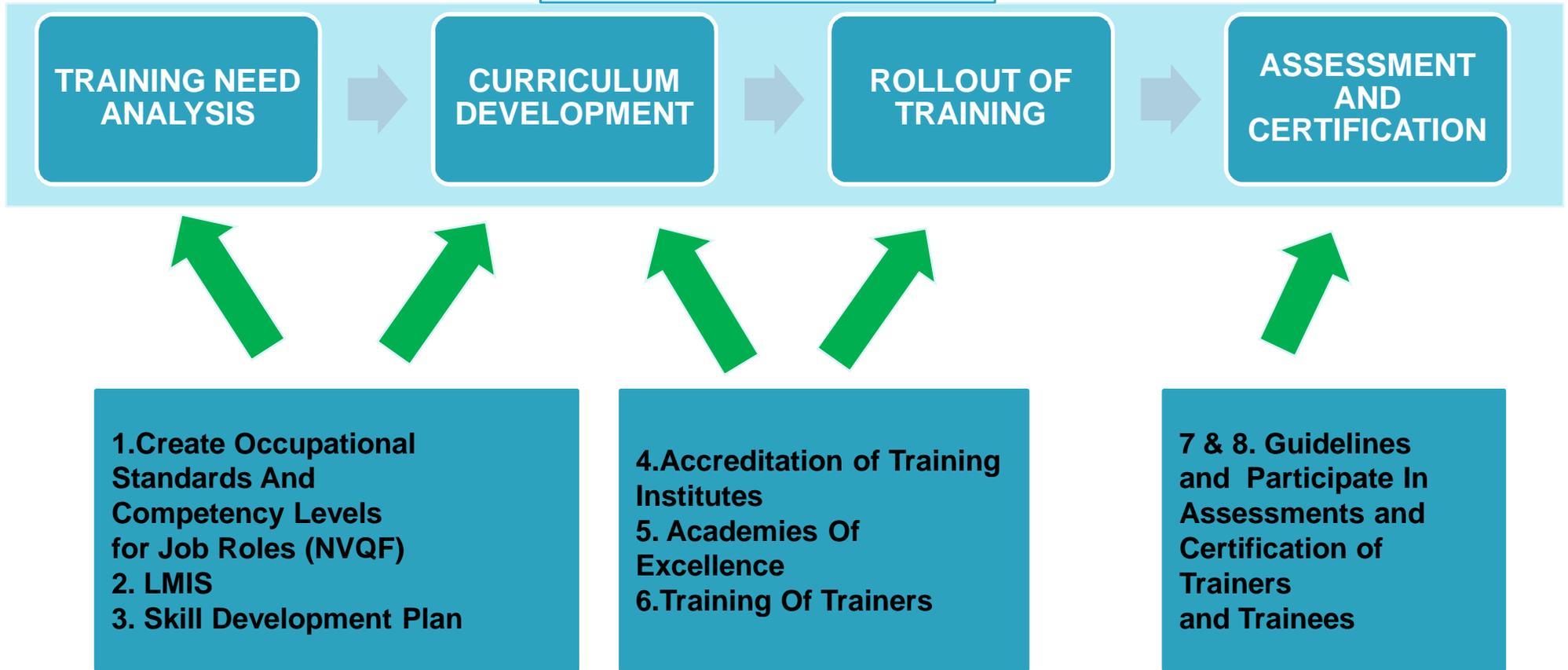
# Agenda

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## Sector Skill Council, Skill Gap Studies, Student Loans and Other International Interventions by NSDC in the Ecosystem

# SSC – Certification and Accreditation Body

## SKILL DEVELOPMENT CYCLE



**SSC**

## Status of SSCs – Mar 2012

Approved by NSDC	SSC Proposals under evaluation/approval by NSDC	SSC Proposals in Pipeline
Auto	Textiles	Logistics & Transportation
Security	Food Processing	Plumbing
Retail	Telecom	Domestic Workers
IT/ITES	Agriculture	Capital Goods
BFSI		Electrical Equipment
Media		Pharmaceuticals
Healthcare		Beauty & Wellness
Gems & Jewelry		Construction and Real Estate
Rubber		Foundry
Leather		Education & Skills
Electronics hardware		Handicrafts

