Chapter 1 Introduction

“The Times They Are Changing”

Come senators, congressmen
Please heed the call
Don't stand in the doorway
Don't block up the hall
For he that gets hurt
Will be he who has stalled
There's a battle outside
And it is ragin'.
It'll soon shake your windows
And rattle your walls
For the times they are a-changin’…

Bob Dylan (Nobel Laureate, 2016)¹

“Everyone has right to education, education shall be free at least in the elementary and fundamental stages. Elementary education shall be compulsory. Technical And professional education shall be made generally available and higher education shall be equally accessible to all on the basis of merit.”

- United Nations, Universal Declaration of Human Rights, Article26(1)

1.1 Introduction

Economics of education is a branch of economics that uses theories and tools used in ordinary economics to the field of education. Education is not a purely economic variable but it gets influenced by economic variables such as income of the household, amount and composition of public expenditure on education and labour market. Similarly, economic variables also can get influenced by the education system of the country. Education can influence positively/negatively the development process of the economy. The human capital approach

¹ http://www.lyricsfreak.com/b/bob+dylan/the+times+they+are+a+chasing_20021240.html
developed by Schultz in 1960s is a water shade in the evolution of economics of education. All the text-books on development economics prescribed by the prominent universities of the world include a section on economics of education. This chapter takes overview of some concepts related to education. The prominent issues that are part of the current national debate on education in India are also briefly discussed.

1.2 Major Stakeholders in the Education System

The major stakeholders in the education system are-

1. **Educational Institutions:** Institutions that supply various education products such as schools, colleges, universities, various coaching classes (collectively known as parallel/shadow education system)

2. **State:** The state influences the supply side of education directly by running the educational institutions and indirectly by providing financial assistance to the private sector suppliers. Formulation of education policy and rules and regulations regarding education are other two responsibilities of the state. In India Education is in the concurrent list of the constitution. So, both the Union as well as the State Government play important role in shaping the education system

3. **Households or individuals:** Households create demand for education that may get influenced by various economic as well as socio-cultural factors. This demand is normally derived in nature. Education is rarely demanded for sake of it. Usually households expect some returns from education in the employment market. These returns are possible because there is demand for various skills in the employment market that can be developed through education. Households may also demand education for its status value.

4. **Employers:** In the labour market educated individuals are on the supply side and the employers on the demand side. Wages offered are directly related to the intensity of demand for a specific skill and its relative scarcity or abundance. Usually it is expected that amount of
education one gets should have a positive relation with the wages one is offered. According to Mark Blaug, “the amount of education that an individual possesses is, in all modern economies of which we have knowledge, positively correlated with personal earnings. This is not true for each and every individual — the correlation is far from perfect — but it is true for average persons and indeed for most. Age, sex, race, native ability, social class background, place of residence, branch of employment, occupation and on-the-job training are other important determinants of personal earnings. But apart from age, none of them are as powerful in their influence on earning as the number of years of schooling completed. In short, additional education can be more or less confidently expected to raise lifetime earnings and, in this sense, the acquisition of education is of the nature of a private investment decision geared to future returns.” (Blaug, 1972)

5. Society: Society does not play any direct role in the demand and supply of education. But the society can influence both demand and supply side of education through various philanthropic contributions to the educational institutions as well as to the households. Through pressure groups society can influence the education policy and functioning of the education systems. The society in general is also a beneficiary of the externalities generated by the enhanced level of average education in the society. The direct benefits of subsidies to the higher education usually go more to the middle and higher income groups in the society. But education economist like J.B.G. Tilak justify continuation of the subsidy as externalities generated by the enlightened educated citizens of any economic class are collectively enjoyed by one and all. The social reforms initiated by the middle class and upper income group Indians in the British India are testimony to this fact. (Tilak, 2013)

1.3 Education and Economic Development

Role of education in human life can be viewed from different perspectives. Right from ancient to modern times human society has recognized the positive role education plays in human life.
During ancient times education systems were shaped either by socio-political or by religious norms. With the rise of democracy and industrial revolution perspective towards education changed. Scholars were respected in the old world but most often they were ‘empty pocketed’. In the industrial economy education slowly became predominantly economic variable and it also became prerequisite for various jobs. While highlighting the role of education in modern economies, Aglo Henderson argued, “In America, higher education is not merely a luxury for the benefit of cultured gentleman. It is necessary preparation for our way of life. It is an investment in human resources and hence in our future. Education and especially higher education, has replaced free land and abundant natural resources as the best route to individual success and personal advancement in this country.” (Henderson, 1960) Education, human resource development and economic development are closely related to each other. In fact, some economists give more importance to human variables than non-human variables in the process of economic development. Human resources can be compared with the ‘software’ in computers whereas capital and natural resources can be compared with the ‘hardware’ in computers. This possibly explains relatively quick revival of German and Japanese economies after the World War II. The war destroyed only the ‘hardware’ which can be developed in the relatively short span of time. ‘Software’ i.e. human skills and capabilities were not destroyed by the war. According to Prof. Frederick Harbinson, “In the final analysis, the wealth of a country is based upon its power to develop and to effectively utilize the innate capacities of its people. The economic development of nations, therefore, is ultimately the result of human effort. …Indeed, if a country is unable to develop its human resources, it cannot build anything else, whether it be a modern political system, a sense of national unity or a prosperous economy…. Education, therefore, is the seed and the flower of economic development….” (Harbinson, 1965). Higher education also plays major role in, “creating and nurturing an intellectual vanguard entrusted with the task of thinking on behalf of society and preparing the
present to meet the future.” (Deshpande, 2006). Education per say is not an unmixed blessing. Role of education in the process of economic development can be summarized as: Education can influences rate, structure and character of economic growth. Pattern of education system of a country can be a cause as well as an effect of economic inequality. In other words, education can increase /decrease inequality and poverty. Unemployment of educated can become an additional problem if education is not geared to the process of man power planning. Education can increase or decrease gender inequality. And in the days of globalisation education can be a channel of cultural imperialism. (Todaro, 2012). The World Development Report 1998 had cautioned us, “Education is the key to creating, adapting and spreading knowledge…But the gains in access to education have been unevenly distributed, with the poor seldom getting their fair share.” How successfully a country addresses the issue of unequal education opportunities, will decide the character of a country’s economic growth. To tackle the inequality problem, some economists suggest public funded education system from KG to PG. But inequality in the field of education can also be created due to private household expenditure on education which is incurred to complement or substitute subsidized education facilities, e.g. expenditure on various coaching classes, finishing schools etc. The present study is basically concerned with study of inequality of opportunity that emerges due to different types and magnitudes of household expenditures on education.

1.4 The Human Capital Theory and Education

According to the human capital theory of Theodore Schultz, human capital is as important as physical capital in the process of economic growth. Human capital can be developed through provision of good quality primary health services, education at all levels, skill development programmes and facilitation of labour mobility. Advocates of human capital theory highlight importance of quality education in increasing human labour productivity and also welfare enhancing externalities that education generates. In the capital (physical) scarce developing
economies, the theory provided a hope and also an action plan. Accordingly, heavy investments were made in the education sector by the developing economies in their initial stage of development. In fact, till 1960s, all the economies, developed as well as developing made substantial investments in education. Importance of education and human capital theory started getting questioned after the first oil shock of early 1970s and increasing unemployment among educated youth. Expected returns from the huge investments in education did not materialise in many developing countries. At this juncture, a new theory was presented by Michael A. Spence in 1973. It reduced the role of education to screening/signalling mechanism. He did not consider education as an investment that increases the productivity of the educated and promises long term dividends. Screening, is a mechanism employer uses to reduce risk in the recruitment procedure. Education level of applicants for the job helps employer in the selection procedure. Signalling is the process used by the employee to give the signal to the employer about his or her employability. Education credentials can be used to signal the employers. These screening models questioned the human capital theory and also the role and importance of education in the process of economic development. Screening model applied to the employment market implies a procedure to ascertain applicant’s ability to learn. It gives preference to the applicant that have earned specific educational credentials. This reduces uncertainty and risk involved in the recruitment procedure. The higher salaries offered to graduates from the prestigious educational institutions is in a way a risk premium paid by the employers. The other side of the coin is, investment made by the potential employee in education is meant for strengthening his/her ability to send signals to the employer. Spence said that even if education does not contribute anything to the productive capacity of an individual, still people invest in it as it enables signalling in the employment market. (Spence, 1973) This can be one of the causes of academic or education inflation that devalues education due to excessive supply of people having similar educational credentials. The clerical
job that was available few decades ago to a matriculate now requires graduation as a minimum qualification in India. This moves the system towards a situation called ‘credential creep’. International Encyclopaedia of Social Sciences (2008) defines credentialism as, “… a social phenomenon, (that) refers to reliance upon formal credentials conferred by educational institutions, professional organizations, and other associations as a principal means to determine the qualifications of individuals to perform a range of particular occupational tasks or to make authoritative statements as “experts” in specific subject areas.” Credential creep is the process of inflation of the minimum job requirement. These developments in 1970s, affected public investments in education adversely. The emergence of the concept of the human resource development in 1980s once again revived importance of education as a tool for economic development. Newly formed, endogenous growth theories had strong link with human capital theory. In 1990s, the gulf war caused the second oil shock. As a result, many developing countries adopted the programme of structural adjustment recommended to them by the World Bank. So initially education got neglected but due to persuasive efforts of the economist like Amartya Sen, Mahbub ul Haq, the concept of human development came into forefront. Though there are differences in two approaches-the human capital theory and human development, at policy level both had almost same effect in developing economies. In 1996 International Commission on Education for the twenty -First Century observed, “education now must be viewed as part of new approach to problems in which it is not simply one of many means towards development, but one of its constituent element and one of its essential goal.” (Tilak,2003)

