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Global Trends in Public-Private Partnership in Funding Higher Education[#]

Bikas C. Sanyal*

Abstract

To face challenges of accelerating demand for funds for higher education many countries around the world are attempting to develop public-private partnership in the development of higher education. The paper starts with the definition of public and private institutions of higher education and argues that the lines demarcating public and private with reference to institutions of higher education are blurred. The paper looks for continua along public and private dimensions of institutional variation along selected critical dimensions. The public-private partnership is designed with this premise. The paper goes on to justify such partnership with empirical evidence to demonstrate the incapability of the public sector alone to meet the demand. Different types of public-private partnership with arguments for and against partnership of specific types including for-profit higher education are discussed. The public-private partnership in Cross-border higher education and Massive Open Online Courses (MOOCs) and their implications for funding higher education also have been included as innovative measures in the presentation. Examples are given where available based on the experience of the countries. The paper ends with some suggestions for successful strategies of public-private partnership for funding higher education in developing countries

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Background

Before we discuss partnership between public and private institutions in funding higher education it may be useful to clarify the conceptual relationship between the two.

The concepts *private* and *privatisation* in connection with the institutions of higher education are complex and easily misunderstood. *Private* means privately owned, either as a *non-profit* entity—in which case ownership of the college or university would be vested in a governing board, or trustees, who would not share in profits (but who may share in some of the liabilities) and with the institution generally accorded significant tax advantages—or a *for-profit* entity that would be owned, like any for-profit enterprise, either by a single individual, a group of individuals, or stockholders of a corporation.

A public college or university, on the other hand, is owned by the state, although this public agency says little about the degree of public *control*. Thus, a public university may be like any other governmental agency, with day-to-day control by a governmental ministry and employees (members of the faculty) classified as civil servants. On the other hand, this public ownership may take the form of a public corporation—still publicly owned, but with substantial autonomy, little or no day-to-day governmental control, and the ability to execute contracts, hire its own faculty and staff, and otherwise operate much like a private non-profit corporation. Public universities, especially in the advanced industrialised countries, are increasingly moving away from the *public agency* and moving toward the *public corporation* model, as in the US, the UK, Japan and even, as of 2010 (and much contested) France.

Neither public ownership nor public control, however, necessarily means total financial dependence on the government. Public institutions can be substantially privately funded through tuition fees, grants and contracts, and even philanthropy (as they increasingly are in the US). At the same time, higher educational institutions that are private and non-profit can be substantially dependent on governmental financing. State financing of private universities can take many forms, from direct annual appropriations in support of operations (that is, just like public institutions), to more indirect forms of support such as eligibility of the faculty and the institution for competitive governmental grants, eligibility of the students for publicly funded grants and loans, support for capital construction and land acquisition, governmental guarantees and other forms of subsidy for institutional borrowing, or tax advantages for philanthropy. In short, public institutions almost everywhere have become more privatised, with tuition fees, philanthropy and more managerial autonomy, at the same time as private institutions in many countries have become dependent on governments and more and more public in their missions.

State financing of otherwise (non-profit) privately-owned institutions may come in stages. The nominally private crown chartered universities of Britain such as Cambridge and Oxford became virtual *public corporations* after the Second World War, as the government took over almost all of the current operating financing (that is, before the re-introduction of tuition fees in 1998) and assumed control over most aspects of operations, but retaining most of the traditional prerogatives of public corporations, such as the ability to select their own leaders, hire and set the key terms and conditions of their faculty and staff, hold their own assets, and invest and assume debt. The constitutionally separate public universities of some US states are similar, with considerable financial dependence on state financing, but with Constitutional guarantees of autonomy from the state governments in matters of

leadership, management, employment, curriculum, ownership of assets and the right to make contracts, issue debt and sue and be sued like any private corporation. The dependence of the public universities on the annual state appropriations for substantial portions of their operating expenditures, however, gives governments in any country a considerable leverage over the affairs of any public university.

In countries that have seen the more recent (20th. or 21st century) emergence of private institutions, Protestant churches, Roman Catholic religious orders, or other non-profit entities may provide the initial investment, capital financing, and organisation, with operating expenditures covered by tuition fees. Later, the state may intervene, taking over more of the financial responsibility for operations—often as the necessary tuition fees becomes too onerous to sustain enrolments—and thus inevitably assuming more day-to-day control. Even more recent examples in China are public universities themselves forming non-profit corporate affiliates in order to facilitate these affiliates to become free from governmental restrictions on e.g., faculty and staff wages and salaries as well as tuition fees. These become like the self-paying tracks within the public universities of many formerly Socialist countries in the former Soviet Union, East and Central Europe, East Africa and elsewhere—but with even more autonomy from governmental regulations.

A number of Asian countries such as India, Pakistan, Bangladesh and the Philippines have encouraged the establishment of a significant number of private institutions by providing regular annual state operating support. Japanese private colleges and universities have also had regular state operating support—but with commensurate public control over their tuition fees and enrolments. Since 2004 the national universities in Japan have been turned into public corporations, to be run as semi-independent administrative bodies with much greater autonomy, including major authority over employment and the setting of tuition fees, but with decreasing state revenue, and the requirement of accountability for results. In Europe, an OECD report shows 69.6 per cent of government supported private enrolment in the Netherlands and 59.6 per cent in Belgium covered by government support. Among the reporting non-OECD countries Israel leads with 76.3 per cent in the government supported private tertiary education followed by Chile at 22.1 per cent (OECD 2004). The Government of Tunisia has set up a legal framework to encourage private investment in higher education which has led to the creation of a large number of private institutions with government support (Zaiem 2005).

From the above discussion it becomes clear that the lines demarcating public and private in reference to institutions of higher education have become almost impossibly blurred.

Rather than attempting to distinguish unambiguously between *private* and *public* institutions of higher education (or even than attempting, within institutions that seem to be private, to differentiate unambiguously between private *non-profit* and private *for profit*), it may be more useful to look for continua along public and private dimensions of institutional variation: specifically, along the critical dimensions of: (1) ownership, (2) purpose or mission, (3) source of revenue, (4) degree of state control and regulation (e.g., over the setting of tuition fees or the terms and conditions of faculty and staff employment); and (5) the prevailing norms and values of the institution. Such a view provides the perspective shown in Table 1, in which *public* or *private* are portrayed as tendencies, or positions on continua of privatisation, for each of the five above mentioned dimensions.

TABLE 1
**Privatisation in Higher Education as Direction or
 Tendency on Multiple Dimensions**

<i>Dimension</i>	<i>High "Publicness"</i>	<i>Continua of Privatisation</i>		<i>High "Privateness"</i>
1. Mission or Purpose	Serves a clear "public" mission as determined by the state.	Mission is avowedly both public and private, but as defined more by the institution.	Mission is mainly to respond to student's private interests, mainly vocational.	Mission clearly serves private interests of students, clients and owners.
2. Ownership	Publicly owned: can be altered or even closed by state like any other state entity or agency.	Public corporation: public with private characteristics or constitutional entity	Private non-profit: clearly private but with public accountability	Private for-profit: owned by individual proprietor, partners, or stockholders
3. Source of Revenue	Dependent on public, or tax, revenue.	Mainly public, but some tuition, or "cost sharing."	Dependent on tuition and donations: some public aid: e.g., needy students.	Tuition-dependent.
4. Control by Government	High state control, as in agency or ministry.	Subject to controls, but less than other state agencies.	High degree of autonomy; control limited to oversight.	Controls limited to those over any other businesses.
5. Norms of Management	Academic norms; shared governance, anti-authoritarianism.	Academic norms, but acceptance of need for effective management.	Limited homage to academic norms; high management control.	Operated like a business; norms from management

With this background I would like to analyse why it becomes so necessary to look for innovative approaches to funding higher education through public-private partnership. First, I would like to examine the issue of qualitative change required and practised in higher education and quantitative growth in higher education around the world.

Qualitative Change and Quantitative Growth of Higher Education

Qualitative changes have occurred among others in such areas as developments in information and communication technology, phenomenon of globalisation, emergence of knowledge-based societies and knowledge-based economies, spread of liberal, market-friendly economic policies promoting economic growth and enabling the increase of higher educational quality, the increasing concern for sustainable and ecologically friendly economic development requiring new behaviours, lifestyles, ethical values and attitudes. All these changes have implications for funds.

The massive quantitative expansion of higher education poses an even more visible and daunting financial challenge. This expansion is driven first of all by the underlying demographic increases in youth cohorts in many of the world's poorest and most populous countries. These demographic increases are then accelerated by the increased secondary

school participation and graduation rates of these increasing youth cohorts—a rate that again is greatest in the very low income countries experiencing the greatest increase in the growth of the youth cohorts. Increase is further enhanced by the students themselves and their parents who recognise the high private returns to higher education, both in terms of lifetime incomes as well as greater opportunities, status and attendant social and political influence. The supply of higher educational opportunities is also increasing—in spite of the rising costs and the financial squeeze on public revenues—due to recognition on the part of governments of higher education’s contribution to economic growth, political stability and other social returns. Finally, the supply of higher education has been enhanced in many countries by growing private sectors and by increased cost-effectiveness and accessibility through information and communication technology.

Total enrolment in higher education in the world almost doubled from 99.5 million to 196.1 million from 1999 to 2012. That of China became more than four-fold from 7.4 million to 32.5 million and that of India more than tripled from 9.4 million to 28.5 million. Region wise, Asia had the largest rate of increase followed by South America, Africa, Oceania, North America and Europe having the least increase.

At the same time, although the expansion both of higher education enrolments and of participation throughout the world has been massive, participation rates, as measured by the gross enrolment ratios in the developing world, are not yet large enough to accommodate the rapidly increasing demand or need for higher education, as in Table 2 below.

TABLE 2
Growth in Total Enrolments and Gross Enrolment Ratios from
2000 to 2012 by Region*

Year	<i>Enrolment (in millions)</i>		<i>Gross Enrolment Ratio (%)</i>	
	<i>2000</i>	<i>2012</i>	<i>2000</i>	<i>2012</i>
World	99.5	196.1	19.0	32.2
Africa	6.1	11.6	7.9	11.6
Asia	41.0	104.7	12.7	27.5
Europe	25.6	32.5	50.6	69.2
North America	17.7	27.8	46.1	63.9
South America	8.1	17.7	24.2	50.8
Oceania	1.04	1.7	45.6	60.6
China	7.4	32.5	7.8	26.7
India	9.4	28.5	9.5	24.8

Source: UNESCO-UIS (2014)

*Regions as defined by UNESCO.

While developed countries had achieved a higher gross enrolment ratio, Asia and Africa are lagging behind with less than half their participation rate. China, with the largest higher education enrolment in the world, had a participation rate of 26.7 per cent and India has 24.8 per cent while the world average is 32.2 per cent. Therefore, the worldwide demand for higher education will continue to grow.

Financial Implications of Change and Growth

The combination of the needed qualitative changes in the content of higher education along with the huge increases in projected enrolments call for massive and continuing increases in revenues. These increased revenues, in turn, must come from some combination of: (a) *governments*, mainly from taxes or governmental borrowing; (b) *parents*, though tuition fees and support of student living costs; (c) *students*, from term-time and summer employment and borrowing; (d) *philanthropists or donors*, from individuals, foundations and businesses, and through endowments as well as current giving; (e) *business*, as purchasers of services, corporate philanthropists, or as collectors of earmarked taxes that are then passed on to consumers of their products. *Cost sharing* is a term used to describe both the fact of these higher educational costs being shared among these parties—in a form of zero sum game, where the loss of funding from one source calls for an increase from one or more of the other sources—and also the worldwide trend of these costs being shifted from a dominant reliance on governments to an increasing reliance on parents and students (Johnstone and Marcucci, 2010) and on industry and business in various forms. We turn next to the single most important of these sources—governments, or the state—to examine the likelihood of the state being able to provide these increasing revenues.

The Role of the State in Funding Higher Education

Data from the UNESCO Institute of Statistics (UNESCO-UIS 2014) allows the calculation for some 79 countries of the changes for the period 1999 to 2012 both in public higher education expenditures per student and in GDP per capita. This ratio—of public expenditure per student to the GDP per capita—is a rough measure of the capacity of states to accommodate the growth of higher education’s revenue needs, controlling for the very great country and regional differences in per-capita GDP. The change in this ratio was calculated for 79 countries reporting for two points of time, from 1999 to 2012. Table 3 shows, by region, the number of states exhibiting increases or decreases in this key ratio over this time period.

TABLE 3

Number of Countries Exhibiting Changes (increase or decrease) in the Ratio of Public Higher Education Expenditure per Student to the GDP per Capita, by Region

<i>Region</i>	<i>Increase</i>	<i>Decrease</i>	<i>Total</i>	<i>% Decrease</i>
Arab States	1	4	5	80.00
Central and Eastern Europe	2	12	14	85.71
Central Asia	0	4	4	100.00
East Asia and Pacific	2	9	11	81.82
Latin America/Caribbean	4	10	14	71.42
No. America/Western Europe	5	12	17	70.59
South and West Asia	0	4	4	100.0
Sub-Saharan Africa	1	9	10	90.00
Total	15	64	79	81.01

Table created by author based on UNESCO-UIS (2014, *ibid*). For each country, the year closest to 1999 was considered as the base year and that closest to 2012 as the final year.

Table 3 shows that 64 out of 79 countries had a decrease in this key ratio. All the reporting Central Asian countries and the South and West Asian countries had a decrease, followed by 90 per cent of the Sub-Saharan countries, 85.7 per cent in Central and Eastern Europe, 81.8 per cent in East Asia and Pacific, 80 per cent in Arab States, 71.4 per cent in Latin America and Caribbean countries and 70.6 per cent in North America and Western Europe. The lowest percentage of countries having a decreased ratio was North America and Western Europe. In spite of the financial crisis they have been able to increase their share of investment in higher education in five out of 17 countries. Although the points of time and the coverage of the region vary, the trend is expected to remain in the same direction, supporting the conclusion that in most regions of the world—and especially in the developing world—the state's capacity to provide financial revenues is far from matching the resources needed for the critical expansion of higher education (Sanyal 1998, Sanyal and Martin 2006).

The economic crisis enveloping the world starting in 2008 has aggravated the situation. The leading economies of the world are still (in the beginning of 2015) emerging from the worst economic crisis since the Great Depression. This global economic downturn has adversely affected the developing countries as well through reductions in export earnings, remittances, aid flows and foreign direct investment. The financial impact on education has been severe. The new government in the UK has been obliged to slash university budgets and to increase tuition fees dramatically. Public institutions in the US, supported by the 50 states that must balance their budgets in the face of declining tax revenues and that are unable to borrow for operations, are also cutting budgets and increasing tuitions. Private universities in the US, Japan and other countries with significant private sectors are losing applicants as middle class families are suffering from static incomes and high unemployment. Even the wealthy universities in the US and the UK such as Harvard, Oxford, Cambridge and Yale have lost billions of dollars from their endowments, necessitating commensurate cuts in their operating budgets.

The inability of state revenues from taxation or borrowing to keep up with higher education's already high and very rapidly rising annual revenue needs is a function of two main factors—quite apart from the global economic slowdown that has diminished tax revenues in most countries, but that should return with economic recovery. The first is the sheer technical difficulty (and the expense) of collecting taxes on property, commercial transactions and incomes. This difficulty is exacerbated by tax avoidance, which is made even more difficult to combat by globalisation and the ease of moving businesses and residences to countries with lower taxes. The second factor inhibiting the availability of tax revenues for higher education—and especially serious in low income countries that may be experiencing the greatest enrolment pressures and therefore, the greatest increase in higher education's revenue needs—is the competition from other socially and politically compelling needs such as elementary and secondary education, public health, housing, clean water and improved transportation for the limited available public revenue. For these reasons, many countries are turning to other sources of revenue—and especially to parents and students—to supplement the increasingly inadequate public resources for higher education's increasing revenue needs and also trying to encourage partnership with private sector with its different components.

We discuss four ways of public-private partnership: growth of the private sector in higher education, shifting the cost to students and parents, partnership with business and industry and a combination of these three partners.

Public-Partnership in Funding Higher Education

Growth of the Private Sector in Higher Education

According to one estimate, 30 per cent of the world's higher education enrolment was private towards the end of the last decade (UNESCO 2009), while in the sixties and seventies there was little outside the US, Japan, Korea, the Philippines and a number of countries in Latin America. The number has been more today.

Japan, the Republic of Korea, Philippines, Indonesia, Brazil and some other countries in Latin America reflect policies that have shifted costs to parents and students through the deliberate limitation of the public sector and the encouragement of a growing, generally demand-absorbing, private sector.

In 2011, the private sector represented more than three quarters of total higher education enrolment in Japan and Korea, more than two-thirds in Brazil, more than half in Mexico, and between a fifth and a third in Chile, Poland, Portugal and the US (OECD 2014). Number of private providers in India increased from 1 to 165 between 1995 and 2013 (S. Mishra Ghosh, OECD, *ibid*). This growth of private higher education has been the result not only of increased demand, as discussed above, but also due to *differentiated* demand in many countries, where government provision of higher education may not be meeting the demand, e.g., religious education or short-cycle training in areas of greatest employment growth such as business, computer science, or English language instruction. But private higher education and the reasons for its growth (or failure to grow) vary widely.

Private colleges and universities in the US, for example, include many of the highest priced and most elite institutions, supported financially through large endowments, generous annual donations, governmentally-provided student financial assistance that is fully portable to private institutions, a long history of tuition fees and a middle and upper-middle class that can afford them, and a culture that accepts the financial responsibility of parents, if financially able, for much of the cost of higher education for their children. In other countries, particularly in Latin America, Asia and Africa, the shift of increasing numbers of students to the private sector is furthered by the imposition of ceilings on enrolments in the low-fee or free, public universities, generally making the public sector more accommodating to the better prepared students—and thus becoming the elite sector—while channelling more and more participation through a demand-absorbing private sector.

