



INTEGRATING SKILL DEVELOPMENT INTO PRIMARY EDUCATION: A FRAMEWORK FOR BIHAR

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Abstract

Primary education establishes the foundation for subsequent skill acquisition. This research investigates the essential junction between skill development and access to basic education, focusing on the state of Bihar, India. The study is divided into three main portions. Section-I conceptualizes skill development within the context of access to primary education, emphasizing how early education can create the key abilities required in a worldwide market. Section-II presents a detailed demographic profile of Bihar, examining the state's current standing in terms of educational access and skill development. This section underscores the challenges and opportunities unique to Bihar's socio-economic landscape. Section-III provides a SWOT analysis of Bihar's educational and skill development ecosystem, identifying strengths, weaknesses, opportunities, and threats. Based on this study, the article recommends strategic initiatives to improve both educational access and skill development in the state. The study emphasizes the importance of taking a comprehensive approach to education and skills training, suggesting that such a strategy is critical not only for Bihar's development but also for driving India's overall economic growth in the global knowledge economy.

Keywords: Skill Development, Access, SWOT Analysis, Global Knowledge Economy.

Introduction

This paper examines the relevance of skill development in the context of the access to primary education, with a specific focus

on Bihar. It is structured into three sections: Section-I conceptualizes skill development in the context of access to primary education; Section-II shows the demographic profile and position of Bihar in skill development; Section-III provides a SWOT analysis for Bihar, offering strategies to improve skill development and educational access. The research emphasizes the necessity of a comprehensive approach to education and skills training to drive India's economic growth in the global context.

Section-I: Skill Development and Access to Primary Education

Improved access in broader sense and universalization of primary education offer essential first steps on the path to becoming successful knowledge economies. But knowledge economies demand not just more education, rather it incorporates training as well. In the context of

Table 1: Core Work Related Skills

<i>Abilities</i>	<i>Basic Skills</i>	<i>Cross-functional Skills</i>	
Cognitive Abilities	Content Skills	Social Skills	Resource Management Skills
• Cognitive Flexibility • Creativity • Logical Reasoning • Problem Sensitivity • Mathematical Reasoning • Visualization	• Active Learning • Oral Expression • Reading Comprehension • Written Expression • ICT Literacy	• Coordinating with Others • Emotional Intelligence • Negotiation • Persuasion • Service Orientation • Training and Teaching Others	• Management of Financial Resources • Management of Material Resources • People Management • Time Management
Physical Abilities	Process Skills	Systems Skills	Technical Skills
• Physical Strength • Manual Dexterity and Precision	• Active Listening • Critical Thinking • Monitoring Self and Others	• Judgement and Decision-making • Systems Analysis	• Equipment Maintenance and Repair • Equipment Operation and Control • Programming • Quality Control • Technology and User Experience Design • Troubleshooting
		Complex Problem Solving Skills	
		• Complex Problem Solving	

Source: World Economic Forum 2016, based on O'NET Content Model

knowledge economy aspirations, the challenge of educational reform is therefore not just to increase access or even raise conventional tested achievement, but also to change the nature of teaching-learning process i.e., making vocational and skill training a part of education system so that they address knowledge economy objectives.

As far as skill is concerned, the extant literature defines it in numerous ways. As per World Employment Report 1998, *skill is an acquired and practiced ability or to a qualification needed to perform a job or certain task competently. It is a multidimensional concept. It is the ability to direct human energy efficiently to achieve desired goals. It is one of the attributes that generate knowledge resources, the others being technology, organization, information and education skill.* (Planning Commission's Committee on India Vision 2020). As per World Economic Forum (2016), there are different kinds of core work related skills. This is shown in Table 1.

As India is progressively moving towards a "knowledge economy," it is highly important for its work force to acquire and then upgrade the skills that are suitable for the upcoming economic opportunities. This will transform to its large labor pool into a skilled workforce, which will be highly adaptable, highly flexible and analytical to the global needs and environment.

India is a vast country having mixed economy in which there is a wide range and heterogeneity. Looking to the vast magnitude of the scope of the skill development schemes, it is not possible to have a "one size fit all" kind of approach for the solution. However, the skill development scheme needs to be well coordinated and properly dovetailed to have an effective and efficient mechanism to fulfill the requirement. The government of India is taking initiative to fill the existing skill gap through skill development mission in order to leverage its position to fulfill domestic and global requirement and at the same time fulfilling its domestic requirement of the skilled labor force. As per the study by the National Skill Development Corporation (NSDC), in the domestic market incremental requirement of skilled manpower across various sectors in India would be 347 million by the year 2022.