11

5

11

15

26

Cumulative



# Build career path for “Rejects”

	Blue Collar		Grey Collar		White Collar
	School Dropouts	ITI	Diploma	Advanced Diploma	Professional Degree
Job Role	Fitter/Helper	ITI Fitter / Machine Operator	Machine Operator / Production Supervisor	CNC Programmer / Design CAD /CAM	Operations Manager
Employment Opportunity	SME	Manufacturing Sector, PSUs	Manufacturing Sector, PSUs	Specialized Industries: Auto etc	Manufacturing Sector, PSUs
Starting Monthly Income (INR)	2,000 – 3,000	4,000 – 5,000	6,000 – 8,000	8,000 - 10,000	15,000+
Monthly Income after 5 Years (INR)	5,000 – 6,000	8,000 – 12,000	12,000 – 14,000	30,000+	50,000+

**Career Ceiling for School Dropouts**

The HRD system makes it almost impossible for a dropout to have a career progression into a white collar job, however skilled he may be

# NSDC effort on Ecosystem interventions

## Skill Gap Surveys and Other Studies

- **Skill gap survey of 20 high growth sectors**
- **State Skill gap studies completed for Odhisa, North East States and for 5 other states of India are underway for next year.**
- **Study on labor market information system for India**
- **Study on building train the trainer capacity in India**
- **Engagement with States & Central Ministries**

## Special Initiative

- **UDAAN- Program is a private sector led initiative to train and employ 8000 youth of J&K per annum over a 5 year period.**
- **A national awareness campaign through TV and Print to reach out to schools, colleges and training institutes in the length and breadth of the country.**
- **Partnership with various Banks to provide unsecured Vocational Loans ranging from Rs 5000 to Rs 150000**
- **Participation in World Skills**

# Creating an Enabling Environment- Skill Loans with CBI

## Pilot Project

- Vocational Loan on a Pilot basis
- Loan would in the range of Rs.5000/- to Rs.1,50,000/-

## Tripartite Agreement

- Operate through tripartite agreement amongst Student (Trainee), Training Provider and the Bank