While the number of private institutions worldwide has increased very rapidly, most are small: in virtually all countries, the ratio of private to public institutions is greater than the ratio of private to public enrolment—demonstrating that most private institutions are relatively small.

The private higher education referenced in the section above, which has been growing throughout most of the world (albeit less in Europe than elsewhere) and which increasingly has the blessing, and frequently the direct and indirect financial support of the state, is legally and at least nominally non-profit. However, higher education that is avowedly and legally for-profit, has also been growing in many countries. This growth has been fuelled by

the soaring demand for higher education, by the limitations on both the capacity and sometimes the programmes offered in the public and non-profit sectors, and by the relatively high per-student costs of traditional public and non-profit private higher education. Aggressively efficient private management that is motivated by profits, able to avoid many of the regulatory burdens of state higher education, unencumbered by faculty unions or traditions of academic governance, able to selectively offer programmes only in low-cost, high demand fields, and enabled by new instructional technologies, can offer instruction at very low costs per student. In the US, private for-profit institutions can even benefit from the same kind of tax supported student financial assistance that is given to students in the private non-profit sector. An analytical treatment of this sector is available in *New Players, Different Games: Understanding the Rise for Profit Colleges and Universities*, Johns Hopkins University Press 2007.

Although for-profit higher education—both degree granting and short term certificate granting—has grown especially rapidly in the US, examples are not uncommon in other countries. The Laureate Education, the Apollo Group and the Carlyle Group are running in country and offshore universities for profit. Legislation to permit for-profit higher education was passed in the UK in 2004 and in Australia in 2005. Japan started experimenting with it in 2004. Malaysia, Philippines and Singapore are also promoting for-profit higher education as a part of state plans for higher education self-sufficiency, to cite only some examples (Garrett 2007). Even People's Republic of China saw its first publicly listed for profit, Hao Yue Group of higher education provider founded in 1997 had an investment of 50 million pounds by Carlyle Group in 2008 (Press Release, Carlyle Group, 26 November, 2008). China had post-secondary education Services Company with fully accredited universities since 1999. During the next ten years it has provided degree programmes to over 21,000 on campus students and e-learning services to 141,000 students through 15 university partners in e-learning network (SUMFOLIO 2009). The "Law for the facilitation of private schools" in China enacted in 2002 although does not encourage making profit as the primary aim, does not explicitly prohibits them either (Cheng 2009). Among the for-profit higher education providers, the University of Phoenix, founded in 1976, stands out in the size of its domain, hosting 13 publicly held higher education firms in the US and 19 others in countries around the world including China, Japan, Malaysia, the Republic of Korea and Singapore. Courses are offered on-line, and include on-campus interactions in more than 200 locations for 100 degree programmes at Associate's, Bachelor's, Master's and Doctoral levels (Cheng 2009). This is now the largest college in the US approaching half a million students with revenue of almost US\$4 billion dollars (Frontline 2010).

The growth of for-profit higher education in the US has been fuelled by government funds. For example, a post-secondary educational federal grant programme sponsored by the US Department of Education called the "Pell Grant" provided 24 per cent of its US\$18.3 billion to profit making institutions in 2008, with the for-profit University of Phoenix collecting the largest amount at US\$656.9 million (National Consumer Law Centre, 2010). Another important for-profit higher education company is India's NIIT Limited. Listed on the National Stock Exchange and Bombay Stock Exchange of India, it is one of the world's largest information technology training and education companies, with 5 million students in class room and on-line education across 20 states within India and 30 countries around the world, including more than 100 educational centres set up in China and other parts of the Asia-Pacific region. The US, Canada, the UK, Australia, China, Indonesia, South Africa and

Nigeria are among the 29 countries of the world where NIIT Limited has set up its centres. In 2009 NIIT Limited and its subsidiaries had an annual revenue of some US\$255 million (NIIT 2010).

The principal advantages attributed to for-profit higher education are those attributed to all forms of private enterprise in market economies: mainly their presumed greater efficiency and responsiveness to the fast changing demands of students and to the equally fast changing needs of job markets. For-profit higher education—with some important exceptions such as the University of Phoenix in the US—generally does not attempt to compete directly with the traditional established universities, either public or private non-profit. Rather, for-profit institutions more commonly compete aggressively in the short cycle, vocational, non-degree market for job-relevant skills, often catering to those who are disadvantaged or otherwise underserved as well as to adults. They may thrive where the public institutions have failed to provide commensurately useful and job-relevant programmes. The profit motive encourages both efficiency and accountability. Finally, as with all tuition fee-supported higher education, the costs to the state are said to be less—although the non-state revenue advantage of cost-sharing can come easily from non-profit higher education, and the savings to the state are lessened by amounts that the state may contribute, as in the US, to the tuition fees via governmentally provided financial assistance to students in the for-profit sector.

At the same time, for-profit higher education is frequently criticised for over-aggressive recruitment of unqualified students, for the lack of professionalism and curricular authority in their academic staffs, and for what are sometimes viewed as excessive profits to owners and management—especially when some or even most of the revenue taken as profit is actually from the state taxpayer. In the US, the National Consumer Law Centre claims the US for-profit sector is more vulnerable to corruption and fraud. In December 2009 the owner of the University of Phoenix agreed to pay over \$US 78 million to settle a *False Claims* lawsuit for violation of student aid laws. The Centre also points out that while students at for-profit institutions borrow more than students at public or non-profit institutions; their completion rate is lower, contributing to the higher incidence both of unmanageable debts and of costly defaults (National Consumer Law Centre, 2010).

Let us now move to the second type of partnership mentioned above.

Shifting Cost to the Parents and Students

Partnership in funding by shifting some of the increasing costs of higher education—including both the institutional costs of instruction as well as the costs of food, lodging and other elements of student maintenance—from governments and taxpayers to parents and students is promoted by many economists and policy analysts partly on the basis of equity. The argument is that the benefits of higher education—in virtually all societies—are realised disproportionately by the sons and daughters of the better off and the more privileged, while the taxes to pay for the increasingly costly higher education are borne by all citizens (and under some systems of finance disproportionately by the poor). Proponents of at least some significant cost sharing also claim some tuition fees and some fees for food and lodging makes for greater efficiency, both in the provision of the higher education and in its consumption. But the more compelling argument for cost-sharing may be the sheer need for revenue to supplement the increasingly insufficient sources of public revenue. The position

of UNESCO with respect to the politically volatile issue of cost-sharing has been clearly, if subtly, stated as follows: “With regard to inputs, the general consensus is that financial responsibilities should be shared by all stakeholders. More concretely, increased contributions are expected not only from the state but also from students and their families, and from industry and business” (UNESCO 2004).

The principal forms of cost-sharing, or shifting some of the increasing costs of higher education—including both the institutional costs of instruction as well as the costs of food, lodging and other elements of student maintenance—from governments and taxpayers to parents and students are the following seven (Johnstone and Marcucci 2010; Johnstone, 2004, 2006).

1. The introduction of more than nominal tuition fees in public institutions of higher education: This was done in China in 1997, the UK and the Czech Republic in 1998, Austria in 2001 and Germany in 2005. With the devolution of the constituent countries of the UK in 1999, Scotland first replaced up-front with deferred tuition fees, and then abandoned tuition fees altogether in 2008. England and Wales followed suit by also shifting from up-front to deferred tuition fees and in late 2010 seemed on the verge of a very large increase in these deferred fees (that is, covered automatically by student loans). More than 20 per cent of the total operational budgets of the Chinese higher education institutions were covered in 2000 by tuition and fees paid by students (Arimoto 2006).
2. The introduction of a dual track tuition fee, in which free or only nominal tuition fees are preserved for a restricted number of highly qualified students, usually on the basis of examination scores, while other less-qualified students are admitted within a fee-paying track: In this way, governments in which free or very low fee higher education is enshrined in a constitution or framework law (especially common in former communist countries) can claim to be following the law (for these so-called regular students), while earning substantial amounts of revenue from the fee-paying students. Dual track tuition fees are practised in Russia, Eastern and Central Europe, India, Pakistan and East African countries such as Kenya and Uganda, among others.
3. A very sharp rise in tuition fees—that is, at rates in excess of the increase in actual per-student costs: Such a shift has been happening for more than a decade in the US and Canada, and in late 2010 seems to be on the verge of happening in the constituent countries of the UK. The Indian Institutes of Management and Technology also increased their fees sharply in recent years. Such increases allow governments to shift greater portions of per-student costs onto parents and/or students, or allow public sector institutions to increase enrolments without additional governmental revenue—or both.
4. The imposition of user charges, to be paid by parents and/or students on food and lodging that in many countries was formerly provided free or at heavily subsidised rates: This is a form of cost-sharing that may be more politically palatable than tuition fees in countries that have traditionally provided free or very low fee higher education and that are meeting resistance from students and politicians to the raising of fees for instruction—yet that need the revenue from some form of cost-sharing. In this way increased user charges have been employed in countries like Norway and Sweden that continue to charge no tuition fees, as well as in Russia and Ethiopia that employ dual

track tuition fees. (Oddly enough, the costs of student living are frequently considerably greater—and may also be subject to greater yearly increases from inflation—than are the generally moderate tuition fees of most countries, yet seem to escape the political controversies that so often accompany policies to increase tuition fees.)

5. Diminution of tax supported student grants or scholarships and increasing the burden on parents or on the students themselves, who may be expected to assume either additional loans or additional employment or both: The diminution of the tax support may be through a reduction in the amount of the average grant, or through a reduction in the number of grants awarded, or both. Similarly, the reduction of costs to the government may be through an outright cutting back on either the size or the number of maintenance grants, as in Russia and the UK, or through a freezing of the grants in an otherwise inflationary economy, which diminishes the real value (and the real cost to the government)—as in Morocco. Or, the reduction in tax support to student financial assistance may be through a shift in the form of student assistance from grants to loans, as in the UK and the US.
6. A decrease in the subsidy cost of the average student loan, either through an increase in interest rates paid by the student borrowers, or an increase in the cost recovery of student loans through better servicing and collecting: Examples would include the outsourcing (and resulting improvement) of collections in South Africa and Rwanda, or the removal of certain (mainly short cycle, for-profit) colleges with historically high rates of borrower default from the list of institutions whose students are eligible for guaranteed loans, as in the US.
7. The official encouragement of tuition-dependent private institutions, both non-profit and for-profit, sometimes combined with state subsidies for capital costs, student financial assistance, or even operating expenditures: governments are increasingly recognising not only that some form/forms of cost-sharing are necessary, but that private institutions can offer the same educational benefits oftentimes for fewer tax dollars, and can even provide models of efficiency and social responsiveness for the benefit of the states' public institutions. In fact, one of the most striking trends in higher education worldwide has been the growth of private higher education: both non-profit, and for-profit—and we turn to a more complete discussion of this trend in the next section.

There is a debate around the issue of shifting costs to the parents and students.

Those who tend to resist the advancement of private higher education and what they perceive as an excessive privatisation of public universities and colleges, generally emphasise the following points:

- Higher education is mainly a public good, benefiting all the members of society not only through increased productivity and economic growth, but also contributing to the political, social and cultural betterment (Vossensteyn 2004).
- Social rates of return computed on the basis of the external monetary effects alone account for some 6 to 15 per cent for some developed countries (Blondal 2002). Similar evidence also exists for developing countries. The addition of significant non-monetary benefits such as the role of higher education in strengthening civil societies,

political stability, social cohesion and tolerance, and effective democracies strengthens the case for state funding and state control.

- Disciplines and programmes that are strategic for sustainable development of the country but may not be economically attractive in the short term need to be financed in large part by the state (whether in private or public universities).
- Without state support, neither banks, nor students, nor parents will have sufficient incentive to invest in higher education in its imperfect market. Benefits of the investment are not known until after graduation (Tilak, 2011).
- Without state intervention, students from disadvantaged groups may not be able to pursue higher education.

At the same time, those who argue for increasing reliance on private funding—both for some tuition fees in the public sector as well as for the encouragement of, and state financial support to, private colleges and universities—as well as for substantial autonomy for institutions, whether public or private, make these points:

- The state subsidy itself is based on the taxes of all tax-paying citizens, but in all countries the students (that is, the primary beneficiaries) are disproportionately from higher socio-economic classes or from privileged ethnic or linguistic groups. The incidence of taxation falling on all citizens, including the poorest, is especially pronounced when taxes are paid by consumers, whether directly as in sales or consumption taxes, or indirectly as in taxes on businesses that are passed on to consumers (such as taxes on electricity, fuel or food), and even more so when the state is borrowing and effectively printing the money, which simply causes inflation that falls even more heavily on the poor on those with fixed incomes. In short, all citizens in most countries pay for the high costs of higher education, but the beneficiaries are disproportionately from the more privileged groups.
- Higher education benefits monetarily the individuals pursuing it through higher private rates of return varying from 8 per cent in Japan to 18 per cent in the UK among the OECD countries (Blondal 2002).
- Higher education also provides considerable non-monetary benefits, including greater prestige, more choices of jobs and places to live, and generally a better quality of life.
- Finally, as we have discussed above, state (mainly tax) funding in almost all countries is simply unable to increase fast enough to keep up with the rapidly rising costs and revenue demands of higher education. This is especially the case in the low-income countries that are experiencing the fastest rise in potential enrolments and the greatest competition for the limited revenues of the state.

We now move to the third type of public-private partnership mentioned above.

Partnership with Business and Industry

I shall give some examples.

Birla Institute of Technology (BITS) established Practice Schools in a number of enterprises which agree to collaborate with BITS on a regular basis. All BITS students are required to work on real-life problems in industrial workplaces and to be supervised jointly by BITS and the enterprise staff. The work of the students is regularly monitored and evaluated by the resident faculty and is integrated into the degree programme. The BITS,

with its human resource development programme, also executes continuous professional development in industries through distance education. This generates income for the BITS. Wadhwa *et al* reported that companies in regions with an absence of research universities function as “surrogate universities” to create specialised labour pools with high-tech skills (Sanyal, 2011).

In India FICCI’s National Knowledge Functional Hubs partnership model promotes industry to sponsor research and development in Indian universities (OECD 2014).

In France industries employing more than 20 employees pay 1.6 per cent of their wage bill amounting to about 2 billion Euros a year as training tax (Taxe d’apprentissage) to finance professional development programme in institutions of higher education.

In Spain, the Centro Superior para la Enseñanza Virtual (CSEV) a foundation operating with private funding is coordinating with public institutions to promote virtual learning and entrepreneurial platforms for the Ibero-American community with application of the new technologies.

The Union of Small Industries in the State of Sao Paulo in Brazil approached the University of Sao Paulo to create a user-friendly interface in order to facilitate access of small companies and entrepreneurs to USP’s body of knowledge for financial advantage of both (OECD 2014).

The Gatsby Trust, a non-governmental organisation, established in the Faculty of Technology in Makerere University assists in developing the technological base of the small enterprise sector of Uganda and helps the sector’s growth with financial returns (Sanyal, 2011, *ibid*).

In this light, the two most critical issues for all governments with regard to their colleges and universities are: (1) the *appropriate amount of tax support* (both to institutions and to students) relative to all the other competing claims on public revenues; and (2) the *appropriate degree of governmental control*, or governmental *steering*, over colleges and universities, whether public agencies, public corporations, private non-profit, or private for-profit institutions.

The last partnership type having implication for funding higher education is discussed below.

Combination of Two or More of the above Partners

Cross Border Higher Education and Its Financial Implications

Cross-border education refers to the movement of students, researchers, instructors, knowledge, learning materials and programmes for educational purposes across national/regional or geographic borders (Knight 2006). The phenomenon is as old as civilisation. However, the volume and forms of cross border higher education have increased dramatically in the last decade of the 20th and the first decade of the 21st centuries. The forms of cross border higher education have always included students crossing borders to other countries for degrees, for short term academic experiences (either with or without transferable degree credits, referred to in the US as *study abroad*), or for dissertation or post-doctoral research. These traditional forms have increased with the burgeoning worldwide demand, especially in low- and middle-income countries where the demand for higher education, driven by demographics and surging secondary school completion, is

greatly exceeding the domestic capacity. The demand is especially increasing in countries like China, India and other Asian countries, as well as countries in the Middle East and North African Region where rising incomes, both of states and families, provide the financial wherewithal to send students to universities in the wealthy nations of the OECD, and especially to nations that can provide instruction in English (which attribute privileges in the US, the UK, Canada, Australia and New Zealand).

In the recent years, a major part of cross-border higher education has taken a commercial turn: as a source of profits, or export earnings. The cross-border movement of students for profit, especially those who can afford the higher tuition fees frequently charged to students from other countries, is furthered by the increasingly aggressive recruitment of students from the receiving or providing countries, which view the provision of cross border higher education as a significant source of export revenue. This cross-border higher education as a whole increased from 1,712,750 students in 1999 to 3,509,708 in 2012. Most of them belong directly or indirectly to the for-profit sector. The most important sending, or *importing*, region in 2012 was East Asia and the Pacific, with 1,143,084 students sent elsewhere for higher education, followed by North America and Western Europe with 6,26,571 Central and Eastern Europe sending out 4,20,218 in 2012. The most significant of these student-sending, or importing, countries in 2012 were China, which sent 694,365 students for study abroad, followed by India, which sent 189,472 students. The most important receiving, or *exporting*, countries in this period were the US receiving 740,482, UK with 427,686, France with 271,399 and Australia, receiving 249,588 students. (UNESCO-UIS, website extracted on April 25 (UNESCO—UIS extracted on April 25, 2015).

The English-speaking countries of the UK, the US, Australia, New Zealand and Canada increased their income from the export of higher education in two ways: first, by recruiting students on full fee payment basis, and second through offering programmes to foreign students in their home countries through varieties of delivery modes, charging very high fees. These and other exporting countries are investing in international marketing campaigns of their domestic programmes and services through their Ministries of Trade, Commerce and Foreign Affairs to sell their educational programmes abroad like any other exportable commodity. The five above-mentioned higher educational exporters received in 2005 US\$28 billion, which were almost eight times the total commitments of these countries in bilateral and multilateral aid for higher education. The US alone received US\$14.1 billion, with England and Australia accounting for US\$6.1 billion and US\$5.6 billion respectively. In 2008, the US higher education exports had reached \$17.8 billion (Varghese, 2010).