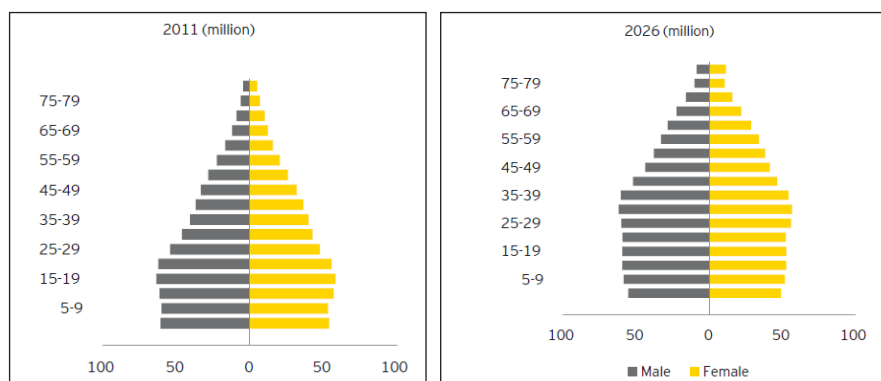
Section-II: Position of India in Skill Development with Special Reference to Bihar

The demographic dividend is a rare window of opportunity in India. However, this is a debatable issue that whether India is in a position to reap the benefits of this demographic dividend for the economic

growth of the country. Although there is swelling workforce in the country, this is a big challenge for India because there is a huge shortfall of educated, skilled and trained workforce. Since India is facing these shortages, the demographic dividend itself cannot lead to a high economic growth. Human capital is an important aspect of the demographic dividend while determining the economic growth (Chandrashekhara 2006). Some studies have found out that India has a potential to achieve a higher rate of economic growth through productive employment of this swelling work force arising out of the demographic dividend (Ghani 2011).

Currently, India stands at the historical juncture, with the potential to reap rich economic benefits in the next few decades. The rapid growth in the country's population would be accompanied by an unprecedented demographic transition, with far-reaching consequences on economic growth. Chart-1 shows the population pyramid of India and demographic changes by 2026.

Chart-1: India's Demographic Dividend

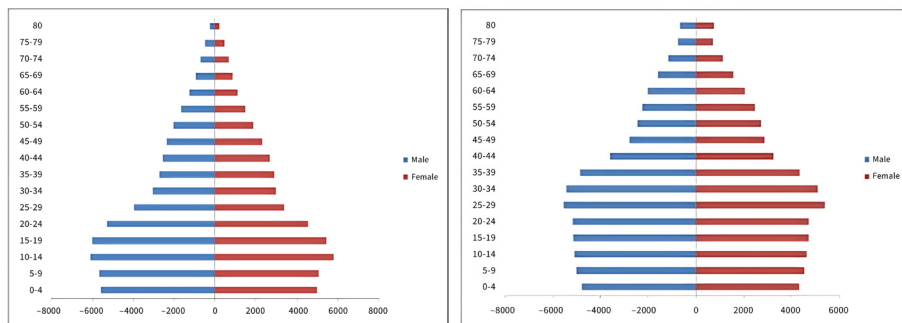


Source: Census of India projections

India is expected to become one of the most populous nations by 2026 (1.4 billion). The country's population pyramid is expected to "bulge" across the 15–64 age bracket over the next decade. Around 64% of India's population is expected to be in the age bracket of 15–59 years by 2026, with only 13% of the total aged above 60 years. Working age population would increase from 761 million to 869 million during 2011–2020. India will be experiencing a period of "demographic bonus," where the growth rate of the working age population would exceed that of the total population. India is poised to become the

world's youngest country by 2020, with an average age of 29 years, and account for around 28% of the world's workforce.

