



## ACADEMIA –INDUSTRY PARTNERSHIPS FOR ENHANCING EMPLOYABILITY SKILLS IN HIGHER EDUCATION

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### ABSTRACT:

*Given the fact that India enjoys a Demographic dividend which is expected to last till 2030, it is necessary to examine where we stand as far as developing this dividend is concerned. In spite of the fact that India has a number of advantages in this area, like the youngest population in the world, high market potential, large number of universities, it is necessary to pause and give a thought to what is the status of employment and specially so the employment in higher education.*

**KEYWORDS:** Demographic Dividend, Academia-Industry Partnerships , Skill Gaps, Employability ,Labor Market ,Skill Development.

### BACKGROUND

By 2020 the world is expected to face shortage of young population to the extent of 56 million and India alone is expected to have a labour surplus of 47 million. However ,growing concerns about jobless and sluggish growth of employment in India has caught the attention of policy makers in the recent years .The proportion of economically active population i.e. in the age group of 15-59 in India which is popularly known as the 'Demographic Dividend' has increased from 57.7 % in 1991 to 63.3 % in 2013. This demographic dividend is expected to last through till 2020 and later till 2050

### The Problem-

The country lacks in skills required for employability and also there is a demand supply mismatch in the labor market. The concern is to find ways to bridge this gap. Of all the strategies adopted at the national level for this purpose, focusing on a meaningful and specific Academia- Industry Partnerships is gaining significance in the recent years. The skill gaps like inadequacy of curriculum to meet market needs, lack of technical training and on the job training, lack of linkages between Academia- industry have been identified as the major causes for this gap.

Though India enjoys a demographic dividend, the employment and unemployment data especially for educated youth are not very encouraging. India has faced a sluggish growth in employment which stands at just 1.4% vis a vis a growth in labour force at 2.4% during 2001-2011. Estimates also place the unemployment rate for at 19.2% for those in age-group 18-24.

The more pressing issue however is the problem of lack of adequate skills which create serious skill gaps and a demand-supply mismatch in the labour force specially arising at the levels of higher education. .

The Government and even the private sector has undertaken a number of initiatives as a part of the Skill development Mission and programme in India like establishment of National Skill

Development Corporation (NSDC) Technical Education Quality Improvement Programme (TEQIP), National Skill Qualification Framework (NSQF), KAUSHAL and so on.,

It is against this background that the paper seeks to examine the specific skill gaps prevailing in higher education in India and examine the mechanism of Academia-Industry partnership to bridge this gap and enhance employability.

## METHODOLOGY

This paper is based on secondary literature and basically analyses the causes of skill mismatch in higher education and proposes an Academia –Industry Partnership model to develop and enhance employability skills in higher education.

### This paper is divided into the following main sections:

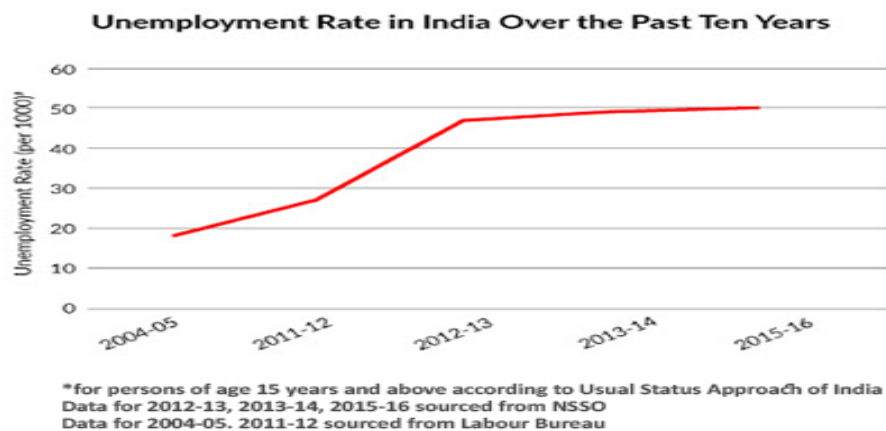
- I) Status of unemployment in India
- II) Skill gaps in education and demand-supply mismatch
- III) Initiatives to bridge skill gaps in higher education
- IV) Academia –Industry Partnership model for enhancing employability skills in higher education

#### I) Status of unemployment in India

The beginnings of jobless growth in India was mainly evident in early 2000. Between 2004-2010 the GDP growth rate averaged 8.43% but only 1 million jobs per annum was created compared to 1999-2004 which witnessed a growth rate of 8.5% pa with 60 million jobs.