Besides aggressive marketing and recruitment, the increase of cross border higher education as an export for profit is furthered by factors such as:

- The increasing search for other-than-state revenue to make up for declining state support in the public sectors of the receiving (i.e., the exporting) countries. (A significant example was the decision of the UK, even prior to the inauguration of tuition fees for home students to begin charging full-cost tuition fees to international students—even from Commonwealth countries—who had once been admitted with no tuition fees).
- The rise of private higher education—both non-profit and for-profit—in the receiving (exporting) countries, which tends to be even more aggressive and successful in their marketing and recruitment of international students than the public sectors in most

countries. For profit cross border higher education includes publicly traded companies such as Apollo, Career Education Services, University of Phoenix and Sylvan Learning Systems, in the US; Informatics in Singapore; NIIT, Tata Infotech and APTECH in India; and corporate universities such as those run by Motorola and Toyota, (Knight, 2006).

- The tactic of the receiving (exporting) countries taking their programmes into the *sending* (importing) countries via branch campuses rather than recruiting students and adding lodging and travel to the expense borne by the families.
- The further tactic of exporting cross border higher education by instructional technology, requiring neither the expense of lodging and travel nor the expense of establishing a branch campus. India, with its ICT and other professional competence has a great potential of generating funds for higher education through partnership in cross border higher education.

Beyond attracting fee-paying students from other countries as a form of export, or profit, many countries have traditionally sought to attract students and scholars from other countries through grants and travel stipends, either as a form of state (or even private) philanthropy, or foreign aid, or as a public expenditure for the purpose of spreading political, ideological, or cultural influence. Such cross-border higher education is financed mostly by bi-lateral aid as overseas development assistance (ODA). (Multilateral aid constituted only about 3 per cent of the total ODA for higher education). The richer countries support higher education in poorer countries by providing scholarships or by sending academic staff, instructional and research materials. Donor countries benefit from these forms of assistance in part by knowing, and being able to influence, what their aid is procuring. Donor countries also benefit from skilled migration, favourable conditions for foreign investment, foreign markets for their goods and services and the advancement of their geo-political interests. Such ODA for higher education increased from US\$1.34 billion in 1999 to US\$3.29 billion in 2004. France with 238,000 overseas students, Germany with 260,000 and Japan together contributed more than 80 per cent of the total bilateral aid in 2004 for cross-border higher education (Bashir 2007).

Other examples of such non-profit, philanthropic and/or politically motivated, cross border higher education assistance include:

- The American Fulbright Programme, which is jointly financed by the US State Department and the participating countries;
- the Erasmus Programme of the European Union, which seeks to promote cross border higher education throughout the EU;
- the Erasmus Mundus Programme of the European Union, which provides assistance to non-EU students enrolling in advanced professional programmes in consortia of European universities;
- the scholarships offered by China to students from Africa and other regions of geopolitical importance to that country;
- the investments made in the creation of academic cities in a number of the smaller Gulf states to attract students from elsewhere in the Islamic world; or
- the generous scholarships once offered to Third World students by the former Soviet Union.

Countries seeking to advance their universities in the rankings of the so-called *world class* universities also seek to attract more international students, as some of these ranking systems include the proportion of students that are from other countries in their ranking formulae. Finally, as a further example of self-interested but non-commercial motives, countries facing a demographic decline in their own youth cohorts—Japan being a prime example—may seek increasing numbers of international students in order to maintain overall higher educational enrolments (in addition to all of the other reasons for seeking cross border students).

Open Education and Massive Online Open Courses (MOOCs) and their Funding Implications

At a time of globalisation and constrained budgets, the promise of the Massive Open Online Courses (MOOCs) is that they will provide free to access, cutting edge courses that could drive down the cost of university-level education and potentially “revolutionise” existing models of higher education. Its development was rooted when MIT established Open Courseware in 2002 and the UK Open University set up “Open Learn” in 2006. In 2011, Sebastian Thrun and his colleagues at Stanford opened access to the course they were teaching at the university “Introduction to Artificial Intelligence” and attracted 160,000 learners in more than 190 countries. Since then, MOOCs have been a label for many recent online course initiatives from institutions, individuals and commercial organisations (JISC, Ceits, 2013). In contrast to the traditional university online courses, MOOCs have two key features (1) open access-and anyone can participate in an online course, for free or on payment (2) Scalability-courses are designed to support an indefinite number of participants. There are two types, one is emphasising pedagogy and (cMOOCs), learning with networks developed informally (learning process) and the other emphasising instructional process with a behavioural approach (xMOOCs). xMOOCs can be seen as the extension of MIT’s Open Courseware initiative offering high quality training to different parts of the world. It is reported that venture capitalists are interested in the financial capital that can be generated by xMOOCs and have set up commercial companies to help universities to offer xMOOCs for profit. Four university partners, Stanford, Princeton, Universities of Michigan and Pennsylvania have helped set up the for-profit company Coursera with investment from venture capitalist firms on this mode. Similarly Sebastian Thrun mentioned earlier from Stanford with his colleagues has set up the company UDACITY. These courses sometimes give credit and at other times give a completion certificate for employment recognition. The UK Open University has applied MOOC in a new, more flexible organisation “Open University’s Future Learn” to provide higher education with low cost (JISC Cetis 2013, *ibid*).

However, it is too early to receive confirmation on their sustainability, pedagogical effectiveness, quality and completion rates and the awarding of Higher Education credit.

Let us not forget we had similar doubts when the Open University was set up in the UK in the mid-sixties.

Conclusion: Strategies for the Public and Private Financing of Higher Education

The worldwide condition of higher education is one of increasing austerity. On the one hand are the high and rising costs and consequent revenue needs, driven by the social and economic needs for higher education in our increasingly globalised world economy, and compounded by the political pressures of the surging popular demand for admittance into what are generally already overcrowded colleges and universities. On the other hand are the limitations of both public and private revenues to support these needs, compounded by the continuance of pervasive poverty throughout the world and by the socially and politically compelling competition for limited public revenues. To make the situation even graver, both of these situations—higher education's increasing revenue needs, and the limitations of available public and private revenues—are most dire in the developing countries.

The solutions, then, are clear in concept, although fraught with difficulties in practice. The financing of higher education—especially in low-and middle-income countries—must seek to:

1. Maintain public tax support—in the face of all of the other competing claims on scarce public revenues;
2. Achieve greater efficiencies, in part by granting public universities and colleges more managerial autonomy—in spite of almost inevitable opposition from politicians, faculty, staff and students, and in spite of what may appear to be few cost-cutting measures remaining to be implemented;
3. Additionally, achieve greater efficiencies by rationalising the public budgeting of all the colleges and universities, building in incentives for the necessary reallocation of resources and investments in the new programmes (Sanyal 1995, Salmi and Hauptman 2006, Sanyal and Martin 1998, 2006);
4. Diversify the public institutions, simultaneously increasing the resources (and efficiency) of a select number of research universities that can be dedicated to the creation of knowledge and the preservation of free inquiry—and at the same time, giving relatively more attention and resources to the institutions that are dedicated primarily to the needs of expanding participation and the future job market;
5. Increase the private revenues through modest tuition and other fees in public universities and—also in spite of inevitable political opposition;
6. Encourage—and modestly support (in countries that have not already done so)—a growing private higher educational sector that can relieve some of the enrolment pressure, as well as provide forms of higher education that the public sector either cannot or will not;
7. Implement financial assistance in the form of means-tested grants and student loans that can maintain cost-effectively and even increase higher educational access and participation in the face of the almost inevitably rising privately-borne costs mentioned above;
8. Recognise that a substantial improvement of access and participation in higher education—especially among the very poor, those in remote regions and those of ethnic and linguistic minority groups—must begin with an improvement of public middle and secondary education.

9. Improve coordination among both “public” and “private” providers in respect of the strategies of provision especially with regard to accreditation and quality labels. Partnership in funding to succeed will need partnership in governance as well.

Although these policy *solutions* will differ in their applicability and urgency in different countries, and although all of these recommendations must be considered in the light of radically different political, economic and cultural realities *on the ground*, they are, in principle, applicable to virtually all countries regardless of the stage of economic development or prevailing political and economic system. Most importantly, these policies need the support and participation of the world’s multinational agencies such as UNESCO, OECD, the international development banks, international scholars and policy analysts and a host of other NGOs dedicated to the strengthening of higher education.

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Financing Education Sector in India — An International Comparison

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Abstract

The paper is mainly developed to review and analyse the public spending on education sector by the Government of India with special reference to international scenario. Although India is now comparable with the world's mostly developed countries in different spheres, its success in educational development is far behind from those leading countries. The scholars find lower proportion of public expenditure as one of the main causes of such poor foundation of primary or elementary education in India. Hence, the paper has given thrust to public spending on education. It finds among others until and unless there is a rapid increase in economic growth and thereby GDP, mere change in percentage of GDP will not make any difference. Educational backwardness cannot be assigned for India alone. But it becomes more acute in the country, with 1.23 billion plus population of which nearly 27 per cent (as per Indian Census, 2011) are illiterate (35 per cent female and 20 per cent male). The paper also finds the governmental apathy in providing sufficient funds and hence, suggests increasing public expenditure in the near future.

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Introduction

In the transitional phases of economy, one can observe that the agro-based (primary sector) economic system has gradually been changing and its dependency on the secondary sector (generally industry, infrastructure, etc.) will increase and then tertiary sectors (service sector) comes as an important source of the country's national income. This transition to tertiary sectors is not an end of development. A more advanced, equitable and sustainable development has been searched by the different economists and demographers. By increasing capital formation does not indicate a process of development. The world, accordingly, has been changing markedly from the physical capital based economy to human capital based economy. Traditionally, human capital refers to a range of demographic indicators of which education and health levels of the people are the two main fabricants as they affect economic productivity in an effective way (World Bank, 2008, Gyimah-Brempong and Wilson, 2004). Actually, it operates both as an instrument and as an output of the development process. A UNESCO report states that investment in capital is much important at early stages of industrialisation, but the role of human capital increases with industrial development and in due course, grows in relative importance (UNESCO, 2005). This is not only true for the world's most advanced economies, but also in those emerging economies that are currently practising reflective transformations and periods of rapid growth and development. India is a unique example of such an economy. It is now widely being recognised "literacy skills are fundamental to informed decision-making, personal empowerment, active and passive participation in local and global social community" (Stromquist, 2005, p. 12). This literacy actually does not merely mean to read and write something. Multi-dimensional aspects of literacy (e.g., computer literacy, health literacy, banking literacy, etc.) have to be considered in the present world's scenario. Andrain Wood with Michele Calendrino argue in their study (2000) that greater openness would substantially raise the employment demand for the educated workers in India. They also project that over the next decade or two, the employment demand for illiterate workers would fall by about a fifth and, among literate workers, the increase in demand would be proportionally larger, the higher their level of education. As such the relevance of educational expansion in a country like India whose economy has been moving decisively to a higher growth phase needs no further elaboration. Considering the importance of education in facilitating social and economic progress in India, the Twelfth Plan (2012-17) places the highest priority on significantly improving the quality of education imparted and on ensuring that educational opportunities are available to all segments of the society (Government of India, Planning Commission, 2013) and as such Education for All (EFA) has become a social movement at the national and the international levels.

Significance of the Study

It is actually a big challenge that the countries will have to face the present technology-based world. The rapid increase of ICT has created a question mark that how far and in what way could it be used in educational system throughout the countries of the world. One of the important issues of the 21st century is the use of information and communication technology (ICT) in different spheres of our daily life. The UNESCO Director-General Irina Bokova, during celebrations of the World Teachers' Day, 2014, affirmed it before the teachers of the

world that "far too often, teachers teach without the right training, without the resources they need." The Department of Education and Training of Western Australia is committed to strengthening professional excellence in government schools. Their research confirms that teacher quality is one of the most important school factors influencing student achievement.

TABLE 1
Literacy and Primary Education

<i>Countries/Region</i>	<i>YLR</i>	<i>ALR</i>	<i>ANER</i>
Bangladesh	79	58	92
Bhutan	74	53	89
India	81	63	93
Iran, Islamic Republic of	99	85	100
Maldives	99	98	95
Nepal	82	57	90
Pakistan	71	55	72
Sri Lanka	98	91	93
World	89	84	89
Developing countries	88	80	88
Countries in transition	100	100	92

Source: UNESCO, 2015

ANER= primary education adjusted net enrolment ratio (ANER) (%)
YLR=Youth Literacy Rate, ALR= Adult Literacy Rate.

Considering all these, it appears that countries like India must have to reform a lot in their educational system right from the policies, contents, structure and methods of delivery, teachers' training curriculum, etc. The cross country International Reports (EFA, World Education Indicators, HDI, etc.) shows it clearly that in India the adult and youth literacy rate (Table-1) are lying far below that of the world, both developed and developing countries. The Primary enrolment rate is somehow comparable with the international scenario.

Along with this, introduction and implementation of ICT in the educational system needs a sizeable government expenditure on education. Although an official target in this respect is to spend at least 6 per cent of GNP, it seems to be insufficient for India on the ground that it has the highest absolute number of illiterates in the world and considering the GNP of the country, 6 per cent is not comparable with the high income group country. So it is a big challenge for the Indian education policy makers to face such a typical scenario in the 21st century. A UNESCO report (Global Education Digest, 2012, UNESCO Institute for Statistics, Montreal, Quebec H3C 3J7 Canada) finds that globally 32.2 million pupils repeated a grade in primary education and 31.2 million left school before achieving the last grade of this education level in 2010. It is more prominent for the countries of Sub-Saharan Africa and South and South West Asia where India is located.

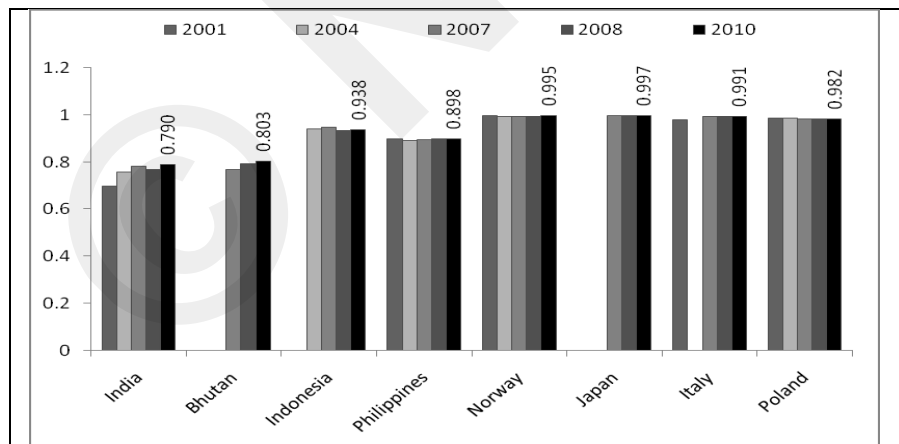
In view of this background, the present paper makes an attempt to review the educational financing pattern in India from different dimensions. Accordingly, this paper is designed as following. Sec-1 introduces the study and its significance, Sec-2 makes an international comparison of educational status of India, Sec-3 tries to compare the public expenditure on education in India with respect to international perspective, Sec-4 delineates trends of changes in GDP and education expenditure in India, Sec-5 public expenditure on

education over the Plan period, Sec-6 deals with social sector expenditure – the recent trends, and Sec-7 presents observations and conclusions.

International Comparison of Educational Status of India: Where do we Stand?

Before entering into the financing of education we will have a brief comparison of educational status under the international perspective and see where we stand? The EFA Global Monitoring Report (GMR) of UNESCO regularly provides a timely update on the progress that countries are making towards the global education goals which were agreed in 2000. Each year, the report constructs an index, Education for All Development Index (EDI) to assess the inter-country educational development throughout the world. The EDI is a composite index using four of the six EFA goals¹ selected on the basis of data availability and they are primary adjusted NER²², Adult literacy Rate, Gender-specific EFA Index (GEI) and Survival rate to grade completion (www.efareport.unesco.org). Three gender parity indexes (GPI) for primary education with each being weighted equally or used as proxy of the respective gender in constructing the EDI as per the methodology of UNESCO. As per the 2009 EFA Global Monitoring Report (UNESCO, 2008), India was ranked at 102nd position (GMR 2009) out of 129 countries for which a complete set of indicators required to calculate the EDI were available (www.efareport.unesco.org). Year-wise trend of the index for some selected countries has been shown in Figure-1.

FIGURE 1
Educational Development Index 2001-2010



Source: UNESCO's GMR (different years)

¹ Net Enrolment Ratio

² Goal 1 — Early childhood care and education, Goal 2 — Universal primary education, Goal 3 — Meeting the lifelong learning needs of youth and adults, Goal 4 — Adult literacy, Goal 5 — Gender and Goal 6 — Quality

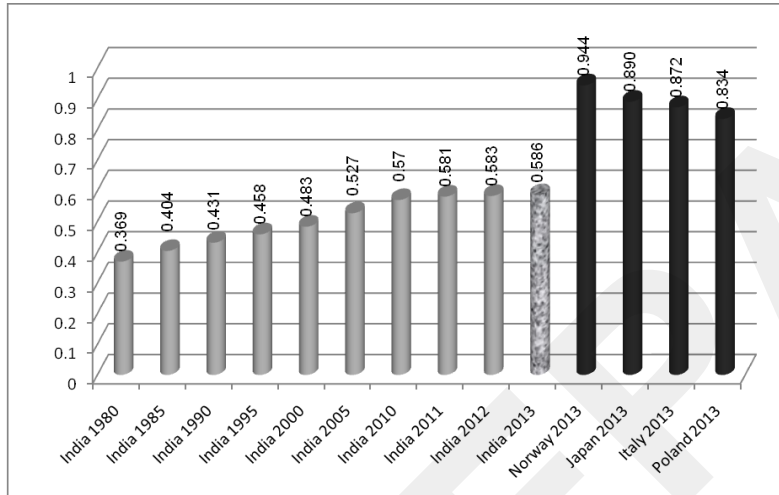
According to the value of the EDI the countries are ranked as “high”, “medium” and “low” EDI. India with a value of EDI, 0.790, has been included in the low ranked EDI countries just merely above Bhutan, Bangladesh and Nepal among the Asian countries and some Sub-Saharan African countries. Over the years, since (2001) i.e., after the United Nations Millennium Development Goals (MDG) were spelt out how much development has India achieved?