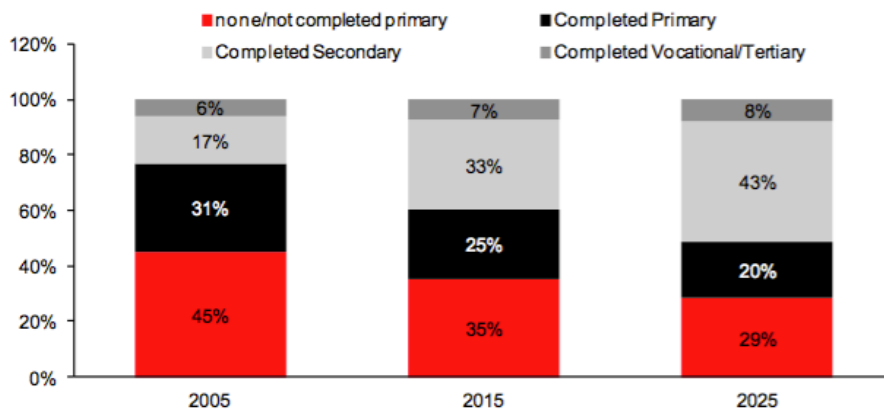
Chart-2: Bihar's Demographic Dividend



Source: Census of India projections

Chart-2 shows that Bihar is expected to retain its position in terms of population in India by 2025 (113.7 millions). Around 64.21 % of Bihar's population is expected to be in the age bracket of 15–59 years by 2026, with only 11% of the total aged above 60 years. The state's population pyramid is expected to “bulge” across the 15–64 age bracket over the next decade. Working age population would increase from 57.5 million to 73 million during 2011–2020. Bihar will be experiencing a period of “demographic bonus,” where the growth rate of the working age population would exceed that of the total population. Dependency Ratio in the state is expected to fall from 803 in 2011 to 383 in 2026.

Chart-3: Educational Profile of India- 15+ Age Group



Source: Global Demographics, Macquarie, September, 2015

India is in transition to a knowledge based economy and its competitive edge will be determined by the abilities of its people to create, share and use knowledge more effectively. To achieve these goals, India needs flexible education and training system that will provide the foundation for learning, primary, secondary and tertiary education and to develop required competencies as means of achieving lifelong learning.

It is expected that even by 2025, 29% of the people with 15+ age group would be those of not completing primary education. This shows that India's workforce is much less educated than its peers. This impacts productivity and propensity to be employed. Table-2 provides the information regarding the education level of 15+ population in Bihar *viz-a-viz* India.

Table 2: Education Level of Population 15+ in Bihar (in %)

		Illiterate	Up to Primary	Middle	Secondary	Higher Secdy.	Diploma	Graduate & Above
Rural	Bihar	38.6	23.9	15.6	12.1	5.5	0.3	3.9
Male	India	32	27.7	19.1	10.7	5.5	1	3.8
Rural	Bihar	70.6	16.3	7	4.6	1	0	0.3
Female	India	58.5	19.9	11.3	5.7	2.7	0.5	1.3
Rural	Bihar	54.5	20.1	11.3	8.4	3.3	0.2	2.1
	India	45.2	23.8	15.2	8.2	4.1	0.7	2.5
Urban	Bihar	15.6	15.8	16.8	16.5	13.8	0.8	20.7
Male	India	12.1	20.2	19.4	16.9	11.6	3.6	16.2
Urban	Bihar	38	19.1	14.1	16.5	7.3	0	0.8
Female	India	27.9	19.7	16.8	13.5	9	1.6	11.5
Urban	Bihar	23.8	17.3	15.6	16.5	10.8	0.4	13.5
	India	19.6	20	18.2	15.3	10.4	2.6	14
Total	Bihar	36.1	23.1	15.8	12.5	6.4	0.4	5.7
Male	India	26.4	25.6	19.2	12.5	7.2	1.7	7.3
Total	Bihar	67.6	16.5	7.7	5.8	1.6	0	0.7
Female	India	50.4	19.9	12.8	7.8	4.4	0.8	4.4
Total	Bihar	51.6	19.8	11.8	9.2	4	0.2	3.3
	India	38.2	22.8	16	10.2	5.8	1.2	5.7

Source: NSSO 66th Round Survey

It is shocking to note that around 51.6% of the population in 15+ age group is illiterate in Bihar as compared to the nation's average of 38.2%.

This reveals that in an era where India is transforming into a knowledge economy with an effective skill development of the manpower, still a big chunk of population do not have access to basic education. So, this transition requires India not only to develop workers into knowledge workers who will be more flexible, analytical, adaptable and multi skilled, but also a system of education which is based on vocational and skilled training.

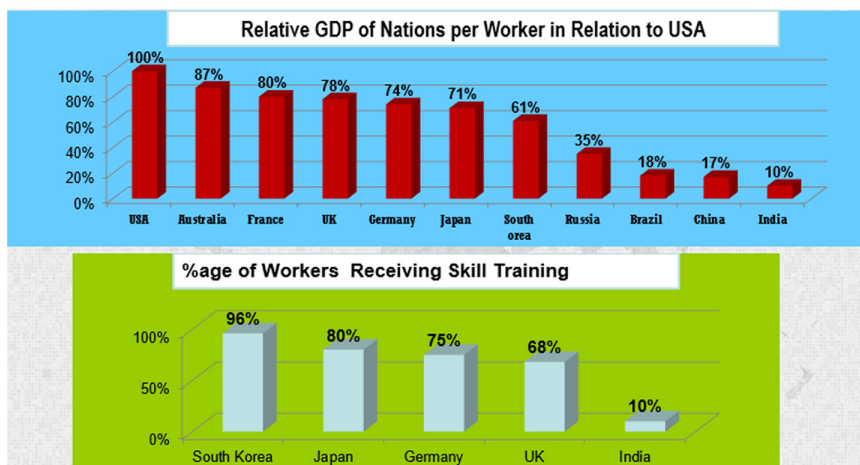
Table 3: Education Level of Youth Workers: 2009-10 (in %)