A recent UN Report states that jobs in India increased by only 1.1% as against a growth rate of 7.7%. The Labor Ministry Quarterly Employment Survey shows that in 2001-11 the Labour force grew at 2.23% while the growth rate of employment was only 1.4%.

The unemployment level in India has shown an increasing trend since 2004. See Fig.1



**Fig.1-Unemployment rate in India**

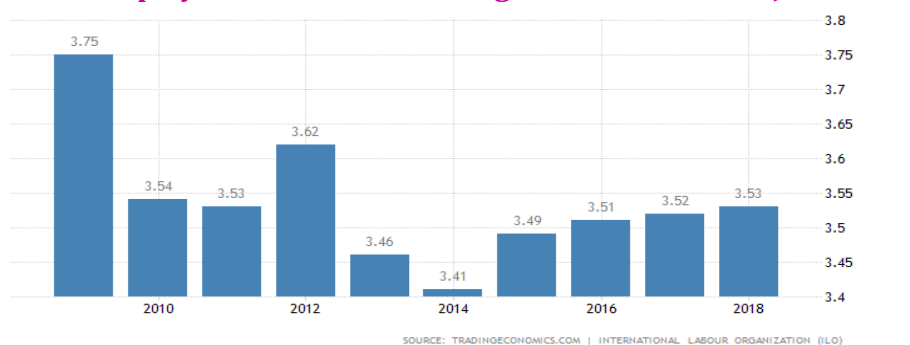
The unemployment figures have been rising in India From about 17.7 million in 2016 to 18 million in 2018 (estimated) .This is shown in Fig 2

**Table 2 Estimated Unemployment in India**



The Unemployment Rate in India increased to 3.53 percent in 2018 from 3.52 percent in 2017 See Fig.3

**The Unemployment Paradox: Looking at Growth Without Jobs EPW**



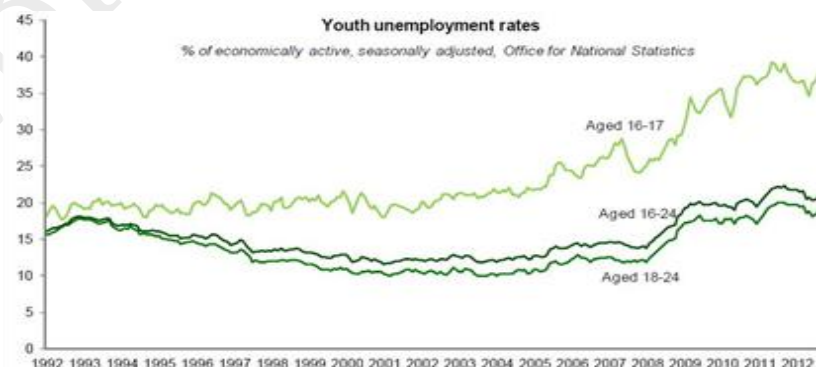
Source ILO 2018

Needless to say all this has led to serious concerns about the increasing unemployment in India.

**EDUCATED UNEMPLOYMENT IN INDIA**

The unemployment data especially for the educated youth do not show an encouraging trend. The unemployment rate for the age group 16-17 years stands at 37.3 percent and for those in age group 18-24 years is at 19.9 percent. These figures are revealed in Table 1

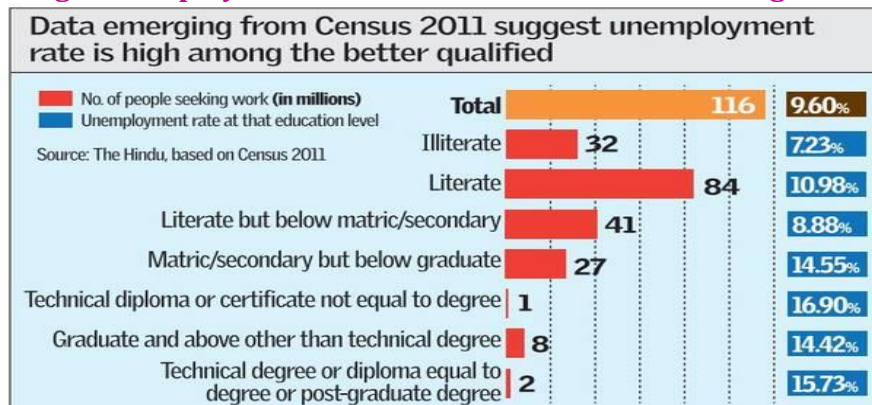
**Table.1 Youth Unemployment rates**



Source: Prachi Kapil (2014 )