Figure-1 shows a brief in this respect. The GMR of 2012 that published the EDI of the countries across the world on the basis of the data of 2010 placed India at 102nd rank (same rank as of GMR 2009) out of 120 countries with an EDI value 0.790. It lies well below the East Asian countries like Philippines, Indonesia or even Bhutan. There are 83 countries whose EDI value is > 0.900. So far as the international scenario is concerned, the EFA Global Monitoring Report in 2008 asked – ‘Will we make it?’ With less than two years left before 2015, this report makes it clear that we will not (UNESCO, 2014). The concept note of the Report (2015) however indicates from the experiences of the past 15 years that we need a better framework for financing progress towards the international education goals. It also states that it will identify the needs for tracking progress at different levels of education and stages of life, so that the world’s forum can have an idea that will be relevant for a post-2015 global education strategy (GMR, 2015, Concept Note).

The Human Development Index (HDI), one of the important indicators related to education, a publication of the UN, is a composite index of measure of achievements in three aspects of human development – a long and healthy life, access to knowledge and a decent standard of living. Two indicators of access to knowledge are considered here. One is expected years of schooling which is assumed to have maximum and minimum values 0 to 18 and second is mean years of schooling with a value 0 to 15. On the basis of this, the Human Development Report 2014 (United Nations, 2014) has ranked the countries as – Very high human development, High human development, Medium human development and Low human development. It has published the data for 187 countries and India has hardly managed its position in the group of Medium human development countries with a rank of 135. The trend of change in HDI Values of India and comparison with the developed countries is shown in Figure 2.

It shows that India’s development is in this respect slow and it is far away from the developed countries. The development remains almost stagnant after 2009. There is also a gender difference in HDI having 0.519 for females and 0.627 for males. The expected years of schooling in India is 11.7 and mean years of schooling is 4.4 which is 13.4 and 8.1 on average for the 2nd category of countries. Comparing the values of HDI and EDI, it is found that the mean value of HDI is 0.706 and it is 0.899 for EDI (Table-2). In both the cases, India again lies far behind the mean values (figures in parenthesis).

FIGURE 2
HDI Value: India 1980-2013



Source: UN Human Development Reports - different years

TABLE 2
Human Development Index and Education Development Index

	<i>N</i>	<i>Minimum</i>	<i>Maximum</i>	<i>Mean</i>	<i>Std. Deviation</i>
HDI	113	0.337	0.944	0.706 (0.589)	0.152
EDI	113	0.528	0.997	0.899 (0.790)	0.109

N: Number of Countries

Thus India's position (135 in HDI and 105 in EDI) in international perspective is very poor so far as the basic education is concerned. It is, therefore, a big challenge to make a reform in educational system and give due importance in its planning and finance the education sector.

Public Expenditure on Education in India: An International Comparison

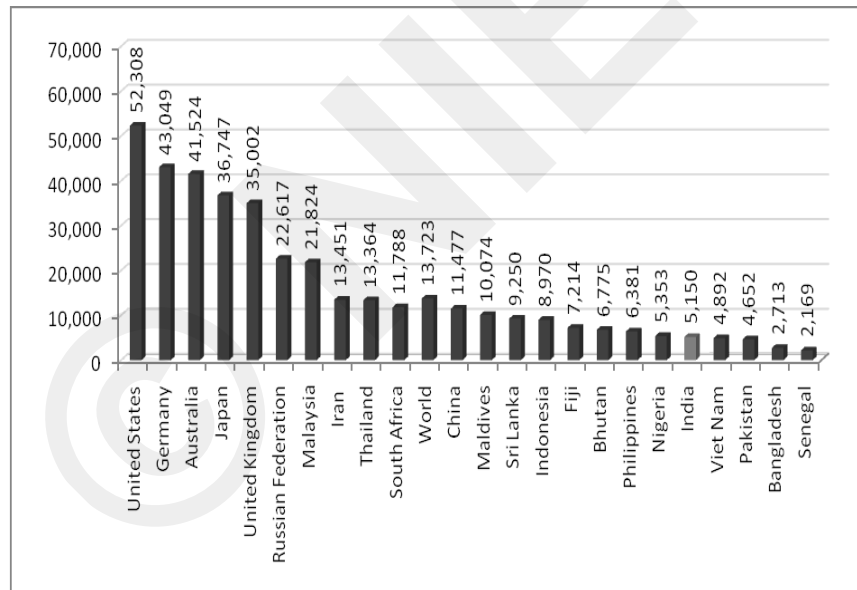
An inter-country cross section analysis (Barro, 1991) finds that public expenditure allocations for education can improve economic growth while promoting equity. Almost similar arguments have been extended by the more recent studies too (Gupta and Verhoeven, 2001) where it is opined that the size and the efficiency of public education expenditure are important in improving socio-economic performance. A number of studies have repeatedly stressed the importance of ensuring a sufficient and stable source of funding for education (Colclough with Lewin, 1993; Mehrotra, 1998; Bruns, Mingat and Rakotomalala, 2003). It has rightly been argued that in India, apart from several other factors, insufficient allocation of financial resources to the education sector on the part of the

government is the prime reason for non-fulfillment of the Constitutional commitments (Tilak, 2002). A question here becomes very much relevant. How can we measure the public spending on education? Some distinct measurement processes are suggested here. These are (i) Expenditure on Education as percentage of GDP, (ii) annual public expenditure per primary student iii) public expenditure of education on different levels of education, etc. Let us examine the issues accordingly.

GDP and its 6 per cent in different Countries: Where do We Stand?

It is very frequent that if a country runs with the economic development, then GDP will be increased both in absolute and per-capita term. Now, to spend 6 per cent of GDP on education in India and the same for high income group countries like Japan, Australia, Spain or even some South Asian and Sub-Saharan countries is not always comparable because the GNI per capita in India is far lower than that in these countries (Figure-3).

FIGURE 3
Gross National Income (GNI) per Capita 2013
for Some Selected Countries (2011 PPP \$)

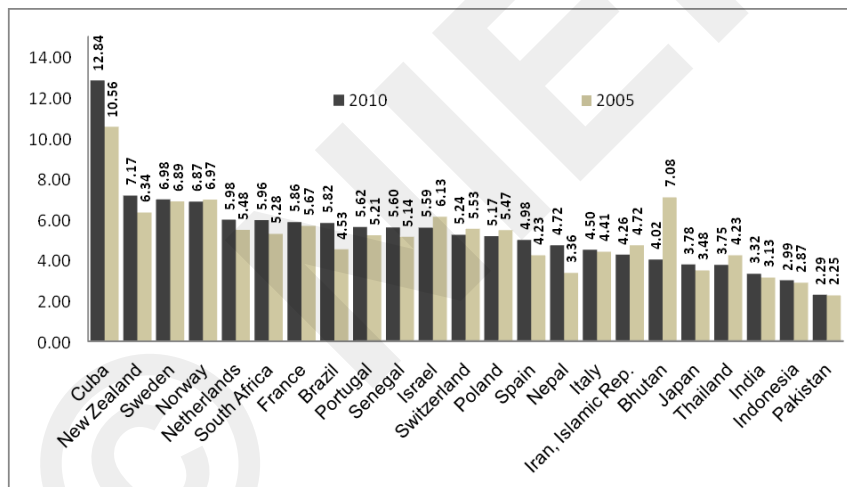


Source: UNDP, 2014, Statistical Tables: Website: <http://hdr.undp.org/en/data>

At the same time, the population size is equally important in discussing the proportion of GDP. It is very clear that population in India and accordingly the number of children in the schooling age group is much higher than that in all the countries except only China. So, an equal amount of GDP in absolute value does not end the story. Figure-3 depicts Gross National Income (GNI) per capita (2013) for some selected countries (2011 PPP \$). The world's average in this respect is much higher than India. India's GNI per capita is only 5150 whereas the world's average figure is 13,723 which is more than twice that of India.

With this poor GNI, it is a very big challenge for *India to cope up with the modern system of teaching-learning system which needs to introduce information and communication technology in the classrooms*. A UNESCO task force, the International Commission on Education for the 21st Century (UNESCO, 1996; <http://www.unesco.org/delors>), recommended in the late 1990s that governments should invest at least 6 per cent of their Gross National Product (GNP) on education, covering all levels. The EFA Global Monitoring Report (GMR), 2008 stated that about one quarter of countries spends this official level on education, but the majority invests less than 5 per cent. And even some face the largest educational challenges for those who still spend less than 3 per cent. As a proportion of GDP, 5.6 per of the regional GDP is invested by the Governments in North America and Western Europe followed by the Arab States (4.9 per cent) and sub-Saharan Africa (4.5 per cent). The regions of Latin America and the Caribbean as well as Central and Eastern Europe are close to the world average (4.4 per cent).

FIGURE 4
Public Spending (as % of GDP) on Education in
some Selected Countries 2005 and 2010



Data from database: World Development Indicators, UNESCO Institute for Statistics. Last updated: 03/12/2015

However, the governments of South and West Asian countries are investing only 3.6 per cent of the regional GDP on an average. The Indian figure in this respect was at 3.8 per cent, which was below the world's average and far from the international norm of 6 per cent of GDP. This proportion of GDP in India (3.8 per cent) is somehow comparable to that of some of the Asian countries. However, it is well below that of the developed countries. For example, Norway spends 7.7 per cent of its GDP on education. The same is 9.8 per cent in Cuba, 8.5 per cent in Denmark 7.4 per cent in Sweden, 6.5 per cent in New Zealand and 5.9 per cent for the US respectively (UNESCO, 2007, Statistical Table-13). Even among the Asian countries it spends less than Iran, Maldives, Malaysia and Thailand. Let us move to some more recent data on this issue.

Figure-4 depicts the public spending on education as proportion of GDP for some selected countries of the world. Considering the period 2005 and 2010, India spends much lower than the world's developed countries like Cuba, Sweden, Norway, the Netherlands, Italy, even Israel, Iran and Thailand. It is spending just a little more than 3 per cent of its GDP, thereby leaving behind just the countries like Pakistan, Indonesia and Bangladesh.

An important aspect in connection with the educational expenditure by the government is seen when cross country expenditure on education as a percentage of GDP is compared to the educational performance/outcome (e.g. Primary completion rate, Adult Literacy Rate, values of Education Index or Human Development Index) of the countries. A distinct trend is discernible between the outcomes and the public spending on education (Table-3). It shows a positive relation as such owing to the low investment in education. The educational indicators are considerably low compared to the countries having higher spending on education. Even some countries like Vietnam, Thailand, Philippines, Japan, Indonesia and Sri Lanka with a lower spending are observed to have performed better so far as the educational indicators are concerned (UNESCO, 2007^a).

TABLE 3
Educational Spending and Outcomes of Some Selected Countries

Country	Expenditure on education as % of GDP	GER Primary	GER Secondary	GER Tertiary	Adult Literacy rate	Youth Literacy Rate
Maldives	7.2	98	72	13	98.4	99.3
South Africa	6	102	102		93.0	98.8
Vietnam	6.6	80	105	13	93.4	97.1
Kyrgyzstan	5.8	106	88	41	99.2	100
Denmark	8.7	100	120	74	95.9	99.8
Thailand	5.8	97	87	51	93.5	98
India	3.3	113	69	23	62.8	81.1

UNDP - Human Development Report 2014, Statistical Table.

Apart from this, the UNESCO report (2007 pp. 18, 19) also draws attention to the issue that the *annual public expenditure per primary student* is an important indicator representing the commitment of the Government's towards achieving the goal of education for all (EFA). By expressing expenditure as a percentage of GDP per capita, education budgets can be compared in relation to the national income level, which is a proxy for the country's ability to generate educational financing. The UNESCO report (2007) compares the annual public expenditure per primary student as a percentage of GDP per capita for 122 countries for which data was available. The lowest public expenditure in this respect has been found in Central Asia region with a median value of 9.3 per cent followed by South and West Asia at 9.7 per cent. In the sub-Saharan Africa, the median expenditure per primary student was almost 13 per cent of GDP per capita being placed at the third position. The countries of North America and Western Europe have been found to spend the highest proportion of GDP per capita on education and this region tends to spend close to a regional median of 22 per cent. The same was 17 per cent in Central and Eastern Europe and 15 per cent in the East Asian and the Pacific region. The annual public expenditure per primary student in India is close to 9 per cent of the GDP. This expenditure is far below compared to

the other developed and developing countries. India's position is only a shade better than some of the sub-Saharan countries (Madagascar, Congo, Zambia, Cameroon, Chad) and a few East Asia and the Pacific countries (Myanmar, Cambodia, Macao, China, Lao PDR, Philippines). The US alone accounts for more than one quarter of the global education budget. Countries like France, Germany, Italy and the UK have education budgets that exceed the spending on education in whole of Sub-Saharan Africa. The Sub-Saharan Africa is home to 15 per cent of the world's school-age population but the combined spending on education by the national governments in the region amounts to only 2.4 per cent of the global education budget. The analysis shows that without increasing the spending on education in those regions, the goal of universal primary education is unlikely to be met.

There is another significant difference between India and the other developed countries with respect to social expenditure on education by the sectors of education. While India spends only 66 per cent of the total public expenditure of education on primary and secondary education, the same is 88.6 per cent in Bangladesh, 81.9 per cent in Korea, 70.4 per cent in Thailand, 65.3 per cent in Sri Lanka, 69.6 per cent in China, 72.8 per cent in Sweden, 76.3 per cent in the UK and 74.8 per cent in the US (Dev and Mooij, 2002). So, in India, the public financing on education, especially on Elementary education is very poor compared to other countries of South and West Asia.

Trends of Change in GDP and Education Expenditure in India

At a distance from percentage of GDP, the total expenditure on education also remains an impressive indicator on the part of the government. Here also, how much total expenditure on education increases over the years is more important than the proportion of GDP spent on education. This is presented in Table-4. It traces mainly two types of indicators namely, GDP at current prices at factor cost and the total expenditure on Education by all the sectors since the beginning of 1951 in India. First, the correlation coefficient between the two variables is found to be positive with almost a value approaching to 1 (0.995). This indicates that as GDP in absolute terms increases over time, it will be a cause of an increase in educational expenditure too, almost in the same proportion. It is simply seen from Table-4 that GDP has been increased at about four times from 2001-02 to 2012-13 and the total expenditure on Education (TEE) has been increased nearly five times over the specified time period. In view of the result, three parameters are calculated. First one is, Expenditure on education as percentage of GDP, Year-wise Change of GDP and third is Year-wise Change of Education Expenditure (Table-4).

The Education Expenditure is being increased significantly in most countries since 1999 and it is expected that as the economies start to grow, a larger share of their GDP is to be invested on education. Table-3 delineates the trends of public expenditure on education in India since 1951. Over the years, India has gone through a planned system of economy. The education sector was given due importance in this Plan. The total expenditure on all sectors had been increased (by 761 times from 1951-52 to 2001-02; Analysis of Budgeted Expenditure, MHRD) considerably, while the increase in the total expenditure on the Education sector is observed to be almost double compared to the expenditure on all sectors (by 1239 times over the same period). A year-wise trend has been shown in Table-4. It is also observed that there has been a considerable jump in the literacy rate from 18.34 per

cent in 1951 to 64.84 per cent in 2001(GOI, 2007-2008) and 73 per cent in 2011 (Census, 2011).

TABLE 4
Public Financing on Education in India since 1950

<i>Year</i>	<i>GDP at current prices at factor cost (Rs. in Crore)</i>	<i>Total Expenditure on Education by all sectors (Rs. in Crore)</i>	<i>Expenditure on Education as %age of GDP</i>	<i>Year-wise change in GDP (In %)</i>	<i>Year-wise change in Total Expenditure on Education (In %)</i>
1951-52	10080	64.46	0.64		
1961-62	17116	260.3	1.52	5.52	8.66
1971-72	44923	1011.07	2.25	6.40	13.30
1981-82	152056	4298.29	2.83	16.81	10.66
1990-91	510954	19615.85	3.84	16.65	14.10
1991-92	589086	22393.69	3.8	15.29	14.16
1992-93	673221	25030.3	3.72	14.28	11.77
1993-94	781345	28279.69	3.62	16.06	12.98
1994-95	917058	32606.22	3.56	17.37	15.30
1995-96	1073271	38178.09	3.56	17.03	17.09
1996-97	1243546	43896.48	3.53	15.87	14.98
1997-98	1390148	48552.14	3.49	11.79	10.61
1998-99	1598127	61578.91	3.85	14.96	26.83
1999-00	1847273	74816.09	4.05	15.59	21.50
2000-01	1991982	82486.88	4.14	7.83	10.25
2001-02	2167745	79865.7	3.68	8.82	-3.18
2002-03	2338200	68561.55	3.66	7.86	-14.15
2003-04	2622216	73044.93	3.4	12.15	6.54
2004-05	2971464	81280.85	3.26	13.32	11.28
2005-06	3390503	97224.19	3.34	14.10	19.62
2006-07	3953276	137574.00	3.48	16.60	41.50
2007-08	4582086	155790.92	3.4	15.91	13.24
2008-09	5303367	188799.87	3.56	15.74	21.19
2009-10	6108903	241301.67	3.95	15.19	27.81
2010-11	7248860	293478.23	4.05	18.66	21.62
2011-12*	8391691	351145.78	4.18	15.77	19.65
2012-13#	9388876	403236.51	4.29	11.88	14.83

Note: #Budget Expenditure, * Revised Expenditure

Data Source: Analysis of Budgeted Expenditure, MHRD, Different years; column 4, 5 and 6 calculated.