Category	Illiterate	Below Primary	Below Secondary	Secondary & Higher Secondary	Diploma	Graduate & Above
Regular Worker	5	4.3	30.2	28.1	5.1	27.4
Casual Wage Labour	43.3	0.5	0	0.3	21.4	34.6
Self Employed	15.9	7.7	42.9	27.1	0.9	5.5
Productively Employed	21.1	5	28.4	20	7.4	18.2
Unemployed	4.4	3.3	27.7	32.1	6	26.5

Source: NSSO 66th Round Survey

Table-3 shows that around 55% of those Productively Employed are having below secondary education. Table-4 given below gives the information of technical skill among youth population.

Chart-4: Low Productivity and Skill Formation in India



Source: Planning Commission 2008

Only 10% of the total workforce in the country receive some kind of skill training (2% with formal training and 8% with informal training).

There are four major challenges confronting the skill development in Bihar i.e., making vocational skill attractive, student mobilization, quality of skill development and enabling environment (shown in Fig. 1).

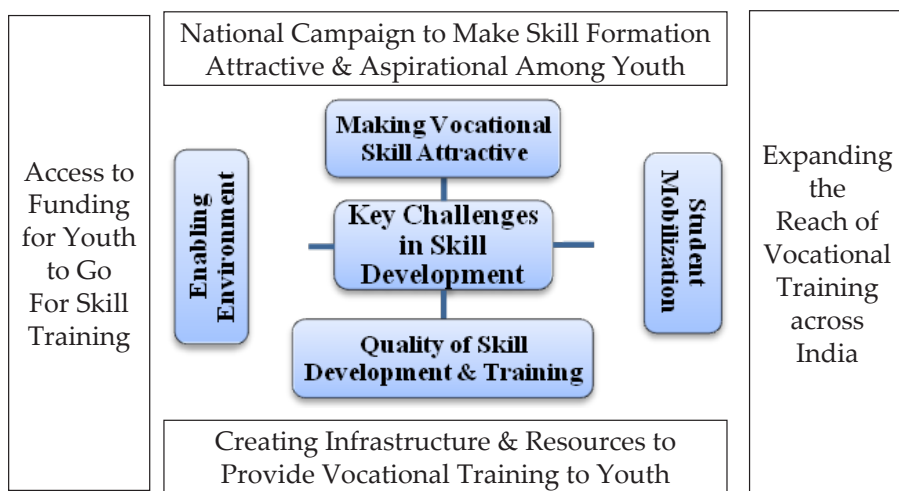


Fig. 1: Skill Development Issues in Bihar

Section-III: Evolving Strategy for Skill Development: A SWOT Analysis of Bihar

In order to reap the benefits of demographic dividend, a multi-pronged strategy is needed to ensure an effective skill development of manpower in the state like Bihar. For achieving this goal, universalization and access to primary education is the foremost priority. We need some very specific measures that could address the neglected issues of access. In order to foster demand for education, the primary education must be made productive in real sense. For this, government can organise evening classes for those children who are engaged in labour activities and who could not attend regular schools. Vocational education should be made an integral part of primary education. In addition to providing deprived section students the normal education, they should be provided with some skill development training. Government should devise some strategy to provide training and for drop-outs of different categories and thereby increase the return on education. Unless this is done, it would be difficult to convince poor illiterate parents to send their children to school. Besides this, to avoid the engagement of teachers in non-teaching activities, the government can employ college/university students during their vacation days for

carrying different surveys. This would not only get the work done but at the sometime provide some incentive to the students and some income to them.



Fig. 2: A SWOT Analysis for Bihar

For ensuring the skill development of masses, there are four important aspects which need to be taken into consideration. These are infrastructure, delivery, funding and policy (depicted in Fig. 3 given below).