The data in recent years of Census 2011 also shows that the unemployment rate is highest for the better qualified. As can be seen in Fig 4for graduates and post graduates the unemployment rates are at 14.42% and15.73% respectively

**Fig 4 Unemployment rates in different educational categories**



Source Rukmini .S (2105)

A Report on 5<sup>th</sup> Annual Employment –Unemployment Survey (2015-16),shows a veryhigh unemployment rate for theage group 18-29 years at 18.4% at All India Level by the Usual Principal Status Approach

At the global level, 300 million youth will enter the labour force by 2025 and 25% of the world workforce in the next 3 years will be Indians. In spite of the advantages that India enjoys in the area of demographic dividend a lot remains to be done with respect to developing the quality of education, skills and employability of the youth in the country

**II) Skill Gaps In Education: The Demand Supply Mismatch**

The issue of Demand-Supply mismatch due to skill gaps is an extremely crucial issue . The percentage of workforce receiving skill based training in India is just 10 % compared to developed countries which is in the range of 68-96%. The formally skilled workforce in India is at a low of about 2% as compared to 96% in South Korea and 80% in Japan . It is projected that the manufacturing and service sector are expected to be the major drivers of growth and would employ more than 50 percent of the workforce in India of which about 75% will be highly skill intensive. This sectorial shift in employment would obviously demand a highly skill oriented workforce, all of which require specific skills training which is not a natural outcome of the higher education process in India . There is thus a need to identify the skill gaps and the means to bridge the same.

The Skill IndiaAnnual report (2016-17) has provided data on incremental human resource requirements across24 sectors in the country.The study has projected an incremental human resource requirement at 103.4 million during 2017-2022 given in table 2 below

**Table 2 Break Up of incremental requirements across 24 sectors**

S.No	Sector	Projected Employment		Incremental Human Resource Requirement
		2017	2022	(2017-2022)
1	Agriculture	229	215.5	-13.5
2	Building Construction & Real Estate	60.4	91	30.6
3	Retail	45.3	56	10.7
4	Logistics, Transportation & Warehousing	23	31.2	8.2

5	Textile & Clothing	18.3	25	6.7
6	Education & Skill Development	14.8	18.1	3.3
7	Handloom & Handicraft	14.1	18.8	4.7
8	Auto & Auto Components	12.8	15	2.2
9	Construction Material & Building Hardware	9.7	12.4	2.7
10	Private Security Services	8.9	12	3.1
11	Food Processing	8.8	11.6	2.8
12	Tourism, Hospitality & Travel	9.7	14.6	4.9
13	Domestic Help	7.8	11.1	3.3
14	Gems & Jewellery	6.1	9.4	3.3
15	Electronics & IT Hardware	6.2	9.6	3.4
16	Beauty and Wellness	7.4	15.6	8.2
17	Furniture & Furnishing	6.5	12.2	5.7
18	Healthcare	4.6	7.4	2.8
19	Leather & Leather Goods	4.4	7.1	2.7
20	IT & ITeS	3.8	5.3	1.5
21	Banking, Financial Services & Insurance	3.2	4.4	1.2
22	Telecommunication	2.9	5.7	2.8
23	Pharmaceuticals	2.6	4	1.4
24	Media and Entertainment	0.7	1.3	0.6
	<b>Total</b>	<b>510.8</b>	<b>614.2</b>	<b>103.4</b>

Source: The Skill India Annual report (2016-17)

The study further has estimated the training needs that would be required across 34 sectors and reveals that there would be a growing need for imparting training specially in electronics, logistics, construction Retail, Beauty and Wellness. See Table 3.