Although over the years, an increase in GDP and TEE has been seen, it is seen that after the World Declaration on Education for All (EFA) adopted at the World Conference on Education for All held in Jomtien, Thailand, in 1990, the government expenditure on education as percentage of GDP has been remaining within 3 per cent to 4 per cent (in between 1990–2001). Since Dakar Millennium Declarations in September 2000 (i.e. during the period of 2001-2013) this percentage has also been remaining almost the same as

earlier. The Kothari Commission in 1966 strongly recommended the spending of 6 per cent of GDP on education in India. The Government of India (GOI) also targeted to spend the same and it was also declared to make provisions for the recommended level by 1986. Public expenditures on education, both as a percentage of GDP and as a percentage of total government expenditure, have increased since 1950-1951. Education and training expenditure as a percentage of GDP rose from below 1 per cent in 1950-1951 to over 4 per cent by 2000-01 (Figure-4). Expenditure on education had been below 2 per cent of GDP till 1970 and below 3 per cent up to 1981-82. Actually, it does not cross the bar of 4 per cent of GDP in any of the years except some recent years (2010-2013). This is hardly comparable to international standards where governments of 35 countries out of 177 countries in the world were spending more than 6 per cent of GDP on education (UNDP, 2007).

Apart from the high human developed countries like Iceland, Norway, Sweden, Switzerland, Finland, Denmark, Belgium, New Zealand and Malaysia, there are several countries like Ukraine, Tunisia, Fiji, Guyana, Maldives, Bolivia, Botswana, Namibia, Morocco, Kenya and Yemen with medium scale of human development that are also spending much higher on education than India (UNDP, 2007). It may be noted here that human development in India has been placed in the medium category along with the above mentioned countries. Exceptions like Ethiopia do exist where educational spending has been more than 6 per cent of its GDP on education although it occupies the lower rungs in human development (UNDP, 2007).

The gross or total increase in expenditure does not end the whole story. Columns 5 and 6 in Table-3 show the annual growth of GDP and the annual growth of public expenditure on education which have been calculated from column 3 and 4 and the same is depicted in Figure-2. The annual growth of GDP shows an increasing trend, while, in contrast, the growth of educational expenditure has a decreasing trend. Actually, educational expenditure is fluctuating in nature over the consecutive years and as such the growth pattern over the last 50 years (1952-53 to 2003-04) shows a decreasing trend. This shows that educational expenditure in India has not grown proportionately with the growth of GDP since independence.

The whole analysis brings a picture before us that the Government of India has not been paying much importance to its education sector even after the World Declaration on Education for All (EFA) in 1990 or also even after the Dakar Millennium Declarations in September 2000. This, combined with the scenario of post-independence period (1950 to 1990) where in spite of committing to universalise the elementary education at different times with different years as the target, India is still missing the goal to achieve the universal elementary education for all the children.

Public Expenditure on Education in India over the Plan Period

The Planning Commission in India was set up in March, 1950 by a resolution of the government, which, while presenting its first plan before the nation, categorically stated “-----economic planning is an integral part of a wider process aiming not merely at the development of resources in a narrow technical sense, but at the development of human faculties and the building up of an institutional framework adequate to the needs and aspirations of the people” (<http://planningcommission.nic.in/reports/publications/pubf.htm>:). Education is not only an important component of human faculty development,

getting the children an adequate level of education is also a strong aspiration of the Indian parents (PROBE, 1998; Pratchi Education Report). Even after more than 60 years of the planning era in India, the question that still remains significant is whether the government has acted in consonance with its declaration. This section exclusively analyses the importance that has been given to the education sector during the plan period in terms of public expenditure on education.

The planning regime has been introduced in India taking five years as the planning period for each economic plan. This five year economic plan (FYP) is expected to provide the developmental strategy to the government. Economic intervention of the government is reflected by this plan. Since its inception in 1950 the country has gone through 12 FYPs and currently, the economy has stepped into the 13th FYP. Table-3 depicts the share of education in plan outlay over the different plan periods.

Table-5 depicts the public expenditure on education Plan-wise in India, along with an average plan outlay beginning 1961 (3 FYP). Although absolute plan outlays have increased manifold between the 3FYP and 10 FYP, it must be noted that the outlays in the table as per Economic Survey (GOI) are calculated at current prices. After allowing for calculations at constant prices, the picture no longer remains the same (Tilak, 2002).

Looking into the total plan outlays allocated to education, it is evident that percentage of the total plan outlay on education (Column 5 in Table-5) has been increasing steadily after an all-time low during the Annual Plan (1979-80) and the 6 FYP (1985-90). The proportion of the total plan outlay was at its zenith during the 3 FYP at 6.9 per cent, and it was only during the 10 FYP (6.7 per cent) that it could reach close to this figure. This also shows that the basic intention of the government in the early years of the planning era was to ensure the spread of education in the country. But the scenario changed soon after the 3 FYP and the proportion of educational outlay remained well below 5 per cent till the 8FYP. It is only in the 11 FYP that this crucial sector has been given special attention although the 10FYP outlay was marginally above 6 per cent after gross neglect towards this sector for over 40 years since 1966. It took more than 40 years for the government to implement the recommendation of the Kothari Commission (1966). There has been an unprecedented increase in educational outlays in the 11 FYP and it is hoped that the goal of Education for All may after all be realised. However, analysts have attributed slow growth rate of the economy to the low proportional outlay in education over the 40 year period. The rate of growth of the economy has been lower than what had been recommended by the Kothari Commission. Thus, it may be concluded that the slow growth rate of the economy, along with a marginal share allocated to education, may be one of the important reasons for the non-fulfilment of educational right of the Indian children.

There is another issue that may be addressed here. Is the 6 per cent of GDP sufficient for a country having a billion plus population size? In India, out of a 1.02 billion population, 25 per cent (253 million) belong to the age group of 5-14 years (Census of India, 2001). An estimate was made by the Department of Education, GOI in 1999 for the additional requirement in public expenditure on education for making Elementary Education a Fundamental Right in India by the year 2001. It has been reported that there are 377.53 lakh children in the primary age group (6-11) and 303.45 lakh are in the upper primary age group (11-14) are still uncovered by the schooling system. Some estimates, made by individual researchers, indicated clearly that India will require more than 6 per cent of GDP on education for having universal provision of schooling for the children in the age group of

5-14 years. Seth (1985) suggests 10 per cent of GDP, Tilak (1994) estimated about 8 per cent of GDP as educational outlay, while Rao (1992) proposed about a quarter of the GDP to be allocated on education (cited in Tilak, 2002).

TABLE 5
Share of Education as a whole in Plan Outlay in India (Rs in crore)
at Current Prices

<i>Plans</i>	<i>Period</i>	<i>Total Outlay</i>	<i>Education</i>	<i>% on Education</i>
Third Five Year Plan	1961-66	8576.6	588.7	6.9
Annual Plans	1966-69	6625.4	306.8	4.6
Fourth Five Year Plan	1969-74	15778.8	774.3	4.9
Fifth Five Year Plan	1974-79	39426.2	1710.3#	4.3
Annual Plan	1979-80	12176.5	263	2.2
Sixth Five Year Plan	1980-85	109292	2976.6	2.7
Seventh Five Year Plan	1985-90	218730	7685.5	3.5
Annual Plan	1990-91	58369.3	2316.5	4.0
Annual Plan	1991-92	64751.2	2599	4.0
Eighth Five Year Plan	1992-97	434100	19599.7	4.5
Ninth Five Year Plan	1997-02	859200	49838.5	5.8
Tenth Five Year Plan (Realisation))	2002-07	945328	63224	6.7
Eleventh Five Year Plan (Projection)	2007-12	2156571	238608	11.1

@ includes both Central and State sectors # includes expenditure on scientific research;
Source: Economic Survey, different years, GOI: <http://indiabudget.nic.in/>

Social Sector Expenditure: The Recent Trends

Universal access, enrolment, retention, achievement and equity in education were the five parameters on which the 10FYP laid its main thrust. Among these five parameters, providing access to education is the primary responsibility of the government. According to the VII Educational Survey (2002), 87 per cent of the total habitants (10.71 lakh) were provided with a primary school within a distance of 1 km and 78 per cent (9.61 lakh) were also served by an upper primary school. To provide universal access, a sizeable number of habitants have to be provided with a school. To achieve this goal, a substantive amount of financial allocation to education is imperative. Figures-5 and 6 depict the trends of social expenditure on education in the recent past.

A steady increase in the total expenditure by the Government (Central and State combined) can be highlighted and it has more than doubled between the year 2001-02 (Rs 644,746 crores) and 2007-08 (Rs 13,55,381 crores). A similar trend is also observed in the social sector in the aggregate and education expenditure in particular although the latter has shown a lower rate of growth than the former. Social sector expenditure as a percentage of the total expenditure decreased from 21.4 per cent in 2001-02 to 19.3 per cent in 2003-04, while recovering in the following years (22.4 per cent in 2007-08 (RE) and 24.1 per cent

in 2008-09 (BE)). But, expenditure on education, which stood at 10.6 per cent of the total expenditure in 2001-02, have remained around 10 percentage points over the past years (up to 2008-09 (BE)).

Nevertheless, the government has been successful in establishing a large number of primary (1.32 lakh primary schools and 56,000 Education Guarantee Scheme, EGS and Alternative and Innovative Education, AIE Centres) and Upper Primary (0.89 lakh) institutions in the recent past and as such access to primary education is very close to achieving the desired goal of universal access (Government of India^{b1}, 2008). Government estimates show that around 1 (one) lakh habitations still remain to be covered by any primary and upper primary school.

Constitutionally, India is federal in character and as such there is a union budget at the Centre along with the budgets prepared by the state governments at the state level. As education sector has been placed in the concurrent list, both the Central and the State governments are allocating funds to this sector separately. But the fund allocation by the Central government has not been in adequate measure till the world conference on Education for All held at Jometien in 1990. For instance, in 1995-96 the Centre's allocation to Elementary Education was Rs. 23.72 crores (81.46 crore) while it was 3,424.60 crore (2,212.41 crore) by the States (Compendium of Educational Statistics, Table-7.6, NCERT, New Delhi, 2002; figures in the parenthesis represent expenditure on secondary education).

FIGURE 5

Trends in Social Sector Expenditure by General Government* (In Rs crore)

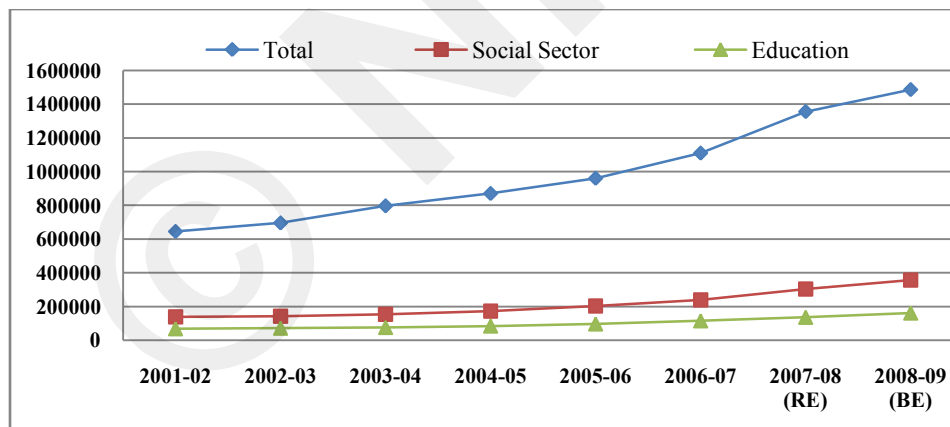
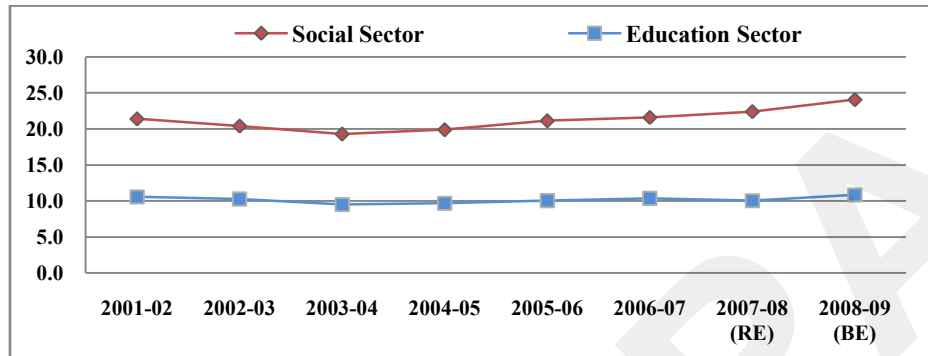


FIGURE 6

Trends of Social Sector Expenditure by General Government* (In % age)



Note: * Central and State Governments combined; 2006-07 Revised Expenditure and 2007-08 Budget Expenditure;

Source: Economic Survey (different years), Ministry of Finance, Government of India:
<http://indiabudget.nic.in>

Up to the year 1990, this share was too negligible to be mentioned. During certain years (in 1970s) it was even '0' from the end of Centre. This may be due to the fact that at the time of commencement of the Indian Constitution, the primary responsibility for elementary education was given to the state government, while the responsibility of higher and technical education was given to the Central Government. In 1978, after the 42nd Constitutional Amendment, all the levels of education were placed under the concurrent list. Thus for the non-fulfilment of the Constitutional commitment with regard to Elementary Education in India, both the Central and the State Governments may be held equally responsible. The pressure on the Indian Government by the international dignitaries at this conference compelled the government to accord high priority to UEE. Accordingly, it is after 1990-91 that the Centre has been allocating a sizeable amount to elementary sector of education. Yet, the actual expenditure made by the Centre compared to the States taken together is very marginal. However, it is a positive feature that the share given to elementary education has been increasing steadily in the recent years.

Observations and Conclusion

The paper primarily examines the pattern of public expenditure on education in India with respect to International concept. The afore-mentioned analysis brings to light the following issues among others.

In an international perspective, as per the estimate of 2007-08, 5.6 per cent of the regional GDP is invested by the governments in North America and Western Europe followed by the Arab States (4.9 per cent) and Sub-Saharan Africa (4.5 per cent). The regions of Latin America and the Caribbean as well as the Central and Eastern Europe are close to the world average (4.4 per cent). However, the governments of South and West Asian countries are investing only 3.6 per cent of the regional GDP on an average. The total expenditure on education in India was 2.78 per cent of the GDP (Actual) in 2006-07 and has

become 2.87 per cent in 2007-08 (revised estimate) and 4.29 per cent as per the Budget Estimate of (2012-13). This appears to be insufficient so far as the international scenario is concerned.

The UNESCO (2007) compares the annual public expenditure per primary student as a percentage of the GDP per capita for 122 countries for which data is available. The lowest public expenditure in this respect has been found in Central Asia region with a median value of 9.3 per cent followed by South and West Asia at 9.7 per cent. In the sub-Saharan Africa, the median expenditure per primary student was almost 13 per cent of the GDP per capita being placed in the third position. The countries of North America and Western Europe have been found to spend the highest proportion of GDP per capita on education and this region tends to spend close to a regional median of 22 per cent. The same was 17 per cent in Central and Eastern Europe and 15 per cent in the East Asia and the Pacific region. While the annual public expenditure per primary student in India is close to 9 per cent of the GDP per capita, this also is much lower than the international average.

There is another significant difference between India and other developed countries with respect to social expenditure on education by sectors of education. While India spends only 66 per cent of the total public education expenditure on primary and secondary education, the same is 88.6 per cent in Bangladesh, 81.9 per cent in Korea, 70.4 per cent in Thailand, 65.3 per cent in Sri Lanka, 69.6 per cent in China, 72.8 per cent in Sweden 76.3 per cent in the UK and 74.8 per cent in US.

The trend line of annual growth of GDP shows that the growth of GDP has an increasing trend, while, in contrast, the growth of educational expenditure has a decreasing trend. Actually, the growth of educational expenditure is much fluctuating in nature over the consecutive years and as such the growth pattern over the last 50 years (1952-53 to 2003-04) shows a decreasing trend. This shows that educational expenditure in India has not grown proportionately with the growth of GDP since independence.

During the planning period, the proportion of educational outlay remained well below 5 per cent till the 8FYP. It is only in the 11FYP that this crucial sector has been given special attention although the 10FYP outlay was marginally above 6 percent after gross neglect towards this sector for over 40 years since 1966. It took more than 40 years for the government to implement the recommendation of the Kothari Commission (1966). Thus, it may be concluded that the slow growth rate of the economy along with a marginal share allocated to education may be one of the important reasons for non-fulfillment of universalisation of elementary education of Indian children.

Intra-sectoral allocation of expenditure on education is also an important aspect through which one can evaluate the importance assigned by the government to each sector of education. Analysis of this trend is not very satisfactory. In 1990-91, a little less than 50 per cent (46.1 per cent) of education expenditure had been provided for the elementary education. Since then it has been remained more or less static till 2000-01 (MHRD, GOI, 2007). It is only after 2001-02 that an increasing trend is being observed so far as the financing of elementary education is concerned. In the recent period (2003-04), a little over 60 per cent of the total expenditure on education has been earmarked for Elementary Education followed by Secondary Education, at 38.98 per cent.

The Central government has been allocating very nominal amounts in the education sector till the world conference on Education for All held at Jometien in 1990. For instance, in 1995-96 the Centre's allocation to Elementary Education was Rs 23.72 crore while it was

3,424.60 Crore by the States. Till the year 1990, this share was too meager and not worth highlighting. Over certain years (in 1970s) it was even nil on the part of the Centre.