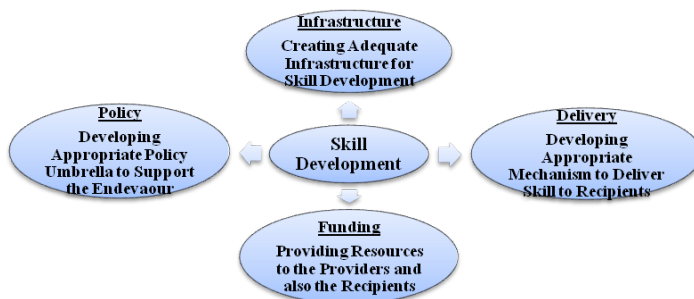
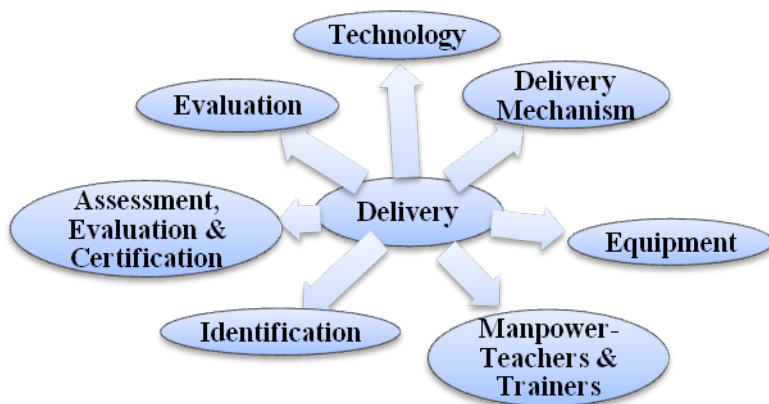


Fig. 3: Aspects of Skill Development

- Infrastructure involves industry associations (FICCI, CII, ASSOCHAM) to voice the needs of the market and provide opinion on relevant policies. It also involves the international bodies (ILO, World Bank, EU) which play advisory role to government bodies and provide funds. Private players (IL & FS Education, India Can, India Skills) also play a major role in providing funds and developing vocational education training institutes. Besides this, standards, curriculum, content, infrastructure for assessment and feedback, social infrastructure in the form of supply of teachers and trainers also contribute towards skill development.
- Delivery means the need to develop appropriate technology, mechanism & support system, recruiting, training & maintaining army of trainers, identifying entire gamut of learners with peculiar needs classified on the basis of age, gender, education, social group, location, dropouts, differently abled, creating independent, robust agencies for certification & quality control to deliver skills to the taught.



- Funding involves different sources like, central government (in the form of schemes e.g. PMKVY, schemes of individual ministries, central scheme for vocational education in class 9-12, UGC scheme of community colleges, B.Voc., DDUKAUSHAL, etc.), state government, industry/employer (i.e., on the job training through internal training departments sponsored training/skill development), international cooperation (sponsored programmes of World Bank, OECD etc.), philanthropy/CSR, students/self-financed.

Table 4: Framework for the Creation of an Efficient Education Delivery Model

<i>Availability</i>	<i>Accessibility</i>	<i>Adaptability</i>	<i>Acceptability</i>
Focusing on the needs of both learners and the labor market in order to make these skills available Forging Partnerships between public administrators, suppliers of educational services, industry and civil society	Directly Addressing Learners' Demand coming from varied geographies and socio-economic backgrounds such as education levels, income levels, industrial growth, etc.	Focusing on Learners' Priorities of vertical mobility for those pursuing skills, and will enable learners to shift from skill-based training to academics and vice versa Meeting Learners' Requirements for well-established competency standards, affiliation and accreditation	Facilitating Learners' Priorities in terms of Quality of infrastructure (ICT and physical infrastructure), pedagogy and skill delivery methods Focusing on Learners' Needs for developing an advanced curriculum framework based on best industry practices

Source: FICCI

- Policy implies the interventions taken by the Central and State government. The Central government policies involve Formation of Ministry of Skill Development & Entrepreneurship, National Policy for Skill Development and Entrepreneurship (2015), Education Policy (1986), National Skills Qualifications Framework (2013) and The Apprenticeship (Amendment) Act (2014) while the State government policy involves State Skill Missions, Convergence of multiple skill schemes, Convergence of Skill, Employment (Labour) and Entrepreneurship departments.

Conclusion

India is in demographic phase and is in position to reap the benefits of the demographic dividend by providing trained manpower to fulfill the global and domestic need for skilled manpower, the Government of India had initiated National Policy on Skill Development, to facilitate its target of imparting requisite skills training to 500 million people by 2022. However, on the other hand, there are lots of challenges in the way of achieving target such as quality of training, standardization of curriculum, recognition of course globally etc. India has lot to work on policies for the skill development and put efforts for effective implementation of these schemes. The adoption of a much more robust

approach is essential for putting in place a quality skill education and training framework in the country.

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