On the whole, in the post Second World War era education expanded unprecedentedly all over the world in terms of enrolments, public expenditure on education, establishments of new educational institutions and development of new types of education programmes. But this growth was not smooth nor monotonic. Some countries performed exceedingly well because
of education expansion. (South Asian miracle economies) while in case of some countries like India the effect was moderate. The wave of globalisation in the last two and half decades is one major factor that has affected the world economies and consequently education too. The role of state on the supply side of education (especially higher education) is getting shrunk and the vacuum is getting filled by the private domestic and international players. Explosion of information and communication technology and its offshoot the knowledge economy have brought in the paradigm shift in almost all the sectors of the economy. The knowledge economy is based on four pillars-

“1. an economic and institutional regime that is conducive to the creation, diffusion, and utilisation of knowledge
2. a well-educated and skilled population that creates, shares, and uses knowledge efficiently
3. a dynamic information infrastructure that facilitates the communication, dissemination, and processing of information and technology
4. an efficient innovation system of firms, research centres, universities, think tanks, consultants, and other organisations that applies and adapts global knowledge to local needs to create new technology.” (Patel, 2011).

The knowledge economy is about to revolutionise conventional education system and many non-conventional forms of education have already emerged. The Chapter Three will discuss this issue in detail.

1.5 Indian Education System

1.5.1 Pre-independence Period

The concept of university or higher education is deep rooted in the Indian soil. Ancient Indian Universities like Nalanda, Takshashila were globally known centres of higher learning. Unfortunately, this excellence in education vanished over a period. Modern Indian education
has no direct link with the rich heritage of the bygone era. During the British period, modified western education model was transplanted to the highly non-western Indian society. The purpose of this was of course to create suitable class III and IV labour force that will help the British administrators to rule India. Education system of any country is normally shaped by its social-cultural, economic and political features. In the long run the education system also shapes various socio-economic relations in the society. Though education during British era had limited purpose, it inadvertently ignited some Indian minds. In the 18th and 19th centuries a swarm of socio-political reformers emerged in India. Even the half-baked education that was doled out to Indians during British period could pave the path for the Indian Freedom Struggle and also helped initiation of many social reforms needed to make democracy successful.

1.5.2 Education after Independence

After Independence India had the golden opportunity to harness the strength of education that was already tested and highlighted by one and all social and political reformers. The Draft First Five Year Plan had provided an excellent blue print for the holistic development of Indian education system. It gave priority to universalisation of primary and secondary education but was extremely cautious about the expansion in the higher education (except programmes related to Commerce, Science and Technology). In the post-independence period, “…there was huge rise in the social demand for higher education and the democratic government had to respond in a fitting manner.” (Tilak, 2013) Higher education in India, right from ancient times, is linked with the social status. So irrespective of its economic returns, demand for the higher education remains high in India. In the last seven decades quantitative expansion of the higher education has been enormous. “…it is quite diverse and democratic, second only to China in terms of enrolment, it is largest in the world in terms of institutions…in quantum of production of graduates India trails behind only US and China” (Tilak, 2013). Former Prime Minister, Dr. Manmohan Singh described, The Eleventh Five Year Plan (2007-12) as the National Plan for
Education with focus on higher education and skill development. The Plan suggested nine-fold increase in the outlay for higher education and proposals for many new central institutions. This moved higher education ‘from the government’s peripheral interests to key agenda.’ (Agarwal, 2009) The 12th Five Year Plan (2012-17) has considered inclusive and qualitative expansion of higher education as its major thrust area. “The enormity of the challenge of providing equal opportunities for quality higher education to ever-growing number of students is also a historic opportunity for correcting sectoral and social imbalance, invigorating institutions, crossing international benchmarks of excellence and extending the frontiers of knowledge. The 12th Five Year Plan shall focus on utilizing this historic opportunity of expansion for deepening excellence and achieving equal access to quality higher education” (UGC, 2011) Prime Minister Narendra Modi also has given prime importance to the skill formation.

1.6 Profile of Indian Education System

1.6.1 Literacy

<table>
<thead>
<tr>
<th>Census Year</th>
<th>Persons %</th>
<th>Males%</th>
<th>Females%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1951(5+)</td>
<td>18.3</td>
<td>27.2</td>
<td>8.9</td>
</tr>
<tr>
<td>1991(7+)</td>
<td>57.2</td>
<td>64.1</td>
<td>39.3</td>
</tr>
<tr>
<td>2011</td>
<td>73</td>
<td>80.9</td>
<td>64.6</td>
</tr>
</tbody>
</table>

*Source: Educational Statistics at a Glance (2016), MHRD*

Almost fourfold increase in the overall literacy percentage was achieved in the six decades. Though percentage of female literacy is still very low, it shows almost sevenfold increase compared to what it was in 1951. Surely, figures in 2021 census will show substantial positive change in percentage terms for all the three categories. There is also a flip side to this progress. In 1951, when population was about 36 crores, about 81.7% were illiterate that was 31.68 crores. In 2011 population was about 121 crores and 27% were illiterate that was about 32.67 crores.
crores. This implies, though literacy percentage has improved, the absolute number of illiterates had almost remained the same. At present, India is having the highest number of illiterates.

1.6.2 Primary and Secondary Education

Annual Status of Education Report (ASER) has consistently reported the poor performance of school children in basic academic skills—ability to read, write, and calculate. As per ASER 2015: Maharashtra, about 52% students in class V could not read a text book meant for Class II students. (Pratham, 2015) In 2012, students from Tamil Nadu and Himachal Pradesh (Both States classified as educationally above average in the Indian context) took the Programme for International Student Assessment (PISA) test conducted by the OECD. The two states were at the bottom, ranked 72nd and 73rd out of 74 (Chhapia, 2012). The former principal of a well-known school remarked, “Education is confused with certification. That students survive a joyless system is a tribute to their resilience…the system is so hugely “content driven” that all that the marks reflect are a student’s ability to absorb and spew content, and the teacher’s ability to “teach to the test” (Lahiri, 2017).

According to the data presented in Lok Sabha, the highest number of vacant positions out of sanctioned posts in secondary schools (71.73%) and primary schools (83.9%) are in Jharkhand. All India average is 14.8% at the Secondary level and 17.51% at the Primary level. There are in all nine states having vacancies above national average, that also includes Gujrat. (The Economic Times, 2016)

Over one lakh (105630) government schools elementary/secondary in India have just one teacher according to the Annual Report 2014-15 of MHRD. According to RTE Act guidelines, there has to be one teacher for every 30-35 students in government/private schools. But the state governments flout these norms. Madhya Pradesh has the highest number of such schools, followed by Uttar Pradesh, Rajasthan, Andhra Pradesh, Jharkhand (Kumar, 2016).
Centre for Budget Governance and Accountability (CBGA) and Child Relief and You (CRY) conducted a survey in Maharashtra and found, the state dedicates around 40% of its budget towards private-aided and unaided schools, even though 69% of all elementary schools are government-run. The trend is almost same for the last 4 years. This affects the quality of education in the government schools. Similarly, teacher training is non-priority area. Only 0.4% of the school -education budget was earmarked for training. 0.5% for inspection and monitoring. Teachers’ salary marked the biggest component of the budget with 69% (Sahoo, 2017). About 14.5% of schools are without drinking water facility. About 3.1% schools don’t have toilet facility. In 7.8% schools there were no separate toilets for girl students (Loksatta, 2017).