The problem of educational backwardness is an international problem and this cannot be assigned for India alone. But it becomes more acute in the country, because, with 1.23 billion population of which nearly 27 per cent (as per Indian Census, 2011) percent are illiterate (35 per cent female and 20 per cent male) it is really not an easy task to make such a bulk of population literate within a specified time frame. The pressure on Indian government by the international dignitaries compelled the government to accord high priority to UEE. Accordingly, it is after 1990-91 that the Centre has been sharing a sizeable portion of expenditure on elementary sector of education. Yet the actual expenditure by the Centre compared to the States taken together is very marginal. However, it is a matter of import that the share to elementary education has been increasing steadily in recent years.

Within the international frame, it is evident from the earlier discussion that India's position does not reflect any commendable scenario and the continuous half-century long neglect and failure to go in line with the other comparable countries in the world is quite apparent in spite of our constitutional commitment regarding the issue. The review and analysis of educational financing in India since independence as it has been seen and sketched in this paper does not seem to be satisfactory, especially when it has been compared with international perspectives. Eight year of schooling (Elementary Education) is a basic right of the children born in a society and it is also a social need for any country. This, for realisation, requires a series of efforts from several dimensions in different ways. It is not a single dimensional effort. Rather it is a holistic schema. Parents should be well aware and responsible in sending their children to school, society should have a positive direction so that the parents may be encouraged in the process, political leadership should have a clear-cut agenda regarding this need and above all the Government will have to ensure universal access so that each and every child can get at least the feasible schooling facilities. Unless there is a rapid increase in economic growth and thereby GDP, mere change in percentage will not make any differences at all. All these can ensure and achieve the goal and fulfill the need.

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Effect of Socio-economic Factors on Students' Choice of Discipline

— A Study of Four Academic Institutions of North India

Sarvendra Yadav*

Abstract

In the era of neo-liberal policies, the choice of a technical degree or a liberal degree at the undergraduate level has become a matter of debate across the globe. Market forces are creating such an environment which encourages certain forms of technical degrees only. Students enrolled in the liberal arts and their choices are always subject to scrutiny. This paper, on the basis of 200 college students' interviews of north India, tries to analyse the interrelationship between the socio-economic factors and the choice of discipline by undergraduate students. Based on the empirical data, it thoroughly discusses how the choice of a particular degree, i.e., technical degree or a liberal degree is conditioned. It also delves into how the different socio-economic factors, like age, gender, religion, caste, class, parents' and grandparents' education and intermediate college backgrounds shape the choice of a technical versus non-technical degree by a student. Simple logistic regression has been applied using step-wise forward regression to prepare different models. Major findings show, that the choice of technical or liberal degree does not depend on parental education, occupations and family income against the standard notion which has always pointed out, i.e., parental education and occupations, and family income are the key determinant variables in the choice-making of students' disciplines.

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Introduction

In the changing global landscape, neo-liberal policies are affecting every sphere of life and trying to push forward certain ideals which are conducive to the market. One such ideal is 'choice', precisely, the option to choose. This option of choice is not confined to market goods but also extends to services like education, health, etc., provided by the state. State educational policies under the influence of neo-liberal market logic are promoting only certain kind of technical skills or knowledge in academic institutions which is desirable to the market. In this backdrop it is important to understand whether these choices or preferences are the result of market processes or individual social conditions, i.e., socio-economic factors, especially when it is a well established fact that socio-economic factors have an impact on the students' educational outcomes.

In this backdrop, the primary focus of this paper is to examine the relationship between a student's choice of any particular discipline and his/her socio-economic background. We will examine how the students' enrolment in their present degree courses is governed by their socio-economic factors like their gender, religion, caste and class. In addition to these, it is also examined how explanatory variables like the educational backgrounds and occupations of the students' grandparents and parents, and their own senior secondary schooling background help in the enrolment in a particular degree.

In the present study, the participation in different disciplines was measured through enrolment. Basant and Sen (2010) make a distinction between attainment and enrolment. The former includes the population of students that have completed graduate and higher level education, while the latter focuses on the segment which is currently studying for the purpose of graduation or for passing higher level courses. They define attainment as a stock measure and state that it carries the "burden of history", and enrolment as a flow measure that captures the current situation and provides indications for the future (Basant and Sen, 2010).

Given this background, only those B.Tech and B.A. students were interviewed who were enrolled in the third year of their college education.

The analysis of the paper is done by measuring the strength of the relationship and the cumulative impact of all the explanatory variables were tested through Logistic Regression. Here, logistic regression was chosen because the dependent variable was binary in nature. In this paper, the nouns "college" and "institution" are used interchangeably. Thus, even though the University of Delhi students were sampled from two colleges, namely, St. Stephen's College and Hindu College, yet, we refer to the Delhi University students as belonging to one "college".

Research Question

The main research question of this paper is to examine the relationship of different socio-economic factors with the choice of a particular discipline (technical or non-technical) among engineering and social science students. Broadly speaking, it is about structural factors, or how socio-economic factors affect choice of disciplines by undergraduate students. Based on the empirical data, it thoroughly discusses how the choice of a particular discipline is conditioned. Keeping this in view, how the different socio-economic factors, like age, gender, religion, caste, class, parents' and grandparents' education and intermediate

college backgrounds shape the choice of a technical versus non-technical degree has been analysed. The cumulative effect of these independent variables on the choice of a particular discipline (technical or non-technical) by a student has been analysed through simple logistic regression.

Methodology

A non-random stratified sampling, *Quota sampling*, was used. This differs from random stratified sampling in as much as instead of dividing the population into strata and randomly choosing a number of respondents, the sample 'quotas' are set by the researcher himself (Sarantakos, 1993, p. 152).

A quota of 100 students from social science backgrounds and 100 students from technical backgrounds was set to give equal representation to both groups that were to be compared. Considering all significant dimensions of the student population and ensuring that each dimension would be represented in the sample more precisely, *dimensional sampling* was used. This sampling procedure is used particularly when the sample is small and one wants to guarantee that at least one representative from each dimension of the population is included in the sample. Choosing the entire sample only from a single place does not consider regional variations in the socio-economic profiles of the students. Therefore, these 100 students from each of the groups were further divided into 50 students from Delhi (a metropolitan city) and 50 students from Kanpur (a regional, non-metropolitan city). Hence, this distribution of the sample ensured 50 students with social science backgrounds from Kanpur and Delhi each, and the same for the same technical background case as well.

Initially, we tried to make sure that all 50 students of the social science or technical background would be from the same class. We were successful in getting students from the same class in three of the institutions, with the exception of the University of Delhi. To complete the sample of 50 students from the University of Delhi, we had to incorporate two colleges, namely, Hindu College and St. Stephen's College. Initially, we tried to collect the sample from among the B.A. third year students enrolled in the Sociology course at Hindu College, but the class size was very small, i.e., around 20-25 students. Therefore, we had to include B.A. third year English Honours students from St. Stephen's College and Hindu College. We wanted to know the opinions of students who were studying the most popular course that their college had to offer, which is Computer Science and Engineering (CSE) in IIT Delhi and English Honours and Sociology Honours in St. Stephen's College and Hindu College, respectively. So, besides the 34 Hindu College B.A. Sociology Honours and B.A. English Honours third-year students, we decided to include 16 B.A. English Honours third-year students from St. Stephen's College as well to complete the sample size. St. Stephen's College and Hindu College are situated across the road from each other and cater to students of almost the same socio-economic backgrounds. The class sizes of the IIT Delhi, HBTI Kanpur and Christ Church College (CSJM University, Kanpur) samples were 66, 64 and 158, respectively.

Therefore, for the collection of primary data, the technique used to gather information was questionnaires. The research instruments used to perform this operation were informal talks with the students' communities, and a detailed questionnaire with open- and close-ended questions. A pre-tested and pre-structured questionnaire and a subsequently

modified questionnaire were used. The final questionnaire was tested in a pilot study before going to the field. The questionnaires were collected within a six month time-span, from September 18, 2008 to March 8, 2009.

Figures 1-3 and Table 1 exhibit the following demographic composition across disciplines and locations which were finally selected for the study.

FIGURE 1
Gender Distribution across the Colleges

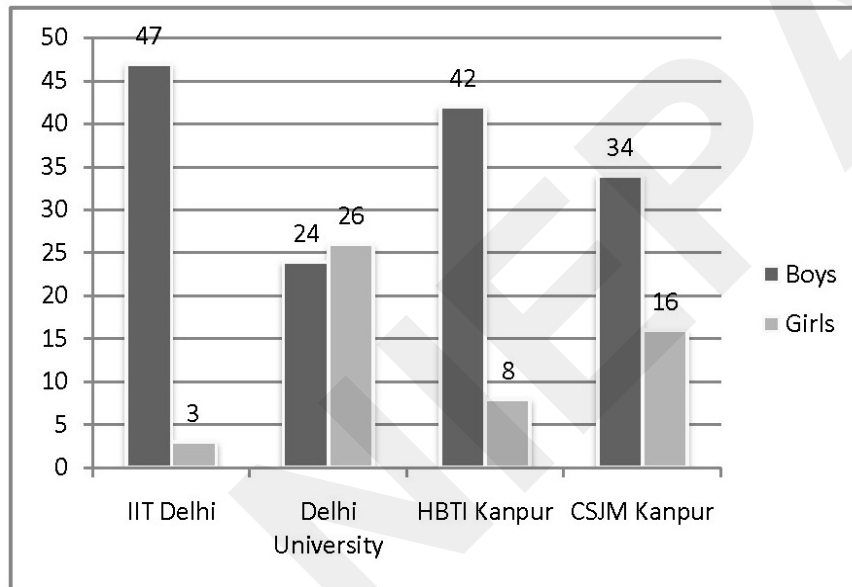


TABLE 1
The Descriptive Statistics of Ages of the Students

College	Age of the Students			
	N	Minimum	Maximum	Mean
IIT Delhi	50	19	21	19.98
Delhi University	50	19	24	20.36
HBTI Kanpur	50	19	24	21.44
CSJM Kanpur	50	17	25	19.92
Total	200			20.43

Standard Deviation = 1.213 Years.

FIGURE 2
Religious Categories Across the Colleges

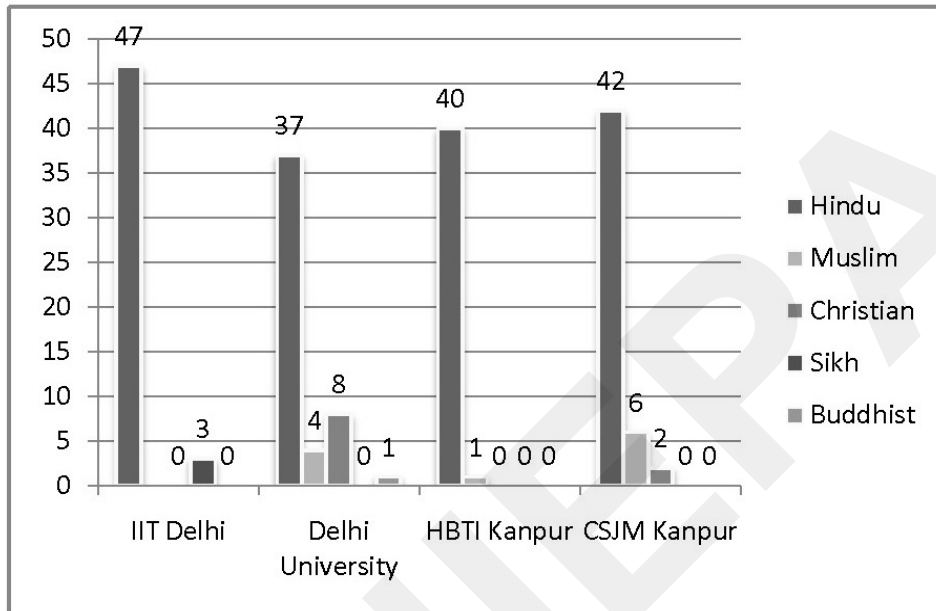
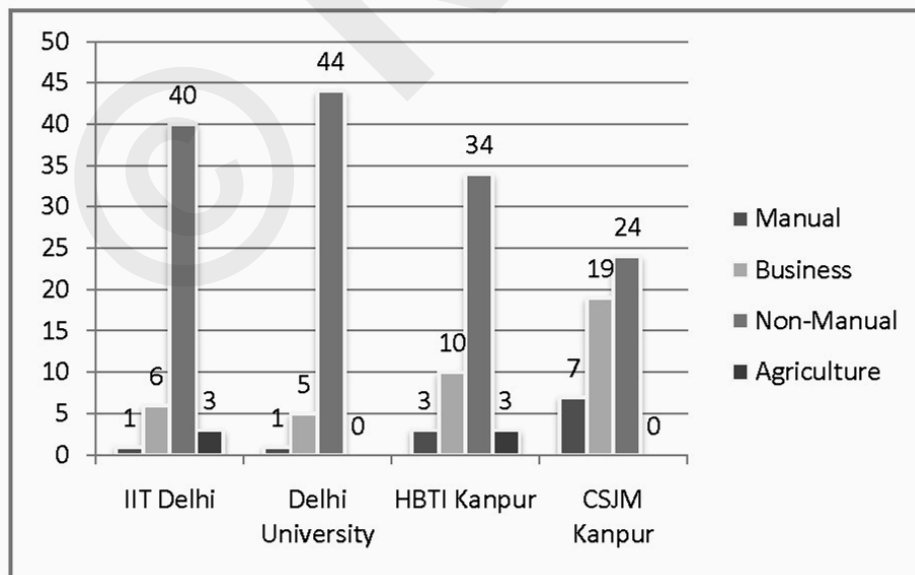


FIGURE 3
Occupational Categories of the Students' Fathers across the Colleges



Review of the Relevant Literature

Socio-economic background determines the choice of any student's career, and a lot of studies have explored the influence of family background on the educational attainment of students. The focus of these studies centred on high school completion or the total number of years of schooling, specifically, how the educational achievements of a student are determined by parental education, family income and the family head's occupational status (Biblarz and Raftery, 1999; Boggess, 1998; Datcher, 1982; Ginther and Pollak, 2000; Hill and Duncan, 1987; Kane, 1994; Li and Wojtkiewicz, 1992; Manski, Sandefur, McLanahan and Powers, 1992; Sandefur and Wells, 1999; Wojtkiewicz, 1993). Using multinomial logit, Leppel, Williams and Waldauer (2001) examined the impact of parental occupation and socio-economic status on the choice of college major, with a special attention directed towards female and male differences. Only a few studies of the choice of college major have looked at the role of the socio-economic status of the parents upon the students' choices by examining gender differences. A rare study by Ware, Steckler and Leserman (1985) concluded that highly educated parents increase the probability of women choosing a major in Science and have a negative impact on the probability of men choosing to major in Science.

Chakrabarti (2009) examined the role of economic, social and demographic factors in determining the likelihood of participation in higher education of rural and urban youth in India. Her study revealed that the female youth, as compared to her male counterpart, has significantly higher odds of attending a higher educational institution for an Arts/ Humanities course in urban India. Based on a survey conducted with nearly 260 students, Varma and Kapur (2010) found a strong correlation between the socio-economic status of students and their access to the IITs, their satisfaction and their attitudes towards their future plans.

More recently, Basant and Sen (2010) have explored how an individual's participation in higher education is dependent on his/her religious affiliations, socio-economic status and demographic characteristics. Before this, Desai and Kulkarni (2008) tried to examine the changes in educational attainment among the various social groups over a period of nearly 20 years by using a national sample survey of over 100,000 households. They tried to see whether educational inequalities have declined over time, and found a declining gap between *dalits* (another term for members of the Scheduled Castes), *adivasis* (another term for members of the Scheduled Tribes) and others for whom the odds of completing primary school education are generally against.

Most of the studies which have been done on Indian universities are based on secondary data collected through several surveys about college attainment or enrolment of students. But how the students make their educational decisions about the choice of discipline in graduation has not been explored adequately. What are the variables which affect these choices, and what are the correlations that can be found amongst them all? This study makes an effort to deal with these questions and tries to examine them systematically, and thus, contribute to the relatively sparse literature on this subject.

Logistic Regression

Regression analysis is used for establishing the relationship between two variables; it can be used for the assessment of association, as well as for prediction. In this study, the observational research design was used to find the association between the variables and to predict the chances of a student choosing the respective degree.

Therefore, empirical specification for the final model becomes:

$$\begin{aligned} \text{COLLEGE DEGREE} = & b_0 + b_1 \text{ AGE} + b_2 \text{ GENDER} + b_3 \text{ RELIGION} + b_{4-7} \text{ CASTE} + b_{8-11} \\ & \text{INCOME} + b_{12-20} \text{ GRANDPARENTS' OCCUPATIONS} + b_{21-29} \text{ PARENTS' OCCUPATIONS} \\ & + b_{30-53} \text{ GRANDPARENTS' and PARENTS' EDUCATION} + b_{54-61} \text{ INTERMEDIATE} \\ & \text{BACKGROUND} \end{aligned}$$

Measurement and Classification of Explanatory Variables

The explanatory variables were designed to control the socio-economic backgrounds and academic backgrounds of the students. In the former, mainly age, gender, caste, class and grandparents' and parents' education types and occupations were taken into account by creating dummy variables of each variable's different sub-categories. Each variable and its categories have been summarised in Table 2 and discussed in detail below.

Age: Age was used as a continuous data-set. No specific categories were made.

Gender: Gender was used simply as a binary variable.

Religion: Initially, religion was categorised into Hindu, Muslim, Sikh, Christian and Buddhist. Chi-square testing was done on these categories, but due to the very low frequencies appearing in the non-Hindu groups, the regression results were dropped. Hence, we made only two broad categories for religion of the student population in the regression analysis, viz., Hindu and non-Hindu.

Caste: Caste categories were taken simply from the official categorisation followed by the Constitution of India. The castes were divided into the General Category, Other Backward Castes, Scheduled Castes and Scheduled Tribes. Non-Hindu students who did not avail of any reservation or benefits were included in the General Category.