**Table 3 Estimated Training needs across 34 Sectors**

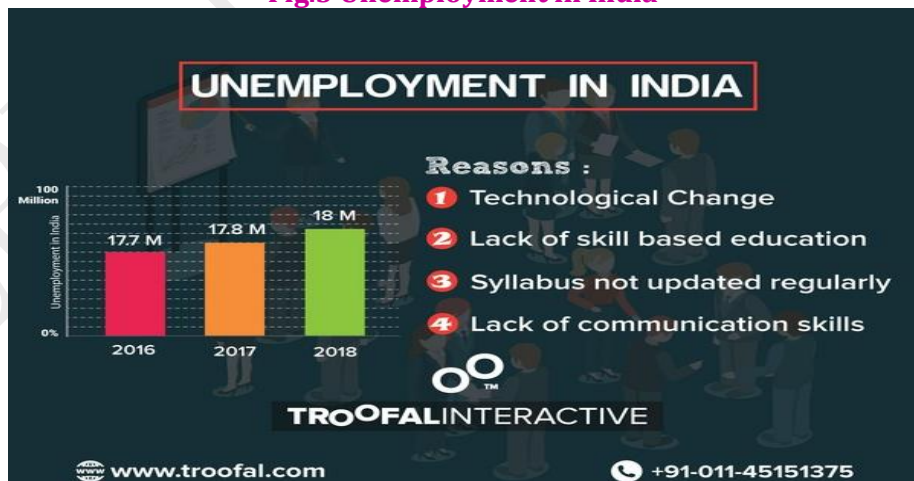
S. No.	Sector	g Need (2017 to 2022) (In Lakhs)
1	Agriculture	24.5
2	Animal Husbandry	18
3	Fertilizer	1
4	Textile Handloom and Handicraft	60
5	Automotive, Auto Components & Capital Goods	41*
6	Gems & Jewelry	35
7	Food Processing	33.7
8	Leather	25
9	Pharmaceuticals	14
10	Chemicals & Petrochemicals	12
11	Steel	7.5
12	Rubber Manufacturing	6.7
13	Road Transport & Highways	62.2**

14	Ports & Maritime	25
15	Aviation & Aerospace	14.2
16	Railways	0.12
17	Power	15.2
18	Oil & Gas	7.3
19	Renewable Energy	6
20	Coal & Mining	2.6
21	Construction	320**
22	Furniture & Fittings	52.6
23	Paints & Coatings	9
24	IT-ITeS	16
25	Electronics	53
26	Telecom	38.2
27	Retail	107**
28	Beauty & Wellness	82
29	Media & Entertainment	13
30	Tourism & Hospitality	49
31	Banking, Financial Services and Insurance (BFSI)	12
32	Logistics	42.9**
33	Healthcare	32
34	Security	31
	Total	1268.72

Source: The Skill India Annual report (2016-17)

A further analysis identifies the main reasons for the skill gaps as technological change, lack of skill based education lack of communication skills and outdated syllabus. See Fig 5

**Fig.5 Unemployment in India**



### III) Initiatives to bridge skill gaps in higher education

The Government of India and the private sector has undertaken a number of initiatives as a part of the Skill development Mission and Skill programmes in India which is well documented.

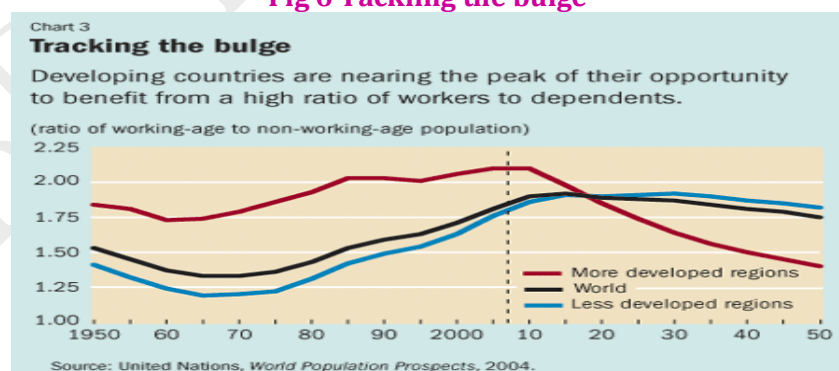
**The major initiatives include:**

- Establishment of National Skill Development Corporation (NSDC)
- Rashtriya Uchchatar Shiksha Abhiyan (RUSA)
- Technical Education Quality Improvement Programme (TEQIP),
- National Skill Qualification Framework (NSQF).
- Department of Skill Development and Entrepreneurship under the Ministry of Skill Development, Entrepreneurship, Youth Affairs and Sports
- The Deen Dayal Upadhyaya Grameen Koushalya Yojana (DDU-GKY) for poor rural youth
- Pradhan Mantri Kaushal Vikas Yojana (PMKVY)
- *Startup India*
- *Make in India*
- *Skill India*
- *Entrepreneurship and Skill hubs*

These initiatives have achieved the objective of skilling the youth to a large extent. To just cite an example the NSDC by March 2014 has approved 158 proposals amounting to an expenditure of Rs.2215.89 cr and 19,54,300 persons have received job oriented skills training. The NSDC also formed 14 sector skill councils (SSC) to meet the skill requirements of the specific centers in the country. These initiatives are being also promoted through the educational institutions and private partnership projects. About 60 corporate houses and private institutions are working with NSDC for imparting vocational education and training in India. All this would help NSDC achieve its desired target of 150 million skilled persons by the year 2022. Organisations like training centers of banks, corporates, institutes and so on are also intensively participating in the Skill India Mission. Skill development programmes have already been introduced at various levels in educational institutions recognizing its extreme significance.