As per the census report student population has increased by 30% in the ten years period from 2001 to 2011. The surge is mainly due to increase in the participation of girls. In India student population is 72 % in the age group 5 to 19. But enrolment share of all religions is not equal (% relevant age group students enrolled out of the total belonging to that religion). The highest enrolment is that of Jains (88%) followed by Christians (80%), Buddhist (79%), Sikhs (77%), Hindus (73%), others (68%) and Muslims student population was the lowest-(63%). But Muslims have shown remarkable positive change in the enrolment of student population in the ten years period (44%) (Varma, 2016)

<table>
<thead>
<tr>
<th>Level/Year</th>
<th>Primary</th>
<th>Upper Primary</th>
<th>Secondary</th>
<th>Senior Secondary</th>
<th>College</th>
<th>University</th>
</tr>
</thead>
<tbody>
<tr>
<td>1950-51</td>
<td>209700</td>
<td>13600</td>
<td>na</td>
<td>7400</td>
<td>578</td>
<td>27</td>
</tr>
<tr>
<td>1990-91</td>
<td>560900</td>
<td>151500</td>
<td>na</td>
<td>78900</td>
<td>5748</td>
<td>184</td>
</tr>
<tr>
<td>2014-15</td>
<td>847100</td>
<td>425100</td>
<td>135300</td>
<td>109300</td>
<td>38498</td>
<td>760</td>
</tr>
</tbody>
</table>

Source: Educational Statistics at a Glance (2016), MHRD
Institutions at all the levels show dramatic increase in number in the 65 years. Increase in case of institutions of higher learning is substantially more in the post 1991 era.

1.6.3 Higher Education

Indian education system suffers from typical problem of the ‘dualistic structure’ described by the famous economist Prof. W.A. Lewis. At one end there are world class institutions like IITs and IIMs and at the other end schools without basic infrastructure like toilets, drinking water are very common especially in the rural areas. The growth of the student intake capacity of technical institutions has increased by 28% between 2011-12 to 2015-16 was reported by The Times of India. This is a good sign for a country waiting eagerly for encashing its demographic dividend. On the same page of The Times of India, there was also a news head line- ‘lack of toilets forces 200 Jharkhand girls to quit school’ (Shridhar, 2015)

The education system in India followed the Nehru Mahalanobis model of the earlier Five Years Plans. Commanding heights of education such as IITs, IIMs were built by the State. In the capital scarce economy, it inadvertently implied neglect of primary and secondary education. High quality higher education system needs to be evolved over a period of time as a sequel to the high-quality primary and secondary education system. These commanding heights of higher education in India became islands of excellence and could not create a trickledown effect for the rest of the higher education system.

1.7 Key Results of the All India Survey of Higher Education 2015-16

Findings of the All India Survey on Higher Education (AISHE) 2015-16 conducted by the Ministry of Human Resource Development (MHRD) are summarised below. Institutions covered by the survey are categorized in 3 broad Categories: University, College and Stand Alone Institutions. There are 799 Universities, 39071 colleges and 11923 Stand Alone Institutions listed on AISHE web portal and out of them 754 Universities, 33903 Colleges and 7154 Stand Alone Institutions responded during the survey.
1.7.1 Universities

According to AISHE (2015-16), 277 universities are privately managed and 307 universities are located in the rural area, 14 universities are exclusively for women. There is 1 Central Open University, 13 State Open Universities, 1 State Private Open University and 118 are Dual Mode Universities. Out of total universities 459 are General, 101 Technical, 64 Agriculture and Allied, 50 Medical, 20 Law, 11 Sanskrit and 7 are Language Universities.

1.7.2 State Profile of Colleges

In the year 2016, the top 8 States in terms of highest number of colleges in India are Uttar Pradesh, Maharashtra, Karnataka, Rajasthan, Andhra Pradesh, Telangana, Tamil Nadu and Madhya Pradesh. Bangalore district tops in terms of number of colleges with 970 colleges followed by Jaipur with 616 colleges. Top 50 districts have about 34% of colleges. College density, i.e. the number of colleges per lakh eligible population (population in the age-group 18-23 years) varies from 7 in Bihar to 60 in Telangana as compared to all India average of 28. As per the survey, 60% colleges are located in the rural area. About 78% Colleges are privately managed; 64% Private-unaided and 14% Private aided. Andhra Pradesh and Telangana have more than 80% Private-unaided colleges and Tamil Nadu has 76% private-unaided colleges, whereas Bihar has 13% and Assam has only 10% private-unaided colleges. Among all 11.1% colleges are exclusively for women. About 22% of the colleges are having enrolment less than 100 and only 4.3% colleges have enrolment more than 3000.

1.7.3 Enrolment in Higher Education Institutions

Total enrolment in higher education has been estimated to be 34.6 million with 18.6 million boys and 16 million girls. Girls constitute 46.2% of the total enrolment. Gross Enrolment Ratio (GER) in Higher education in India is 24.5%, which is calculated for 18-23 years of age group. GER for male population is 25.4% and for females, it is 23.5%. For scheduled castes, it is 19.9% and for scheduled tribes, it is 14.2% as compared to the national GER of 24.5%. Share
of female students is lowest in Institutions of National Importance. Distance enrolment constitutes about 11.05% of the total enrolment in higher education, of which 46.3% are female students. The survey states that about 79.3% of the students are enrolled at the undergraduate level programmes. About 0.4% students are enrolled for Ph.D. Programmes. Maximum numbers of Students are enrolled in B.A. programme followed by B.Sc. and B.Com. programmes. Only 10 Programmes out of approximately 180, cover 83% of the total students enrolled in higher education. At undergraduate level the highest number (40%) of students are enrolled in Arts/Humanities/Social Sciences’ courses followed by Science (16%), Engineering and Technology (15.6%) and Commerce (14.1%). At Ph.D. level, maximum number of students are enrolled in Science stream followed by Engineering and Technology. On the other hand, at the Post Graduate level maximum students are enrolled in Social Science stream followed by the Management stream. Uttar Pradesh is at number one with the highest student enrolment followed by Maharashtra and Tamil Nadu.

Scheduled Casts students constitute 13.9%, Scheduled Tribes students 4.9% and Other Backward Classes 33.75% of the total enrolment. About 4.7% students are Muslims and 1.97% are from other minority communities. Besides gender and caste disparities highlighted in the survey, disparities also exist between rich and poor, rural and urban population and among different religious groups. Enrolment of Muslims is particularly low compared to others. Similarly, enrolment in rural area is one third or one fourth of that of in urban area. There is also inter-state variation in enrolment. The north-eastern states, Bihar have much lower enrolment in higher education than the national average. About 78% colleges are in the Private sector; aided and unaided taken together catering to 67% of the total enrolment.

<table>
<thead>
<tr>
<th>Table 1.3 Enrolment: Management, Gender and Course Type</th>
</tr>
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<tbody>
<tr>
<td>Level</td>
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</table>

### Profile of Teachers

The estimated total number of teachers is 15,18,813. Out of which, about 61% are male teachers and 39% are female teachers. At all-India level there are merely 64 female teachers per 100 male teachers. Pupil Teacher Ratio (PTR) in Universities and Colleges is 21 if regular enrolment is considered.

### Financing Higher Education

Kothari commission (1967) recommended allocation of 6% of national income to education out of which one fourth or 1.5% should be earmarked for the higher education. All the successive commissions/committees such as National policy on Education1986/92(Rammurti Committee), Punnaya Committee (1992-93), National Knowledge Commission (2005-08), Draft New Education Policy2006 have endorsed the view of the Kothari Commission. Even then the public expenditure on education has always remained in the range of 3-4%. Those who believe in the strong link between education and economic development are of the opinion that had the government consistently spent 6% of national income on education for the last seven decades, it would not have had any finance related problems. Interestingly, though education gets very small share in the total expenditures (about 10%), it gets lion’s share in the expenditures on social services (about 40%).
According to the Principal Financial Wellbeing Index 2015, among the Indian Households, 65% of the respondents said education was the first priority in the household budget. To construct this index a study was conducted jointly by Mint, a Financial daily and Nielsen and Company in the 11 major cities of India among salaried or self-employed. Another survey conducted by Aviva Life Insurance Company India Ltd. and reported by Mint, indicated that parents are not planning financially enough for their children’s education. Only 24% parents surveyed from seven cities in India were planning for their child’s education. In Mumbai 28% parents were planning financially for their children’s education. (Mint, 2016). As per the NSS 71st Round Report (January 2014 to June 2014), the household expenditure on education (Primary and above) per student for both general and technical/professional has increased substantially in the last decade. It was Rs. 2,461 per student in 2007-08 and increased to Rs. 6,788 per student in 2014 indicating an increase of about 175% (MSPI, 2016). Findings of the report are also discussed in the Chapter 5.