## Guarantee

- NSDC would stand as a guarantor for a certain percentage of the default

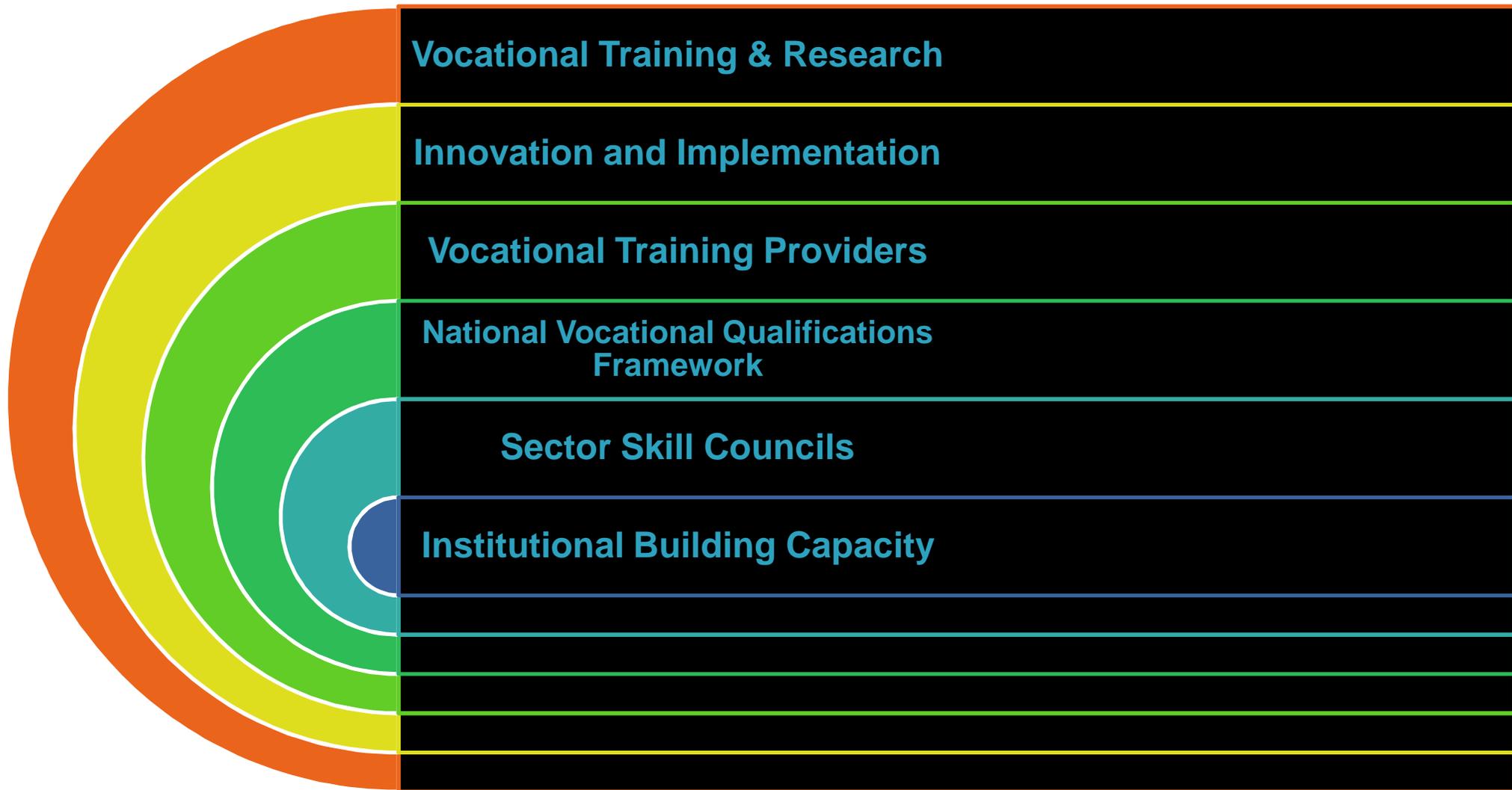
**Discussions initiated with multiple public sector and private banks**

# International Cooperation

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- **Australia : Australia India Education Council**
- **Finland: Joint Working Group**
- **Germany: Indo German Working Group, IMoVE**
- **Multilateral Bilateral Agencies: World Bank, DFID, US India Education Forum**
- **Singapore**
- **Switzerland**
- **UK : UKIERI, UKISF, UKCES, INSSO**

# Cooperation possibilities





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# Thank you

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# There are challenges in this segment but they can be dealt with

## Challenges

## What we have heard



**Student mobilisation**

**“We don’t get jobs even after going through these courses”**

**“My wages remained the same even though I was trained”**

**“Institutes are mushrooming – how do I know which are the good ones?”**



**Industry education**

**“We need to re- train these people, why should we pay them higher”**

**“There are very few quality institutes today and very few have an idea of what we want”**



**Inadequate enabling environment**

**Lack of student loans for vocational courses**

**No standardization of curriculum or content**

**No certification or accreditation process**

# What India CEO's say:

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## According to the 15<sup>th</sup> Annual Global Survey by PwC:

- **41% of the CEOs surveyed in India said that they cancelled or delayed a key strategic initiative because of skill shortage as against 31% in China and 24% global.**
- **Investment in skills and capability building remains a key requirement**
- **Indian CEOs were also more optimistic about talent availability and short-term growth prospects as compared to their global peers. Around 76% of Indian CEOs were willing to take the onus of training the available talent.**
- **They expressed interest in investing in vocational training programmes as compared to the 54% by their global peers.**

PwC survey was conducted among 1,258 CEOs in 60 countries and included 76 from India