Among the various strategies adopted for overcoming the skill gap, developing strong Academia-Industry linkages has been identified as a strong means of bridging the skill gaps in the plan and policy documents of the Government and also at various private forums, corporate levels and at the level of the educational institutes. The twelfth Five Year Plan document also highlighted the fact that industry-academia partnerships are relatively weak in India compared to many other countries.

However the trends in data on the Demographic structure reveals that the demographic advantage that developing countries like India enjoy will taper off in the near future and hence there is an urgency to tackle the problem of skill gaps if this advantage has to translate into jobs (See Fig 6)

**Fig 6 Tackling the bulge**

Source: United Nations World Population Prospects, 2004

#### IV) Academia –Industry Partnership model for enhancing employability skills in higher education

The existing skill development programmes do enhance and help in promoting a variety of skills but are mainly in the nature of mass based courses and are limited in their ability to develop job

specific skills. This is primarily due to the large numbers they cater to. Such skill development courses leave students to find their own jobs.

It is thus necessary to identify some kind of mechanism which would directly develop 'Particularised Skills' which are industry specific. This would support and supplement the efforts of the already existing initiatives of the government in this direction. For this what is required is to have direct involvement of corporates in the skill enhancement programmes specially at the level of higher education to bridge the demand supply mismatch. This kind of initiatives are evident in the vocational courses and training at secondary level through ITI and other skill specific programmes. However it is limited in case of higher education.

The CSR in recognition of the significance of this serious problem of skill inadequacy has already adopted education and vocational skill development as an integral part. It is on this aspect of the CSR that I would like to build an actionable agenda.

The central idea is follows institutions of higher education (those having degree programmes) design their syllabus to increase the quantity, quality and variety of the exposure that they give to their students. For example a specialization in say Chemistry will include several branches of organic and inorganic chemistry and make students perform a large variety of experiments and familiarise them with frontier developments and controversies. Graduation or Post-graduation in Economics would entail an exposure to various branches of economics theoretical and applied, a variety of techniques used and the several schools of economic ideas. And so on. In short academic curricula are designed to increase the familiarity of students to the ways in which the subject is practised. In stark contrast what is expected in industries and firms are extremely narrow and specific applications that form their principal business lines eg. Cosmetics or drugs for certain illnesses in Chemistry. Or in Economics analysis of stock market data for portfolio management services, etc. Firms, as employers, expect their employees to have indepth knowledge in those narrow applications. And when they get qualified chemistry graduates who have either no knowledge or very little knowledge of the specific application they feel frustrated and have to incur considerable expenses in training those graduates.

### MECHANISM

- A Partnership between Industry –Academia for implementing skill training programmes would involve the following steps:
- Industry to identify the particularized skill sets as per their requirements.
- Collaborations with specific educational institutes (if available locally or else as per availability)
- The industry could help designing the courses and curriculum in collaboration with the educational institutes and provide the technical expertise for the training modules.
- Modalities for the corporate in this regard could be worked out at the industry level through the already existing CSR committees and departments
- At the level of educational institutes the placement cells and specific departments can do the detailing of such partnerships
- Such skill training modules can be incorporated in the educational curriculum and programmes which would be welcome by the educational institutes and Universities which already have adopted skill based courses on a priority basis. This would then have to be then incorporated and formalized by aligning it in the educational programmes through the University,UGC and other academic regulatory bodies.
- An added advantage would also be the training which teachers can also avail in such programmes and then help in training the other students.

### BENEFITS

Implementing skill development programmes through the already existing CSR mechanism would have the following benefits:



- Minimum additional fund allocation and therefore very less additional financial burden to companies
- Developing particularized and specific skills as per requirement of industries.
- Creation of a skilled human resource ready for employment, benefits of which would accrue to the other industries in the relevant area
- Skill training and demand –supply matching for local area development (if industry academia partnerships potential exists)
- Simple effective way of fulfilling social responsibility and benefit back to company while fulfilling social responsibility.
- Faculty and teachers would also be able to avail of the benefits of such training.

A very detailed fine tuning would however be required at both industry and academia level for the implementation of such a partnership . This approach basically seeks to combine the educational ,social and private benefits and make both the CSR and Skill development programmes more meaningful and substantial.

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