### 1.8 International Comparison

With one of the youngest populations in the world, India can create a fourth of skilled global work force. On 30 August, 2008, while speaking at the function organised for presentation of the National Awards to Micro, Small and Medium Enterprises, the former Prime Minister

<table>
<thead>
<tr>
<th>Year</th>
<th>2014-15</th>
<th>2015-16(RE)</th>
<th>2016-17(BE)</th>
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</thead>
<tbody>
<tr>
<td>Expenditure (Rs. Crore)</td>
<td>3,53,589</td>
<td>423171</td>
<td>474672</td>
</tr>
<tr>
<td>As percentage of GDP</td>
<td>2.8</td>
<td>3.1</td>
<td>3.2</td>
</tr>
<tr>
<td>As Percentage of total expenditure</td>
<td>10.8</td>
<td>10.6</td>
<td>10.7</td>
</tr>
<tr>
<td>As percentage to total expenditure on social services</td>
<td>46.1</td>
<td>42.2</td>
<td>42.5</td>
</tr>
</tbody>
</table>

**Source:** Economic Survey 2016-17 Volume 2, GoI
Manmohan Singh said, “Education and skill development can be India’s Global opportunity”. To reap this opportunity India must develop true knowledge based society by making provision of universal access to quality education up to at least higher secondary level. India’s poor performance stands out when compared with its peers -other Asian countries as well as other emerging market economies especially in case of literacy levels. As of 2012, about one fourth of India’s population was still illiterate compared to 4% in China, 5% in South Africa, 2% in Turkey. About 50% of Indian Population had only primary education or less, compared to 38% in China, 24% in South Africa and 20% in Turkey. But the 13% of population with tertiary education compares well with 10% in China, 14% in South Africa and 15% in Turkey. India spends disproportionately high on higher education per student compared to that of its Asian peers. The ratio of per student expenditure in tertiary relative to primary education is less than four in Malaysia, two in Indonesia, one in Thailand and Korea. In India it is over nine.(Mundle, 2016) In matters of public expenditure on education, Brazil spends 5.2%, South Africa spends 6.9 of GDP on education in spite of much less incidence of poverty compared to that of India(The Economic Times, 2016). India has slipped three places to the 92\textsuperscript{nd} position on a Global Index of Talent Competitiveness that measures how countries grow, attract and retain talent. India’s rank is worst among the BRICS countries (The Economic Times, 2017). The latest UNESCO Report on Education says that India will be late by half a century in achieving its global education commitments listed in the United Nations’ 2030 Sustainable Development Goals. India’s hopes of reaping the demographic dividend in the next 20-30 years might be difficult to achieve if this prediction were to prove true. (Mint, 2016)

1.8.1 GER and Public Expenditure on Education

<table>
<thead>
<tr>
<th>Countries</th>
<th>Gross Enrolment Ratio(GER)*</th>
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(Mint, 2016)
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<thead>
<tr>
<th>Country</th>
<th>Primary I-V</th>
<th>Lower Secondary VI-VIII</th>
<th>Upper Secondary IX-XII</th>
<th>Tertiary</th>
<th>Public Expenditure on Education as % of GDP*</th>
</tr>
</thead>
<tbody>
<tr>
<td>India</td>
<td>101.4</td>
<td>89.3</td>
<td>62.5</td>
<td>23</td>
<td>4.13</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>111.9</td>
<td>76.1</td>
<td>44.7</td>
<td>13.4</td>
<td>1.97</td>
</tr>
<tr>
<td>Nepal</td>
<td>135.2</td>
<td>90.4</td>
<td>49.7</td>
<td>15.8</td>
<td>4.71</td>
</tr>
<tr>
<td>Pakistan</td>
<td>93.6</td>
<td>55.9</td>
<td>31.1</td>
<td>10.4</td>
<td>2.47</td>
</tr>
<tr>
<td>Sri Lanka</td>
<td>101.3</td>
<td>99.7</td>
<td>99.1</td>
<td>20.7</td>
<td>1.62</td>
</tr>
<tr>
<td>China</td>
<td>103.9</td>
<td>100.4</td>
<td>88.8</td>
<td>39.4</td>
<td>na</td>
</tr>
<tr>
<td>Germany</td>
<td>103.3</td>
<td>101.6</td>
<td>104.6</td>
<td>65.5</td>
<td>4.93</td>
</tr>
<tr>
<td>Russia</td>
<td>98.6</td>
<td>98.7</td>
<td>105.1</td>
<td>78.7</td>
<td>4.15</td>
</tr>
<tr>
<td>South Africa</td>
<td>99.7</td>
<td>94.9</td>
<td>93.1</td>
<td>19.7</td>
<td>6.05</td>
</tr>
<tr>
<td>UK</td>
<td>108.2</td>
<td>112.7</td>
<td>138.2</td>
<td>56.5</td>
<td>5.68</td>
</tr>
<tr>
<td>USA</td>
<td>99.5</td>
<td>101.9</td>
<td>93.2</td>
<td>86.7</td>
<td>5.22</td>
</tr>
</tbody>
</table>

Source: Educational Statistics at a Glance (2016), MHRD, GoI
* The Gross Enrolment Ratio (GER) for a class-group is the ratio of the number of persons in the class-group to the number of persons in the corresponding official age-group **GDP in the year 2014

In case of primary education India’s GRE is satisfactory. But in case of lower secondary and upper secondary a lot needs to be done. India fares badly here not only compared to that of developed countries and China but also vis-a-vis a tiny South Asian country like Sri Lanka. In case of the tertiary sector enrolment, India’s performance is better than many SAARC countries but it is much less than some of the emerging market economies like China and Russia. Gross Enrolment Ratios indicate only the quantitative expansion at the respective levels of education. The quality aspect of education is equally important to link education efforts at macro and micro level to the economic progress. A class 12 standard topper from Bihar said, political science, a subject she studied, is about cooking! (Times of India, 2016)

1.8.2 Human Capital

The Human Capital Report 2016 of The World Economic Forum has ranked 130 countries on the basis of their human capital. India ranks 105. This rank is comparable to that of low income countries, though India belongs to the lower middle-income category on the basis of its Per
capita Gross National Income (PPP). But India fares very well when it comes to quantitative achievements in higher education.

<table>
<thead>
<tr>
<th>Human Capital Rank</th>
<th>Country</th>
<th>Degree Holders (in thousands)</th>
<th>Science, Technology, Engineering, Mathematics) STEM Graduates (in thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td>105</td>
<td>India</td>
<td>77950</td>
<td>2575</td>
</tr>
<tr>
<td>71</td>
<td>China</td>
<td>77670</td>
<td>4666</td>
</tr>
<tr>
<td>24</td>
<td>US</td>
<td>67448</td>
<td>568</td>
</tr>
<tr>
<td>4</td>
<td>Japan</td>
<td>38988</td>
<td>195</td>
</tr>
<tr>
<td>28</td>
<td>Russian Federation</td>
<td>29145</td>
<td>561</td>
</tr>
<tr>
<td>72</td>
<td>Indonesia</td>
<td>17451</td>
<td>206</td>
</tr>
<tr>
<td>Others</td>
<td></td>
<td>313457</td>
<td>3372</td>
</tr>
</tbody>
</table>

*India’s Ranks in the other Areas:* Labour force participation: 121st, Quality of education system: 39th, Staff training: 46th, Ease of finding skilled employees: 45th. *Source: The Human Capital Report 2016*

In terms of world university rankings for 2015-16 compiled by Times Higher Education, India’s performance is dismal. Not a single academic institution in India is included in the list of top 200 academic institutions in the world. There are only two—Indian Institute of Science, Bangalore, and Indian Institute of Technology (IIT) Bombay—in the top 400. There are five more IITs in the 401-600 rankings and just six universities in the ranks 601-800. One may question the methodology of ranking and say that it suits more to capital intensive developed countries. Even then, it is obvious that our universities have miles to go before reaching the world standards. Our students need to compete in the globalised world. Poor quality education may prove to be a severe handicap in this regard.

**1.9 Higher Education: Quality, Equality, Employability**

**1.9.1 Quality**

“The number of students from India going abroad for higher education has increased from roughly 50,000 in 2000 to 200,000 in 2010 and 350,000 in 2015. It is estimated that, in 2015, around 40% went to the US, 20% to the UK, while 25% went to Canada, Australia and New
Zealand. If their average expenditure on fees and maintenance is $25,000 per student per annum, Indian students overseas are now spending approximately $9 billion—the equivalent of Rs. 60,000 crores at the current exchange rates—every year!” (Nayyar, 2016).

Till late 70’s most of the education in India was grossly subsidised as the government was the major player on the supply side. With very little monetary investment one could get a university degree that may not do much value addition in terms of employability, but definitely would enhance once social status especially the status in the marriage market. Till mid 1970s government could bear the tremendous pressure of increased demand for the subsidised higher education. During this period ‘expansion’ was the buzz word and quality of public sector education (government run/private aided institutions) at all levels started deteriorating. After mid 1970s the government spending on education in percentage term started stagnating. But the demand for education and especially for prestigious degree programmes was ever increase. Unaided private educational institutions of higher learning emerged to absorb the unmet demand for higher education. Private unaided primary and secondary education was always available even in the pre-independence period. New wave of entrepreneurs emerged in the field of higher education in the 1980s; many of them had strong link with the local politicians.