Class: The effect of class has been evaluated through the annual household income of the student's family. Annual household income categories were constructed on the scale of the Government of India's Income Tax slabs for the financial year 2008-2009, which was when the fieldwork was carried out in the different institutions. The Income Tax slabs themselves for the different income groups were used as the different income categories. The tax-free income group of up to Rs 1,50,000 per annum was the first category. The second category was the income group of between Rs 1,50,000 and Rs 3,00,000 per annum, while the income group of Rs 3,00,000 to Rs 5,00,000 per annum was the third income group. Households with an annual income of Rs 5,00,000 or more were the highest tax payers, and so constituted the fourth and highest category.

Occupation: Initially fourteen occupational categories were mentioned in the questionnaire. Broadly speaking, these came under the groups manual labour, business, non-manual labour and agriculture. The categories were further subdivided more precisely into

subgroups. Manual Labour was categorised into three subgroups: Unskilled, skilled and highly skilled and supervisory. According to the size of the business, the second category was further subdivided into small business/petty shop owners, medium business and owners of factories/large shops. The service class occupations were grouped as non-manual labour and subdivided into four parts: the lowest profession formed the first sub-category; clerks and shop assistants formed the second; intermediate professions and salaried posts constituted the third; and high professions and high administrative posts were grouped into the fourth sub-category. The agriculture occupation category was also subdivided according to the land-size owned/possessed. Labourers without any land were classified as agricultural labourers. Then, in increasing order, there were small farmers, medium farmers and big planters/landlords.

After the data collection, it was found that most of the categories were not chosen. This showed that most of the students were not from these categories. This also pointed out the accessibility of higher education was limited to certain occupational classes (Non-manual and business). Due to the paucity of observations and to make things more comparable, the sub-categories of the four main occupational divisions were merged, and thus, reduced to four from the earlier 14. Thus, final occupational categories used in regression analysis were manual labour, business, non-manual labour and agriculture. This created the problem of analysing class from the different occupational divisions. But to see the impact of class on the outcome variable, these occupational categories, along with the income categories, helped us understand the overall contribution.

These categories were used for the grandfathers and fathers, but for the grandmothers and mothers, a fifth category was included, that of being a housewife.

Education: Education was divided into five categories. The illiterates were in the first category. Those who were literate and had education up to Class 8 were in the second category. Then, those who had completed higher secondary education, i.e., Class 12, were in the third group. The fourth comprised those who were graduates, while those who were post-graduates constituted the fifth group.

Apart from these, a separate category was made, in which the education of the grandparents and parents were distinguished on the basis of the nature of the field, i.e., technical or non-technical.

Socially important factors which were important in shaping the choices of students were age, gender, religion, caste and class. Along with these, their Intermediate backgrounds like whether the student's intermediate school was from rural or urban area, management (government, private, others), board (CBSE, ICSE, Others) and Intermediate board marks were also taken into consideration. But due to collinearity board marks were dropped in the final logit model in the regression analysis. In choosing the stream whether students have taken any advice from their peer group was also taken into account in the final model. Step-wise forward regression was used in adding these variables and formulating independent models for each explanatory variable and its cumulative impact on the overall model.

TABLE 2
Definitions of the Variables used in the Models

<i>Variable</i>	<i>Definition</i>
<i>Explanatory Variables</i>	
Age	Age of the student.
Gender	Dummy variable that takes the value of 1 if the student is female and is zero otherwise.
Religion	Dummy variable that takes the value of 1 if the student's religion is Hinduism and is zero otherwise.
ConstiC1	Dummy variable that takes the value of 1 if the student's constitutional caste category is General and is zero otherwise.
ConstiC2	Dummy variable that takes the value of 1 if the student's constitutional caste category is OBC and is zero otherwise.
ConstiC3	Dummy variable that takes the value of 1 if the student's constitutional caste category is SC and is zero otherwise.
ConstiC4	Dummy variable that takes the value of 1 if the student's constitutional caste category is ST and is zero otherwise.
Incomeg1	Dummy variable that takes the value of 1 if the annual household income of the student's family is less than or equal to Rs. 150,000 and is zero otherwise.
Incomeg2	Dummy variable that takes the value of 1 if the annual household income of the student's family is between Rs. 150,000 and Rs. 300,000 and is zero otherwise.
Incomeg3	Dummy variable that takes the value of 1 if the annual household income of the student's family is between Rs. 300,000 and Rs. 500,000 and is zero otherwise.
Incomeg4	Dummy variable that takes the value of 1 if the annual household income of the student's family is equal to or more than Rs. 500,000 and is zero otherwise.
(G) Fedu1	Dummy variable that takes the value of 1 if the (grand) father of the student is illiterate and is zero otherwise.
(G) Fedu2	Dummy variable that takes the value of 1 if the (grand) father's education is upto Class 8 and is zero otherwise.
(G) Fedu3	Dummy variable that takes the value of 1 if the (grand) father's education is Senior Secondary (+2) and is zero otherwise.
(G) Fedu4	Dummy variable that takes the value of 1 if the (grand) father is a graduate and is zero otherwise.
(G) Fedu5	Dummy variable that takes the value of 1 if the (grand) father is at least a post-graduate and is zero otherwise.
Medu1	Dummy variable that takes the value of 1 if the mother of the student is illiterate and is zero otherwise.
Medu2	Dummy variable that takes the value of 1 if the mother's education is upto Class 8 and is zero otherwise.
Medu3	Dummy variable that takes the value of 1 if the mother's education is Senior Secondary (+2) and is zero otherwise.
Medu4	Dummy variable that takes the value of 1 if the mother is a graduate and is zero otherwise.
Medu5	Dummy variable that takes the value of 1 if the mother is a post-graduate and is zero otherwise.
GF_Tech	Dummy variable that takes the value of 1 if the grandfather of the student is/ was a technical graduate and is zero otherwise.
F_Tech	Dummy variable that takes the value of 1 if the father of the student is a technical graduate and is zero otherwise.
GM_Tech	Dummy variable that takes the value of 1 if the grandmother of the student is/ was a technical graduate and is zero otherwise.
M_Tech	Dummy variable that takes the value of 1 if the mother of the student is a technical graduate and is zero otherwise.
FO1	Dummy variable that takes the value of 1 if the father's job is manual and is zero otherwise.
FO2	Dummy variable that takes the value of 1 if the father's job is business and is zero otherwise.
FO3	Dummy variable that takes the value of 1 if the father's job is non-manual (service) and is zero otherwise.
FO4	Dummy variable that takes the value of 1 if the father's job is agriculture and is zero otherwise.
MO1	Dummy variable that takes the value of 1 if the mother's job is manual and is zero otherwise.
MO2	Dummy variable that takes the value of 1 if the mother's job is business and is zero otherwise.
MO3	Dummy variable that takes the value of 1 if the mother's job is non-manual (service) and is zero otherwise.
MO4	Dummy variable that takes the value of 1 if the mother's job is agriculture and is zero otherwise.
MO5	Dummy variable that takes the value of 1 if the mother is a housewife and is zero otherwise.
School_RU	Dummy variable that takes the value of 1 if the student's Intermediate College was in an urban area and is zero otherwise.
SManagement1	Dummy variable that takes the value of 1 if the student's Intermediate education was from a government school and is zero otherwise.
SManagement2	Dummy variable that takes the value of 1 if the student's Intermediate education was from a private school and is zero otherwise.
SManagement3	Dummy variable that takes the value of 1 if the student's Intermediate education was from a missionary or some other school and is zero otherwise.
SBoard1	Dummy variable that takes the value of 1 if the student's Intermediate Board was CBSE and is zero otherwise.
SBoard2	Dummy variable that takes the value of 1 if the student's Intermediate Board was ICSE and is zero otherwise.
SBoard3	Dummy variable that takes the value of 1 if the student's Intermediate Board was some other / State Board and is zero otherwise.
Advice	Dummy variable that takes the value of 1 if the student had taken advice on choosing his/ her subjects and is zero otherwise.
<i>Dependent Variable</i>	
Degree	Dummy variable that takes the value of 1 if the student is enrolled in a B.Tech. degree and is zero for a B.A. degree.

TABLE 3
Descriptive Summary of the Variables

<i>Variable</i>	<i>N</i>	<i>Mean</i>	<i>S.D.</i>	<i>Min.</i>	<i>Max.</i>
Degree	200	0.5	0.501	0	1
Age	200	20.4	1.213	17	25
Gender	200	0.265	0.442	0	1
Religion	200	0.89	0.313	0	1
ConstiC1	200	0.68	0.467	0	1
ConstiC2	200	0.135	0.342	0	1
ConstiC3	200	0.165	0.372	0	1
ConstiC4	200	0.02	0.140	0	1
Incomeg1	200	0.255	0.436	0	1
Incomeg2	200	0.295	0.457	0	1
Incomeg3	200	0.17	0.376	0	1
Incomeg4	200	0.28	0.450	0	1
Fedu1	200	0.015	0.121	0	1
Fedu2	200	0.03	0.171	0	1
Fedu3	200	0.105	0.307	0	1
Fedu4	200	0.505	0.501	0	1
Fedu5	200	0.345	0.476	0	1
Medu1	200	0.075	0.264	0	1
Medu2	200	0.115	0.319	0	1
Medu3	200	0.175	0.380	0	1
Medu4	200	0.365	0.482	0	1
Medu5	200	0.27	0.445	0	1
GF_Tech	200	0.05	0.218	0	1
F_Tech	198	0.090	0.288	0	1
GM_Tech	200	0	0	0	0
M_Tech	200	0.025	0.156	0	1
FO1	200	0.06	0.238	0	1
FO2	200	0.2	0.401	0	1
FO3	200	0.71	0.454	0	1
FO4	200	0.03	0.171	0	1
MO1	200	0.01	0.099	0	1
MO2	200	0.03	0.171	0	1
MO3	200	0.26	0.439	0	1
MO4	200	0	0	0	1
MO5	200	0.7	0.459	0	1
School_RU	200	0.755	0.431	0	1
SManagement1	200	0.375	0.485	0	1
SManagement2	200	0.47	0.500	0	1
SManagement3	200	0.155	0.362	0	1
SBoard1	200	0.47	0.500	0	1
SBoard2	200	0.16	0.367	0	1
SBoard3	200	0.37	0.484	0	1
Advice	200	0.88	0.023	0	1

TABLE 4
Choice of Degree: Logistic Regressions and Coefficients of Regression

<i>Variable</i>	<i>Model 1</i>	<i>Model 2</i>	<i>Model 3</i>	<i>Model 4</i>	<i>Model 5</i>
Age	0.365 (0.013)**	0.361 (0.017)**	0.301 (0.054)**	0.437 (0.021)**	0.395 (0.054)*
Gender	-1.725 (0.000)***	-1.744 (0.000)***	-1.707 (0.000)***	-1.828 (0.000)***	-2.366 (0.000)***
Religion	3.678 (0.002)***	3.551 (0.003)***	3.406 (0.003)***	4.234 (0.005)***	4.186 (0.004)***
Caste					
ConstiC1	-0.026(0.953)	0.053(0.911)	0.305(0.561)	0.128(0.842)	-0.591(0.436)
ConstiC2	-0.746(0.189)	-0.628(0.275)	-0.509(0.419)	-0.482(0.544)	-0.847(0.340)
ConstiC3	RC	RC	RC	RC	RC
ConstiC4	1.482(0.349)	1.322(0.394)	0.979(0.583)	1.515(0.424)	1.020(0.666)
Class					
Incomeg1		0.123(0.800)	0.176(0.776)	0.590(0.455)	0.986(0.294)
Incomeg2		0.538(0.248)	0.403(0.445)	0.479(0.456)	0.870(0.210)
Incomeg3		0.737(0.154)	0.795(0.144)	0.890(0.178)	1.022(0.171)
Incomeg4		RC	RC	RC	RC
Occupation					
GFO1			-0.881(0.231)	-1.108(0.215)	-1.191(0.206)
GFO2			RC	RC	RC
GFO3			0.012(0.979)	-0.060(0.921)	0.107(0.871)
GFO4			0.470(0.399)	-0.153(0.821)	0.119(0.875)
GM01			0	0	0
GM02			RC	RC	RC
GM03			0	0	0
GM04			0	0	0
GM05			-0.094(0.930)	0.213(0.890)	-0.079(0.960)
FO1			-0.289(0.754)	0.346(0.772)	-0.107(0.928)
FO2			RC	RC	RC
FO3			0.475(0.354)	0.668(0.271)	0.639(0.336)
FO4			0	0	0
MO1			0	0	0
MO2			-1.003(0.442)	-1.651(0.261)	-1.321(0.338)
MO3			RC	RC	RC
MO4			0	0	0
MO5			0.269(0.553)	0.550(0.329)	0.573(0.359)
Education					
GF_Tech				-0.167(0.868)	-0.396(0.712)
GM_Tech				0	0
F_Tech				1.249(0.164)	1.150(0.222)
M_Tech				0.842(0.660)	0.254(0.902)
GFedu1				0.245(0.744)	0.481(0.565)
GFedu2				RC	RC
GFedu3				-0.082(0.908)	-0.164(0.833)

Effect of Socio-Economic Factors on Students' Choice of Discipline

Variable		Model 1	Model 2	Model 3	Model 4	Model 5
GFedu4					0.361(0.637)	0.690(0.415)
GFedu5					-0.314(0.749)	-0.054(0.960)
Fedu1					0.904(0.624)	0.485(0.801)
Fedu2					-0.037(0.977)	-0.268(0.847)
Fedu3					-0.409(0.605)	-0.354(0.688)
Fedu4					0.426(0.432)	0.353(0.551)
Fedu5					RC	RC
GMedu1					0.991(0.109)*	0.718(0.283)
GMedu2					RC	RC
GMedu3					-0.666(0.446)	-0.719(0.452)
GMedu4					-0.770(0.363)	-1.313(0.163)
GMedu5					0.735(0.612)	0.483(0.754)
Medu1					-1.450(0.186)	-1.543(0.209)
Medu2					-0.607(0.446)	-0.339(0.702)
Medu3					RC	RC
Medu4					0.381(0.573)	0.384(0.596)
Medu5					1.022(0.179)	0.791(0.353)
+2	Background					
	School_RU					-
	SManagement1					1.018(0.109)*
	SManagement2					-0.737(0.377)
	SManagement3					-0.598(0.422)
	SBoard1					RC
	SBoard2					1.445(0.046)**
	SBoard3					1.087(0.285)
	Advice					RC
						1.621(0.022)**
	Constant	-10.38(0.002)	-10.56(0.002)	-9.85(0.006)	-14.85(0.002)	-14.119(0.005)
	N	200	200	191	189	189
	LL	-108.943	-107.466	-101.163	-88.277	-81.111
	LR chi2	(6)59.37	(9)62.33	(17)62.41	(36)85.45	(42)99.78
	Prob > chi2	0.000	0.000	0.000	0.000	0.000
	Pseudo R2	0.2141	0.2248	0.2357	0.3261	0.3808

Note: *p*-values are in parentheses; *** means significant at the 1% level; ** means significant at the 5% level; * means significant at the 10% level; LL is Log-likelihood; 0 is a dropped case; and RC is the reference category for the particular category variable.

Empirical Estimates of the Logistic Regression where the Dependent Variable is the Current Degree of the Enrolled Student

In this section, we explore the role played by age, gender, religion, caste, class, and occupations and education of the grandparents and parents in pursuing a technical degree.

Baseline Model (Model 1): A total of five models were constructed on the different controlled variables. Model 1 of the table shows that a student's chance of pursuing a technical degree during his/her higher education increases as the age of the student increases. This is thus a highly significant variable. It particularly supports the observation

that getting admission into a standard technical institution takes time. This is because most of the students who come from the middle class background rely heavily on one or more years of coaching classes to gain admission to a renowned technical institute.

Another highly significant variable in Model 1 is Gender, which depicts a negative relationship with the degree. This demonstrates that as the chances of the students' choosing a technical degree increase, it is more likely that the girl students' chances of opting for the technical degree will be less. This is particularly discouraging in the sense that girls are still considered unfit for technical courses. The gender bias is visible in the choice of degree.

Religion is another very significant variable which shows a direct relationship with pursuing a technical degree. The Hindu students' chances of pursuing a technical degree are more as compared to those of non-Hindu students.

The caste categories do not show any significant relationship in Model 1.

Adding Class to the Model (Models 2 and 3): Model 2 controls the Class variable, more precisely, the income group, which is not significant enough to make concrete inferences. OBC and ST Category students' chances of pursuing technical degrees are unchanged in Model 2 when we add income to the other variables from Model 1.

Model 3 is an extension of the Class effect exploration which incorporates or controls the occupational backgrounds of the grandparents and parents. None of the occupational response variables were significant. But after controlling Occupation, it was noticed that the coefficients of the Gender, Religion, Caste and Income groups were nearly unchanged, except for a little variation in ConstiC1 and ConstiC3. This shows that under Model 3, as compared to Model 2, the General Category students' chances of pursuing technical degrees increases when we control Occupation, whereas, under the same condition, the ST Category students' chances fall.

Adding Parental Education to the Model (Model 4): Model 4 added one more important factor which contributes maximally to the cultural capital of a student, viz., the education of his/her grandparents and parents. Education has been controlled in two ways. Firstly, it was observed whether the grandparents' and parents' graduation, when applicable, was in the technical stream or a non-technical one. Secondly, we observed their levels of education.

It seemed more likely for a student to choose or go in for a technical degree when his/her father and mother were also from the technical line. Between the parents, the father's background was more important than the mother's.

Those students whose grandfathers and fathers were graduates had a higher likelihood of pursuing a technical degree as compared to those whose grandfathers and fathers had studied only up to the Intermediate level. This also demonstrates that parents with only school education or intermediate education are less than encouraging circumstances for a technical education for their children.