Private education has flourished in ‘low-risk high profit segments of higher education’. These institutions also prefer to function in a non-transparent manner and tend to be exploitative. Accessibility to education has increased because of the private players but on the quality issue very few private institutions deliver what they promise at the time of admission. So, whether public or private, quality of education has deteriorated over a period of time. In case of public sector institutions, it deteriorated because of shortage of funds and almost zero accountability as these institutions always operated in the seller’s market and in case of private unaided institutions because of excessive greed to increase profits. Till 1980’s higher education was a quasi- monopoly of the government. Telecom, civil aviation were also monopolies of the
government in the pre-LPG era. Liberalisation of telecom, civil aviation has benefited the consumers in the last two decades. The competition between private and public sector helped to improve the quality of both these sectors. But same is not true in case of education. Quality of private as well as public sector higher education is equally bad barring the few exceptions in both the sectors. Students prefer public sector higher education institution as they charge less fees. In case of the private unaided institutions they have to pay substantially more with no guarantee of better quality. Income Tax Department raids on the educational institution, especially on unaided private colleges running professional courses, to unearth the black money collected as capitation fees and donations from students is a common news item. Leaking of question papers and other corrupt practices in the examination conducting bodies of the universities get reported almost every year.

Public sector institutions bring in ‘crowding out effect’ in case of teacher recruitment. Teachers always give the first preference to jobs in public sector institution over unaided private sector as the pay scales in most of the private unaided institutions are lower than that of the public sector. Besides public-sector job comes with its implicit feature – ‘ease of doing a job’. The accountability is less in the public sector once teacher gets a confirmed post. Private sector needs to offer substantially more salary than that of public sector to attract good quality public sector teacher. This will necessitate fee hike at commercially non-feasible level. The low quality of education in the private unaided institutions is a built-in feature because these institutions cannot attract quality teachers by offering better pay scales as that will reduce their profits substantially. In 40% private engineering colleges in Maharashtra, contract teachers were not paid salary for three months by the management. This was because the government did not reimburse the subsidy amount of the fees that was given to the socially disadvantaged students at the time of admission. (Acharya, 2016)
At the most, some private colleges promise the sixth pay commission salaries that are on par with the public-sector colleges. That is why the attrition rate among private college teachers is very high. The quality of public sector college teachers is bad because of low motivation, almost no direct accountability to the pay master (the government) and faulty incentive/disincentive structure. To increase the accountability, government goes to the extreme and tries to micro manage the system that results in excessive standardization and one size fits all approach that has a little impact on the accountability. “This (policy) is motivated by the desire to exercise political influence in higher education for patronage, ideology, rents, or vested interests.” (Nayyar, 2016) Such policies kill initiative, innovative spirit and creativity of the teachers. Leadership deficit is another major problem of the public-sector education system. Administrative/managerial talent is grossly different from what makes one a good teacher. The principals of the colleges or the Vice chancellors of the universities are normally chosen from the teachers. This denies the colleges/universities the advantage of having a professional managers/administrator at the helm of the affairs. In all the major universities of the world, teachers are separated from the purely administrative tasks and given a free hand in the academic matters. The teacher -principal/vice chancellor concept also breeds the type of teachers that are least interested in their academic duties and are majorly interested in climbing the power ladder.

1.9.1a. Shadow or Parallel Education System

As per the NSS 71st Round Report 26% of students were taking private coaching combining all levels of education. Incidence of taking private coaching was maximum at secondary and higher secondary levels combined. It was 38% for male and 35% for female students. (MSPI, 2016). Coaching classes have reduced the goal of education to one single pursuit-scoring maximum marks in the examination. The evaluation methods at school/college/university are absolutely compatible to the teaching methodology of tuition classes. Rote
learning under the guidance of tuition class teachers assures high scores in the examinations. High scores are required to get admission in one of the best colleges. This is education without ‘learning’. The education is reduced to the level of screening or filtering mechanism. Precious energy and time of the children get wasted on collecting credentials that hardly enrich their life in the true sense of the term. They are left with very little time and energy to play/exercise or pursue any creative activity as a hobby.

Private tuition classes of big players are promoted frequently with the full-page advertisements in the national newspapers. This is enough to prove the turnover of this business and also hints at the strength of the private tuition industry that can be used to influence the decision makers in the education system. While describing the damage that commercialization is causing to education on all dimensions, the Draft of NPE 2016 stated, “The point in short is that the system is largely sick, and needs rejuvenation—the quality of education, which is critical, has been the main casualty thereby converting the sacred process of education to an unregulated commercial system.” It adds later “…the harsh reality in the ground is that capitation fees, akin to rent-seeking, is rampant. The committee was informed informally that large amounts, at times unbelievably high, are the ‘going rate’ for appointment of a vice chancellor… The committee also notes that investments in professional institutions frequently have the blessings or sponsorship or patronage, indeed ownership, of politicians of various hues—imagine their potential collective power and vested interests in ensuring that no reforms can be pushed through. In short, the ground reality is diametrically opposed to any notion of the ‘purity’ of education. Drastic changes are imperative to clean up the system” (MHRD,2016)

About 69 students committed suicides in six years (2010-16) at the stress chambers of Kota, as they couldn’t cope with the stressful regime of the coaching ‘factories’ that train students for IIT-JEE, without pre-testing their aptitude for the examination. Kota a small town in Rajasthan has about 130 coaching institutes. In 2011, South Korean coaching giant Etoos invested about
Rs. 30 crores to set up centres in Kota. Industry is estimated to be worth of 30000 crores. Top coaching schools pay about 1.5-2 crore salary per year to their star teachers. Clones of Kota coaching industry have mushroomed in all the big cities of India, promising success in some prestigious entrance examination. (Dey, 2016) Poor quality of teachers is one of the major reason cited frequently for the deterioration in the quality of education. It is also to some extent responsible for rapid growth of private coaching industry. Due to shortage of qualified faculty less qualified teachers are appointed. This is partially true. Private as well as public educational institutions appoint large proportion of teachers on the contract basis as it is cost saving. The government in its efforts to downsize public sector education discourages new appointments after retirements. About 30-50 percent positions in most of the institutions are vacant and filled by contractual appointments.

1.9.1b Devaluation of Degrees

Stiff competition in the employment market created education products that promised to enhance employability. Increased access to education also brought in decline in its status value. So, to maintain the earlier level of social status, higher income groups now need still higher levels of education. For instance, engineering degree from any public university was once considered as a respectable qualification but the excessive supply of engineers has reduced their employability. So many of them now enrol for MBA programme to increase their employability. In fact, urban higher middle-class children now aspire to get a foreign degree and employment in the foreign country. Parents spend about 30-50 lakhs for the foreign university Post graduate education. Situation for lower income group graduates is miserable. Education has for long been a key to move up the economic and social ladder. There can be no equality of opportunity without equal access to quality education. Increased household expenditure on education due to the deterioration in its quality increases the disparities among students belonging to the different income groups.
The increased expenditure on education is just a symptom like body-fever. Deep pathological examinations of the education system indicate the chronic problems and systemic dysfunction that needs structural transformation. This issue is elaborated in the chapter VII. Not every problem is because of education system per se. Education system itself is the creation of the society around and in turn also can shape the society.

1.9.2 Equality

One of the major challenges that India faces today is- how to achieve ‘inclusive growth’ in the market oriented economy?

According to the latest Suisse Survey, the richest 1% Indians now own 58.4% of the country’s wealth. The trend of rich getting richer at a faster pace, is observable in India especially in post 2000 period. India’s Gini coefficient of wealth inequality for the year 2016 is as high as 87.6%. India is one of the most unequal countries of the world only next to Russia in the emerging market economies. (Chakravarti,2016) Study by the Oxfam also confirmed the same observations. According to Oxfam this is the global trend. Globally, top 8 rich persons have the same amount of wealth as poorest 50% of the world population. (Times of India,2017) In his article on poverty and inequality in the post reform period, Mahendra Dev has concluded that poverty has reduced as a combined effect of rapid economic growth initiated by the reforms, safety-net programmes such as MNREGA, increase in rural non-agricultural employment etc. Around 138 million people were lifted above the poverty line during the period 2004-05 to 2011-12. But the Gini coefficient calculated on the basis of income distribution (consumption based Gini coefficient underestimates inequality) shows a sharp increase in the post reform period. It was 0.52 in 2004-05 and increased to 0.55 in 2011-12. Inequalities between the poor and rich are much higher if non-economic indicators like
education and health are considered. For reduction in poverty and inequality the two most important measures need to be given the top priority - creating productive employment and providing quality education. (Dev, 2016)

Within India poverty is not evenly distributed across various social groups. Poverty is the highest among the scheduled tribes and scheduled caste population. About 43% of ST and 29% of SC are observed to be below poverty line. At all India level, 25.7% live below poverty line. (The Economic Times, 2016) In Maharashtra 61.6% of rural ST population lived below poverty line in 2011-12. The tribal population below poverty line has gone up in Maharashtra in the period 1993-94 to 2011-12 though there was overall decline in the below poverty level persons in the state as well as in India (Shaikh, 2016). As per the data collected by the Unified District Information System for Education (UDISE) about 2-3 lakh students (about 20%) in a Maharashtra after tenth standard get leaked out of education system (Muley, 2016) At vanicha pada, an Adivasi village in Goregaon’s Aarey Milk Colony (part of Suburban Mumbai) has been one of the educationally most deprived area of Mumbai. Out of 250 residents of the village only about 20-25 adults have been to school that too below 10th standard. There are 28 such villages in the vicinity. (Baruah, 2016)

NSS 71st Round data highlights access to education at various levels. According to report the basic literacy is increasingly available to all but the gulf between the poor and the rich widens as you go up the education ladder.

Privatisation of education has increased the supply of education but at the at the cost of affordability. Unaided college seats in Maharashtra have exceeded the aided seats. (Chhapia, 2016) Fees in the aided colleges for the conventional graduation programme is around Rs.5000 per year but for the same programme in the unaided college affiliated to the state university, it is around Rs.16000-20000 per year. In private universities, this fee can go up to 1.5 -2.5 lakhs per year. The situation is worsened by the fact that many aided colleges are
running unaided/self-financing programmes with the fancy nomenclature. The students are motivated by the management of these colleges to join these new self-financing programmes that are advertised to be more job orienting. Many of these new self-financing programmes are old wine in the new bottle. The colleges recruit underqualified faculty on the contract basis, at a very low salary level, to run these so called innovative programmes. These programmes are not self-financing in true sense of the term as they share same infrastructure that is part of the aided system. Say for example, students having flare for languages are encouraged to join BMM. Similarly, commerce students are motivated to get into BMS or BAF or similar such courses. Science students interested in Biology are motivated to join BSc Biotechnology, Biochemistry, Bioanalytical Sciences etc. Most of these are hotchpotch programmes that make student study many subjects at the superficial level. The employability of students depends on many things and the courses studied at the undergraduate level is just one of them. The placement cell in charge of one the very reputed college narrated one incidence. He said one media related company categorically mentioned that it wants to recruit graduates in English literature and so BMM students should not be sent for the interview. The pay packages offered to some of the BA/BCom/BSc degree holders from reputed aided colleges are more than what is offered to BMS/BMM/BAF degree holders from not so reputed colleges. It is not just the title of the degree programme that fetches the high paying job but the brand value of a specific college or quality of the programme matters equally. Some of the self-financing programmes do help to save parents money. BSc Computer science/IT programme is self-financing but much cheaper than doing engineering programmes in the same field and employability of these programmes if done from good college is comparable or better than that of engineers from not so reputed colleges.

1.9.3 Employability: Returns on Education
Household Survey on India’s Citizen Environment & Consumer Economy (ICE 360° Survey) covered 61000 households. It is the largest consumer economy survey in India since the NSSO conducted the last consumer survey in 2011-12. The survey indicates a strong association between education and household earnings. The data also suggests that college education raises the likelihood of earning more. This association is explained with the inter-quintile comparison of income groups. The survey found the direct relation in case of most of the households, between income level and education level of the major bread winner. For instance, households with matriculate bread winner earns 39% higher than households where major wage earner has primary school education. Similarly, households where the chief wage earner is graduate earned 34% more than households where the bread winner is just XII standard pass. Major bread winner in households at the bottom of the income pyramid have very little education. Even the ‘Middle India’ (those located between the 20th and 80th percentiles of income distribution) is largely composed of those who lack secondary school education. Households with an illiterate bread winner constitute 25% of middle India, while 47% of households in Middle are those where the bread winner has just completed primary schooling. The proportion of graduate bread-winners is significantly higher in the top income groups than in the lower income groups. Top twenty percent has 19% households where major bread winner is graduate. Bottom 20% had 2% household where major bread winner is graduate. (Bhattacharya,2016)

1.9.3 a. Successful Career - the Most Precious Asset

An article in The Times of India, advising investors on various investment avenues stated- it is not gold, real estate, stocks or bonds; the biggest financial asset is one’s career…in one’s chosen career how well one performs will decide how much wealth one creates in his working life. A well performing career is the ‘mother of all assets’ that helps create other assets but the reverse is not possible. In thirty years period 1987-2016 returns on Gold were 9.8%; Returns on shares /Sensex 13.9%(proxy for return on shares) and potential return from career are :5-
20%. (The Times of India, 2017) The choice of career has a strong link with one’s aptitude but also with one’s socio-economic background. Family background influences to a great extent the amount of money that gets invested in career making or in education that promises prosperous career. But merely high investments in education does not promise a good career or prosperity. For instance 1.5 lakh seats of engineering are vacant in Maharashtra (Acharya, 2016) The situation is not better in other states of India. The households have heavily invested in their children’s education and sent them to engineering colleges but very few will be able to get into their aspired career. Every year about 8 lakh engineers enter the employment market. Out of that 60% fail to get any job as an engineer.

Nature of demand for higher education in India has changed substantially. The Economic Times reported on 21 August, 2015, “Generation Y Veers off the Regular Trail …Opts For New-age Careers.” At least 75% students prefer to go in for new-age career options over traditional careers, a Career Guide.com survey to map career trends among students in metros and smaller cities has revealed. The survey was conducted with 5000 students in the age group of 15-21 across different cities, towns and rural areas to check on the trend and awareness of various career options and popular career choices and aspirations of Indian youth. The survey indicated the urban - rural divide as far as choices of career options are concerned. The youngsters in the metropolitan cities were more inclined towards new job orienting career options keeping with the employment market trait. In the semi urban area / rural areas students were either not aware of new type of courses or such courses were not available in their areas. (The Economic Times, 2016)

1.9.3 b “The 20-lakh queue.”

More than 20 lakh applications were received for around 20000 posts of safai karmachari (sanitation workers), advertised by the civic bodies of Uttar Pradesh. These are contractual appointments that can be terminated any time. The minimum education required is class 8 pass
but those holding MSc, M Com, MBA, Engineering Degree have lined up from Uttar Pradesh, Bihar, Jharkhand, Assam, Kolkata, Delhi, Mumbai. Not all those applied were unemployed but they were drawing salaries much less than Rs 17000 per month, promised salary of safai karmachari, working on the contract basis. (Mishra,2016) In 2015, 23 million people, including postgraduates and PhDs, applied for 368 peon posts advertised in Uttar Pradesh. “Why were highly educated people applying for a job which required only primary school education and knowing how to ride a bicycle, people asked?” (Kishore,2016) This is not a recent trend. About ten years ago in 2006, for the police constables’ posts in Maharashtra Engineers, MSc, MA candidates had applied when the required minimum qualification was 12th standard. (Khetan,2006) Quality employment eludes majority of India’s university educated. As per NSS 68th Round report unemployment is around 5% among the urban male graduates/ with higher degrees. (MSPI,2014) But the data does not record the quality of the employment. An engineer working as a delivery boy is not recorded as an unemployed. Not all with university education enter the labour market. A significant proportion remain voluntarily unemployed. The share of such people is as high as 38% and 26% among graduates and postgraduates, respectively. Reasons for doing so vary and include the pursuit of higher studies, engagement in domestic work, disability, being rentiers, pensioners, remittance recipients or become parasites. Gender seems to be playing an important role in determining whether one opts out of the labour force. The share of educated women opting out of the labour force is much higher than that of men. Seventy-one per cent of graduate and 56.5% of postgraduate women were not in the labour force, while the share of men not in the labour force in these categories was 17.8% and 10.7%, respectively. As is to be expected, more women opt out of the labour force for tending to domestic duties. However, what is intriguing is more women report doing so to pursue higher education as well. Jayan Jose Thomas, assistant professor of economics at IIT Delhi, explains this as a characteristic feature of India’s labour
economy. Women from poor households join the workforce to make ends meet, but as economic conditions improve, they opt out due to dearth of quality employment, says Thomas. (Kundu, 2017)

Lack of fluency in English prevents entry of vernacular medium students into the urban tertiary sector even though they may have good knowledge of their subject of specialisation. All this indicates that though higher education increases social status of the underprivileged students it fails to be an instrument of upward economic mobility in case of those who are socio-economically challenged. In fact, conventional education system is doing more harm than good to these students as far as their employability is concerned. Had they been less educated they would have readily accepted the jobs that are better paid and are easily available in big cities such as driver, cook, security guard, baby-sitter. Easy accessibility to higher education is considered to be a ‘safety net’ in the market oriented economy. This ‘safety net’ is not a life saving device for all the underprivileged but for some it is causes ‘suffocation’ and endangers their economic existence. At a recent roundtable on the future of employment in India, each participant was asked to bring an object that represented their outlook on the subject. To everyone’s amazement, a renowned Jawaharlal Nehru University economist brought a knife. He explained that if India continues to witness its historical pattern of employment, our streets may soon be taken over by unemployed youth brandishing knives! (Bansal, 2016) Overall, employment prospects aren’t exactly brilliant for a majority of those who manage to get into a university. It would seem that the employment problem has been aggravated, rather than resolved, by development outcomes in India over the past three decades. Rapid economic growth raging between 6%-8% during reform period had mixed results in the employment market. It created a situation where skill shortages and unemployment among the educated coexists. Besides due to the pressure of global competition, both public and private sector became cost conscious. Mounting pressure of fiscal deficit added still more negative pressure
on the public sector recruitment. So, labour is recruited only when it has decisive advantage over machine. New technology of 21st century created jobs mostly in the tertiary sector. Skill set required for these jobs are different from that of earlier available secondary sector jobs. Education system in India, entangled in its own problems failed to respond to the changing demands of the employment market. Macroeconomic policies aiming at stabilisation also aggravated the situation. Two main factors- labour and Capital never indicated their true market equilibrium prices in so called liberalised economy too. Wages paid to the organised sector labour and for the same work in the unorganised sector rarely showed any parity. Same can be said about the price of capital. In a capital scarce economy public sector banks are crushing under the burden of non-performing assets that got created because of the crony capitalism. Creation of new jobs requires capital that is not available easily. Those who could survive in the new wave that engulfed the employment market were self-motivated or were having the privileged background. Matters are worse for those who come from the disadvantaged backgrounds.

According to some estimates, India’s employment elasticity—the percentage point increase in jobs for every 1% increase in GDP—has been falling steadily over the past 10 to 15 years, and is lower than global and Asian averages. The future, too, does not look very promising. New technology like robotics and artificial intelligence is likely to be very disruptive. Service sectors like Telecom, IT and banking, which were hiring in large numbers until recently, may not require the same number of employees in the future. (Bansal2016)

1.9.4 Silver Lines in the Dark Cloud

Many vested interest in India would like to perpetuate current low level equilibrium of education system, but the status quo can be broken with political will and community support.
Mr. Anand Kumar from Patana, Bihar every year trains 30 students from economically weak background for the prestigious IIT-JEE examination. The programme is known as ‘Super 30’. Success rate among his students is more than 90%. (Mathew, 2016)

Fifty-five boys from remote and economically absolutely underdeveloped tribal zone of Madhya Pradesh (Jhabua) with literacy rate of only 43.3%, cleared IIT-JEE mains this year. This miracle was possible because of the initiative of a district collector who arranged quality teachers for these boys after their school hours. He used the government funds under different welfare schemes for this purpose. (Sirothia, 2017)

“In 2015, top 20% ITI graduates will earn more than bottom 20% engineers.” commented Manish Sabharwal, Chairman of Teamlease Services and Member NITI Aayog Committee on Entrepreneurship and Skills. (Rai, 2015) The National Skill Development Mission was launched by the Prime Minister in 2015 while inaugurating PM Kaushal Vikas Yojana (PMKVY), Prime Minister Narendra Modi said we want ITI and not IIT. As of today Maharashtra has the highest number of ITIs ,417 government and 454 private. About 1 to 1.5 lakh students are trained in these. About 79 different courses are conducted by these Itises and provide about 90% trained labour required by the industry. About 75% ITIs are in the rural areas. This ITIs need to be boosted. Redesigning of courses as per the changing requirements of the industry need to be undertaken. (Durgpurohit, 2016) Government initiatives like KAUSHAL, ‘Make in India’, ‘Stand Up India’, ‘Mudra’ are steps in right direction but are not adequate.

Post-2000, 84% IIT-B graduates stayed back in India: most prefer Mumbai. A survey by Insight, the students’ newspaper, reported that a significant, 40% of those who graduated before 2000 had settled abroad, but the number dropped sharply to less than 16% post-2000. (Times of India, 2016)
The India Skills Report 2017 stated employability of Indians has increased from 33.9% to 40.4% of students. Maharashtra has the highest number of employable people followed by Andhra Pradesh, Uttar Pradesh, West Bengal and Tamil Nadu. Though it is good news the flip side indicated that about 60% of the students are not employable. (Gupta, 2016)

Another recent trend especially in the urban non-professional colleges is campus recruitment drives through which even plain BA, BCom and BSc students are recruited and are offered reasonably good pay packages. It is the brand value of the college in the respective category that decides the number of recruits and the pay packages.

1.10 Objectives and Scope of Study

In this research, the household is treated as consumer of education and one of the major stakeholder of the education system. The explicit objective of the research is to measure various household expenditures on education. The implicit objective is to develop a deep insight into the major issues concerning the higher education in India.

Both the objectives have sub objectives that are listed below.

- To identify and measure various expenditures that are incurred by households while their family members are pursuing higher education in Mumbai.
- To find motivating factors behind these expenditures.
- To study association between socio-economic status of the household and various education expenditures.
- To understand how gender issues, affect various education expenditures.
- To find out accessibility of ICT at the household level.
- To explore views of the households on the certain policy issues such as education subsidy, Accreditation by NAAC and employment prospects.
• To collect the feedback from other stakeholders such teachers, recruiters, administrators of educational institutions and any other relevant body whether they consider higher education as a merit good.

• To suggest measures to improve quality of the higher education system.

Scope of Study

The sample of households is collected from different parts of Mumbai that fall under the jurisdiction of the Municipal Corporation of Greater Mumbai (MCGM).

1.11 Statement of the Problem

In the knowledge economy, construction and dissemination of knowledge is the most important productive resource. Education system plays a vital role in creation and dissemination of knowledge. So, access to education and its quality are major determinants that influence development efforts at the macro (at economy level) as well as at the micro level (household level). To achieve inclusive economic growth, the quality education must be accessible to all. Various measures to achieve the objective of accessible education have been discussed in almost all the government reports on education, published in the post 1991 period. These measures discuss availability, accessibility and affordability of formal education system. Also use of information and communication technology is discussed in the dispersal of quality education. In this discussion one major problem of the present education system gets pushed under the carpet. This problem is –inequality in the education system which is the outcome of unequal private household expenditures for the education of children (e.g. private tuitions or various types of coaching /grooming classes). Parents normally incur these expenditures to compensate for the quality deficit that exists in the formal education system or also to make children employment ready. As a result, two children having equal potentials, studying in the
same formal system may perform differently in their written examinations/interviews/project presentations etc. This study will primarily focus on differences in the various types of expenditures that exist between the ‘advantaged’ and the ‘disadvantaged’ groups. Various socio-economic features of the household are considered while identifying its advantaged/disadvantaged status. Expenditure on education can be considered as an investment and level of this investment depends on the income of the household. Inequality in the access to quality education can have a long term adverse impact on the development of the economy.

In Indian context education is one of the major determinants that will decide the magnitude of ‘demographic dividend’. The study also intends to give some suggestions to the major stakeholders in the education system that may help in the optimisation of their performance.

**Rationale Behind Study**

The present study is an inquiry to find out how inclusive our education system is in the true sense of the term. Access to education is supposed to be easy in the city like Mumbai as variety of aided educational institutions are available that assure affordability. The researcher is working in the field of higher education for the last three decades and has worked in different capacities such as faculty member, Vice-principal, Coordinator of Internal Quality Assurance Cell, armature career counsellor and also as a parent. So, the researcher had enough opportunity to interact with all the major stakeholders of the education system. This experience in the field of higher education helped the researcher in conducting the present study. The study is conducted in Greater Mumbai. Mumbai offers immense variety in the field of education as well as in the socio-economic profile of the households. The researcher has lived in different parts of Mumbai all her life and is familiar with the diversity of Mumbai. So, conducting a sample survey in Mumbai that covers all its diversity was not very difficult.

**1.12 Functional Definitions of Concepts**

**Household:** A household includes all the persons who occupy a housing unit.
**Language of the household:** Language of the household refers to the language members of the household use for communicating with each other.

**Religion of the household:** Religion of the household refers to the religion household has mentioned in the Census survey.

**Caste of the household:** Caste of the household refers to the caste household has mentioned in the Census survey.

**Vernacular medium school/college:** Vernacular medium school/college is a school/college where all the subjects are taught in a language other than English. Semi -English medium schools (where Mathematics and Science are taught in English medium after VIII standard) are also included in this category.

**School/college fees:** School or college fee includes all the compulsory expenses that need to be incurred once a child is admitted to the school or college. This includes actual fees paid to the school or college and also expenditure on books, stationary, uniform etc.

**Tuition/Coaching classes:** Tuition classes refer to all kinds of study help that is meant for facilitating study of academic curriculum prescribed by the school or college.

**Travelling expenditure:** Travelling expenses include all the expenses that are required to travel to and from school/college, tuition or any other career related activity.

**Outside food expenditure:** Outside food expenses include expenses on food that are incurred during school/college/tuition/ any other career related activity hours or while travelling for those activities.

**Cell phone expenditure:** Cell phone expenses include only the cell phone service usage charges and not the expenditure on the handset.

**Other Expenditure:** Other expenditures refer to all the expenditures not included in the list above but are considered essential to make child employment ready such as preparatory courses for the competitive examination viz. UPSC, CAT, GRE etc, part time / online courses to
develop additional skills, expenditures on grooming schools, hobby classes, coaching for sports, summer schools etc.

**Education subsidy:** Education subsidy refers to all the government expenditure that helps to keep the fees at the school or colleges at the level less than the unit cost of production of the service.

**Targeted education subsidy:** Targeted education subsidy means, fee structure at school and college level should be linked to the economic status or to some other criterion and is not given to all.

**Aided educational institutions:** These are institutions run by the government or by the private sector and receive funding from the government on continuous basis to run the institution.

**Unaided institutions:** These institutions do not receive any funds from the government.

**General Degree Programmes:** BA, BSc, BCom normally available at all the universities

**Self-financing Programmes:** These are the programmes run by aided or unaided institutions. No funding is received on continuous basis to run these programmes. The government may sanction a lump sum grant initially to start the programme but all the recurring expenses are to be borne by the institution/covered through fees.

**Period of Reference**

The study was conducted in the year 2015-16.

**1.13 Relevance of the Study**

Two major investors in education are - Government and Households. Macroeconomic objectives of education in democracy are to increase productivity of the human resources and develop enlighten citizenry that supports government efforts to bring in the positive changes in the economy, polity and society. Common Micro or household’s objectives are: to develop one’s value in the employment market and to increase one’s social status. The households use rule of thumb while making education related choices. Choose a school, students of which get
admission to the prestigious colleges. Choose a programme and college that gives advantage in the employment market. Household considers education as necessary investment to maintain or improve the standard of living of the family. In the globalised competitive world, several skills are required to have dignified survival. Education, especially good quality formal education is one of those skills. Parents try their level best to provide best possible education facilities to their children and are ready to spend beyond their means for this purpose. Even the government spends huge amount on education that has helped to maintain fee structure in the aided institutions at the affordable level. But this Government provision of affordable subsidised education is a kind of thankless job. This has increased accessibility to the education at all levels but in the process the quality of education got neglected. Majority of self-financing private sector institutions that charge much higher fees also do not fare exceedingly well on quality front as there is serious shortage of good quality, qualified teachers and also because most of the private managements do not pay well to the teachers. So, on the whole the system suffers from serious quality deficit. The households try to compensate for this quality deficit by accessing parallel education system. Both rich and poor, equally take recourse to the private coaching. This amounts to duplication of expenditure. What parents and the government spend on schools and colleges as subsidy/fees is almost getting wasted. No other commodity in the economy is purchased twice as it happens in case of education. This unnecessarily increases burden of education expenditure for all income groups but pinches maximum to the lower income groups. Besides this there are many other types of expenditures. These include travel, food, cell phone and ‘other expenditures’ mentioned above. Though the fees in aided educational institutions are not very high still parents feel education as one of the most expensive commodity due to all the supplementary expenditures mentioned above. All these extra or supplementary expenses on education make the mockery of the government claim that education at all levels in the government aided institutions is affordable in India. This situation
needs to be changed. The unnecessary burden of education expenditure that is either duplication of spending (e.g. tuition class fees) or does not add to the learning outcomes (e.g. expenditure on travelling, outside food etc) needs to be reduced. Similarly, affordable options should be made available in case of ‘other expenditures’ that are required to become employment ready. Purpose of this study is to suggest measures to reduce unnecessary burden of education expenditures in case of households as well as in case of the government. Governments at all the levels need to understand that quality of education does not necessarily improve with increased budgetary allocations. The government money needs to be spent more wisely. Similarly, parents/ students/ teachers also need to get out of the stereo typical thinking. Education at family level is treated as a holy cow and parents many a times tend to spend irrationally on their children’s education. The study also aims to suggest what needs to be done at the household level to reduce the burden of education expenditure. Teachers are the backbone of any education system and one of the most important determinant of the quality of the education system. The present study also discusses various issues related to teacher’s quality.

1.14 Methodology of Research

Major focus of the study involves collection and analysis of the primary data. Though focus of data collection is household expenditures on education, many other socio-economic variables are also given due consideration. The sample size is 400 households. These households, belonging to different income groups, are from different parts of Mumbai.

**Universe:** The universe consists of all the households in the Greater Mumbai having at least one child studying in the institute of higher learning (post higher secondary level)

**Sample:** The sample of 400 hundred households was collected from different parts of Mumbai. These households had 952 children studying at different levels of education and pursuing variety of degree programme.
Sampling Design: Convenience sampling

The Questionnaire

On the basis of the objectives, the first draft of the questionnaire was prepared. This questionnaire was discussed with various stakeholders such as students, parents, teachers, administrators and people from the industry. The second draft of the questionnaire was prepared on the basis of the feedback of the stakeholders and was pretested through pilot survey. The final questionnaire was prepared after completion of the pilot survey and all the relevant suggestions of the respondents were included in it.

Types of Variables Measured

1. The socio-cultural background of the household was measured through asking following questions-
   a. Language spoken at the household
   b. Religion practiced by the household
   c. Caste of the household
   d. Educational qualification of parents
   e. Migration status of the household and reasons for migration

2. The economic profile of the household could be traced by asking questions-
   a. nature of parent’s occupation
   b. Income of the household
   c. number of family members
   d. number of children in the family
   e. possession of vehicles
   f. access to computer and internet facility at home
3. Expenditure on education was divided into ten categories and expenditure on each child for each category was recorded. Then consolidated and per child expenditure for each category was calculated.

The categories of education expenditures were-

a. Fees at the three levels of education were recorded separately- school, higher secondary, post higher secondary

b. private tuition expenditures if any at the three levels recorded separately- school, Higher secondary, post higher secondary. Reasons for taking private coaching were also recorded.

c. travelling expenditure

d. outside food expenditure

e. cell phone expenditure

f. Other expenditures.

4. Households were also asked question about if they have ever borrowed money to finance education expenditure and who pays for the education.

5. How important is the education expenditure in the family budget was measured through asking two questions about-

a. rank of education expenditure in the family budget

b. Percentage income spent on education

6. Four questions were asked about education subsidy to ascertain households’ views on different aspects of the education subsidy

a. awareness of education subsidy

b. preference for targeted subsidy

c. criterion household would prefer to target the subsidy

d. form of subsidy that household would prefer
1.15 Method of Data Collection

The Primary Data

The present study is based on the primary data collected through the survey of households from Greater Mumbai. A detailed questionnaire is used for the data collection. Each question was explained to the respondents beforehand. All the questionnaires were filled in the presence of researcher so all the queries/doubts of the respondents could be solved immediately.

The Secondary Data

The secondary data was collected through following sources. Websites of - Ministry of Human Resources Development, Department of Education, Government of Maharashtra, UGC, NSS Reports, various periodicals, journals, newspapers, library resources and previous studies conducted in the related area of research.

1.16 Plan of Study

Chapter One: Introduction

Overview of the concepts related to education. Review of the prominent issues related to the education in India, Objectives and scope of the study, Relevance of the study, Methodology of research, Types of variables to be measured, Method of collection and analysis of data, Plan of study.

Chapter Two: Review of Literature


Chapter Three: Globalisation, Knowledge Economy and Education
Concept of globalisation, Impact of globalisation, globalisation of education, knowledge economy and education.

**Chapter Four: Socio-economic Profile of the Sample**

In this chapter, socio-economic features of the sample are explored.

**Chapter Five: Household Expenditure on Education**

Various aspects of education covered in the sample data are described in this chapter. These include medium of instruction, the examination board to which the school is affiliated to, overall academic performance of children, different types of expenditures on education, education subsidy and many more.

**Chapter Six: Economics of Education at the Household Level**

In this chapter the sample data is analysed to study the association between different socio-economic features of the households and the different types of expenditures on education.

**Chapter Seven: Conclusions and Recommendations**

The chapter covers summary of conclusions, recommendations to stakeholders and recommendations for further areas of research.

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