An interesting pattern can be observed on the choices of students when we see the impact of their grandmothers' and mothers' education. An illiterate grandmother is a very decisive factor in the pursuing of a technical degree for a student, and this is statistically significant. Moreover, grandmothers and mothers who had education up to the post-graduate and PhD levels wanted to see their (grand)children in the technical line, whereas, grandmothers and mothers who were educated up to the elementary school level (Class 8) affected their children's chances of pursuing a B.Tech. in the negative direction. Graduate mothers supported technical degrees for their children.

After controlling the educational background of the grandparents and parents in Model 4, we find no significant impact of those variables which were ascribed to the students alone, like age, gender and religion. However, we do see the General Category (ConstiC1) students' coefficient going down, which implies that when we control the education of the grandparents and parents, the student's chances of pursuing a B.Tech. decrease, as compared to Model 3. Under the same condition, the ST Category students' coefficient increases, which means that educated grandparents and parents play a crucial role in the choice of an ST student's degree.

Adding the Intermediate Background variables (Model 5): Most of the variables are unchanged in Model 5, wherein we control the +2 background of the students. The General Category students' (ConstiC1) chances of pursuing a technical degree decrease when we add the +2 background of the students.

Of all the controlled variables in Model 5, the +2 school location, i.e., whether rural or urban, school board and the parents' or relatives' advice before choosing the degree are statistically significant. Hence, it can be concluded that a student who has done his/her intermediate education from a rural school has greater chances of pursuing a technical course. It was also observed that those students' who have completed their Intermediate (+2) from CBSE board have higher chances of going for B.Tech. degree compare to students with Intermediate from state boards. Moreover, advice from others after +2 plays a significant role in helping him/her choose the degree.

Conclusions and Discussion

It is an accepted fact that the students' choices of disciplines are determined by individual preferences, yet, the lesson learned here is that certain socio-economic factors, like age, gender, religion, caste, class, and parental education and occupation, are important in determining these preferences. These effects are also clearly related to the students' Intermediate background as the coefficients of regression of these variables indicate.

In the above estimation, it is evident that students' preferences regarding graduate disciplines are shaped mainly by their ages, genders, religions and Intermediate backgrounds, whereas, their parental education and occupations are not significant.

These findings about the preferences or choices of disciplines are against the standard notion which has always been pointed out, i.e., parental education and occupations, and family income are the key determinant variables in the choice-making of students' disciplines.

What are the results that we can glean out of these findings altogether? We have addressed how various background factors are important in defining the preferences of subjects amongst students. A number of interesting observations have been made and results based on these have been found.

There is a clear difference in the frequencies of various socio-economic backgrounds in the four institutions studied. Gender seems to have a strong connection with who gets into IIT Delhi and HBTI; surprisingly, also, with who joins the lower middle-class CSJM, Kanpur. It is only in Delhi University that both genders seem equally well-represented. Muslims and other religious minorities are relatively fewer in IIT Delhi and HBTI. The General Category students were present in a disproportionate number in all institutions, with their largest concentration being in Delhi University, followed by IIT Delhi. The SCs were surprisingly

numerous in our sample from HBTI and adequately represented in IIT Delhi and CSJM, Kanpur. They were, however, under-represented in Delhi University. The STs were adequately represented in IIT Delhi, but under-represented in the rest of the institutions.

In terms of class inequality, Delhi University had by far the most students with high family incomes, followed by IIT Delhi, the two institutions being separated by a big gap. HBTI and CSJM were substantially behind them, with HBTI students being slightly better off out of the two. The Delhi University students from our sample had the largest number of white-collar fathers, followed by IIT Delhi, HBTI and then CSJM. Delhi University students also had the largest number of working mothers.

When logistic regression were done with the dependent variable being the choice of degree, it was interesting to note that these findings disagree with the increasingly standardised results found in the literature in as much as they exhibit that the impact of parental income, education and occupations greatly reduce once a broader set of explanatory variables are added to the model. Particularly, it was found that parental income, education and occupations do not determine the choice of degree amongst the students in any of the models. This loss of significance may be because of the high degree of heterogeneity between and across both types of institutions and locations. The broad trends visible from the regression analysis are as follows.

Firstly, a major determinant of the choice of the degree is *Age*. It was found that as the age of the student increases, his/her chances of pursuing a B.Tech increase in the best fit model, whereas, in the case of his/her studying in Delhi, the chances reduce as the age of the student increases.

Secondly, Gender is negatively correlated with the choice of degree. Girls' chances of pursuing a technical degree decrease when we incorporate other socio-economic variables into the model. This is an interesting result, since it is often assumed that girls are not fit for technical subjects, which deal with Mathematics, etc. It is a biased cultural construct that girls are assumed to be good in the liberal arts. These results confirm this bias towards girls' education in the Indian academic institutions.

Thirdly, *Religion* also plays an important role in determining the choice of the degree. Compared to non-Hindu students, more Hindu students go in for a B.Tech degree.

Fourthly, *Caste* does *not* at all play any significant role in determining the choice of the degree amongst the student groups.

Fifthly, parental *Income* was *not* found to determine the choice of degree in any of the models. However, in the case of college location, it *was* found to be significant in all models.

Sixthly, as mentioned above, contrary to general findings, *Parental Occupations and Education* are *not* significant factors for the students' degree preference in any of the models. Finally, in the model for the choice of degree, it was found that the response variables related to the Intermediate background were significant. A student who had completed his/her Intermediate education from an urban school had lesser chances of studying for a technical degree as compared to a rural background student. The school board affiliation also decided the choice. Advice from their near and dear ones also affected the students' decisions about their degrees.

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Pushouts from Schooling

— A Sociological Study of Girls' Education in Odisha

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Abstract

Girls' education is a key indicator of the economic development and social empowerment. School dropout is a major educational problem hindering education in developing countries; India is not an exception to this problem. Though the policy makers have designed multiple schemes and programs to address the dropout, still most of the states in India including Odisha fail to arrest the dropout rate at the early stages of education. The current paper makes an attempt to map out the patterns of girls dropout from school education and it aims to explore the nature of relationship between the socio-cultural, economic and infrastructural indicators and the degree of girl's dropout rate from the school system. It is an empirical study based on two villages of a coastal Odisha. The study found that there are two sets factors responsible for the girls drop out. Infrastructural shortcomings such as non-availability of secondary schools in either in same village nor nearby villages, transport related social and safety factors in addition to the infrastructure within the institutional setup. Helping parents in the domestic chores and active participation as a child labourer in agriculture and fishing are the primary reasons for early dropouts in rural Odisha.

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Introduction

Girls' education is a complex issue. In the contemporary society, educated girls are expected to be rational, independent and empowered and at the same time, they are supposed to hold the traditions, customs and norms of the society intact by adhering to their gender roles. Thus, girls' education is regarded as progressive in nature; on the other hand social norms happen to be deleterious for women as a whole. These contradicting circumstances create the perennial problem for girl's education by creating gender gaps in educational attainment. Gender disparity in educational attainment is a bulging phenomenon in India. If we see the educational statistics of India, gender gap in educational attainment is the most visible feature. In the aftermath of Independence, the national leaders and the policy makers realized the importance of education and the existence of gaps in its attainment among various social groups. Many policies have come up to bridge the gap. The 86th Amendment of the Indian Constitution made elementary education a Fundamental Right. It is important to assess the status of dropout in the context of Right to Education Act. The current paper is broadly divided into two sections. The first section presents the broader theoretical debates and reviews the findings of empirical studies conducted across the states in India. The primary focus of the second section is presenting the objectives of the paper in the backdrop of given different education policies, methodology, findings and conclusions.

Section – I

Women's Education since 20th Century

In the early 20th century, women's education was given a call by the socio-political reform movements emerging from different parts of India. Social reformists consider women's education as a means of securing women's status and position in the society. Because of the social movements, this period was able to formulate some laws for the betterment of women's condition in the society. But women were not encouraged to come to the public spaces, rather education was considered to help them in dispensing their gender roles or domestic roles more efficiently (Chanana 2001). Moreover, the reformers did not envisage women's education beyond their gender roles, or any radical change in their domestic roles rather they all wanted a slight modification in the status of women without questioning the underlying assumption of gender roles (Chanana 1990). Thus, though women's education was a topic of public space at that time, women themselves were not a part of public space, instead they were still confined to the four walls of their houses. Accordingly, the purpose of education was to serve the domestic role.

After independence, though constitutional equality prevailed among men and women, policies are shaped by the gender role of women. Earlier, women were not allowed to get education as education was considered as something external to the women folk. Gradually this contention changed to view an educated woman as an efficient home maker and child caretaker. Now, education for women is seen as an indicator of marital prospects. As educated girls are preferred for marriage, girl's education is necessary to meet the marital contingencies (Srinivas 1977; Chanana 2000, Gundemeda 2014). Though the motive behind

educating a girl has changed from time to time, still girl's education is rooted in their familial roles or in the cultural context of society.

The Problem of Girls' Dropout

While focusing on changing status of women in India M. N. Srinivas (1977) recognized 'dropout' as one of the reasons hindering gender equality and full participation of girls in education. The problem continues with its severity even now. If we focus on the statistics of dropout rate from school education in India today, it is obvious to find that girls' dropout rate is more than that of boys'. A report by MHRD (2005) shows that the dropout rate is high among girls than boys and points out that girls constitute the two-thirds, which is nearly 40 million, out in the age group of 6-14 years. In another finding, 'Status of education in India' a National report by NUEPA in 2008 shows that dropout rates (class I-X) is 60.41% for boys while it is 63.88% for girls. In 2010, the Times of India has reported that over 50% of children who join school in class I drop out by class VIII¹.

Girls' education, reasons behind dropout from education has been studied by many scholars. Dropout which would seem to be caused by poverty has actually varied reasons that are determined by context. When it comes to girls' education the complexity of the context has been given by following studies. Some studies hold that girls' education is basically influenced by the socio-cultural values of a given society rather than economic concern (Smits and Hosgor 2006; Colclough et. al. 2000; Kotwal et. al. 2007; Bhatta 1998; Kingdon 2010). Parental background factors such as parents' education, occupation, mother's workforce participation are found to have association with girls' education (Bhatta 1998; Sengupta and Guha 2002; Afridi 2010; Kingdon 2010). The data provided by NSS 61 round (2004-2005) indicates that to attend household chores is the main reason behind girls not attending any educational institutions in the age group of 5-14 (cited in Dutt 2010). Nambissan (2004) locates the problem in *dalit* context. She argues that besides poor infrastructure facilities, lack of effective pedagogic support to acquire linguistic, numerical and cognitive competencies adversely affect the schooling of a *dalit* child. She explains that caste seems to constrain interpersonal relationships of *dalit* children within schools. Ramachandran and Naorem (2013) focus on social attitude towards students from marginalised communities as practiced in schools. Marginalised and lower caste girls are being pushed out from formal schooling by many exclusionary practices of teachers starting from sitting arrangements, taking water from water resources, cooking of Mid-Day-Meals to cleaning the toilets, classrooms so on and so forth.

The foregoing studies highlight multiple factors determining the progress of girl's education in India since the independence. However, a brief review of literature reveals that there are few sociological studies on the status of girl's education in Odisha. The paper also analyses the impact of the Central and State government policies, schemes aimed to improve the educational attainment of girls in rural India in general and Odisha in particular. The present paper makes an attempt to see their effect in relation to socio-cultural, economic and other factors with all its complexities influencing girls' education.

¹ A news published by Times of India on April 3, 2010 titled 'Will RTE address increasing dropout rate?'

Section-2

The Case of Odisha

Odisha is one of the backward states of India where the majority of the people depend on agriculture. In Odisha, the school system has 3 levels- Primary school (Class I to V), Middle School (VI to VII) and Secondary school (VIII to X) or High School. According to Orissa Human Development Report, 2004, Odisha holds 23rd position at national level in literacy. In the report, the rate of dropout is found to be very high and it is found that the rate is even higher for girls. It was 34.7% at Primary level and 59.0% at Middle School level in the year 2002-2003 and it was even higher for SC and ST category, that is 64.5% and 77.7% respectively at Middle School level. The dropout rate among boys in 2004 was 31.9% whereas in case of girls, it was 32.7%.

There have been several policies to address dropout in general and girls' dropout in particular. They are listed below:

- Though MDM (mid-day-meal) programme has become a site of many malpractices and corruptions, it certainly contributed to the increase in the enrolment and decrease in the drop out of students in primary level.
- The Government has established various Balashrams, Kanyashrms and residential Sevashrams to teach SC and ST students at primary and Middle School or middle level. Kasturba Gandhi Balika Vidyalaya (KGBV) scheme was started by the Government of Odisha in 2004 for setting up of residential schools for SC, ST, OBC and minority girls at Middle School level in educationally backward blocks. It works with Sarva Sikhya Abhiyan (SSA). KGBV also aims at giving quality education to the children.
- Odisha government provides pre-matric scholarship under Odisha Girls' Incentive Programme (OGIP) to every SC, ST students from economically weak background with 70% monthly attendance in class IX and X. They are entitled to receive 2250 rupees and 3200 rupees respectively. Girls are receiving a higher amount than boys which is supported by the Department for International Development (DFID), UK.
- Besides this, The Government of Odisha also provides free uniforms and books to every child up to class VIII.
- Like 'Mukhyamantri Balika Cycle Yojna' of Bihar, the Government of Odisha has also started distributing free cycles to girls of SC and ST communities of class IX and X in all educationally backward blocks since 2008. And later on it has extended this scheme to all the girls of Class X to encourage the retention of all girls in schools. Distributing free cycles to girls basically aims at addressing the issue of distance of school and security of girls' walking all the way to reach school.

Except MDM, most of the policy emphasis seems to be at the level of High School. Incentivisation aims at reducing economic burdens of parents for their kids' education. Yet, the result hasn't been satisfying. There has been a decline of girls' dropout at Primary level (from 41.4% in 2000-2001 to 0.6% in 2011-2012) and at Middle School level (from 61.1% in 2000-2001 to 2.23% in 2011-2012).² But, it is still high (51.8%) for girls at High School level

² Odisha State Policy for Girls and Women 2014.

and it is also observed that the dropout rate of girls from SC and ST communities is even higher 61.8% and 62.7% respectively (ibid.).

Objectives of the Study

There is a need to understand why in spite of several Government incentives dropout situation at higher level of schooling has not made any spectacular progress and why situation at the ground level has not been addressed effectively. Objectives of the study are given below:

- To ascertain the depth of girls disadvantage in education and mapping of various socio-cultural and infrastructural factors underlying it.
- To explore multiple layers of discrimination faced by girls in attaining education.

Research Methodology

It is a study based on two villages of Bhadrak district to look at policy impacts. According to Census 2001, literacy rate of this district is 74.64%, male literacy rate is 85.44% (89.64% in 2011 census) and female literacy rate is 63.62% (75.83% in 2011 census). The gender gap in education is 21.82% which is higher than the national average which is 21.70% (Census of India 2001). It is a noticeable fact that the average male-female literacy rate of this district is far more than the national average because the national average is 65.38% and it is 74.64% for Bhadrak. Another most surprising fact is that while the male literacy rate of this particular district is far more than the national average at the same time the literacy rate of females is lower than the national figure. So, Bhadrak district was selected for the study to trace the gravity of the female disadvantage in education. Further from the seven blocks of this district, Basudevpur Block was selected as it is the lowest literate block of the district. Its literacy rate is 67.80% and rural female literacy rate is 54.10% which is also the lowest among the seven blocks of the district (Census of India 2001). From the 182 villages of this block, Addhuan and Barandua were selected on the basis of lowest literacy rate. Moreover, the rationale behind selecting the site is to map the magnitude of educational deprivation of girls where the average literacy rate is above the national average.

In this research, respondents were reached out through snow ball sampling method. To reach out the dropout girls, this method of sampling was used because it is merely not possible to find the dropout girls from the school register as they do not keep the data regarding this or sometimes the school authorities manipulate the data of dropout children to get the rations or to secure the financial assistance given by the government. Snow ball sampling was used with the hope that one dropout girl must know her friends who had dropped out and it became successful in getting the sample by using this method. By employing this sampling method, sixty girls were reached who left their school any time before completing ten years of school education. In the present study the 'dropout girl' is identified as the one who has discontinued her study before completing secondary education or it is the one who has dropped out in any class within class I-X and in the age group of 5-14 due to any reason other than death.

Findings

The studied villages are different from each other in size, composition etc. Adhuan is comparatively a bigger village with population of around 7000 and Barandua is having a population close to 2000. In Adhuan, 64% of the population are SC and in Barandua, 29% of the population are SC. In both of the villages, the basic earning source of people is agriculture and familial occupations like fishing and carpentry. An analysis of social and other family background of girls affecting their education follows.

Social Background

It is noticed that though policies aim at a totality of population, often differential results are perceived. Population is never a single category. It is diverse and hierarchical based on social, cultural and economic parameters. Though education is a fundamental right and it is free and compulsory at the elementary level, the outcome may not be equally realized for all sections of society. Aspects of social background such as caste, gender and so of the child do impact dropout. In the present study, the percentage of dropout girls on the basis of caste is given below.

TABLE 1
Caste Wise Distribution of the Respondents

<i>Caste</i>	<i>Frequency</i>	<i>Percentage (%)</i>
General	12	20
SC	25	41.66
OBC	23	38.34
Total	60	100

It is evident from the Table No. 1 that out of 60 respondents, the percentage (41.66%) of Scheduled Caste (SC) is the highest. They belong to 'keuta' (fisher man) community, who mostly depend on fishing and wage labour for their livelihood. Most of them either do not have any land holding or small patches of land beyond their place of stay. Mostly they are poor and their parents' educational background is also low. Parents do not give much value to their daughters' education rather they prefer their sons' education. In some cases due to poverty, they cannot afford their daughters' education and in some cases they do not want to educate the girls as they would leave the parental house after marriage. They have engaged their daughters in the work of fish-drying and to separate varieties of fish from each other and many other associated jobs of fishing.

When the researcher asked their parents about the reasons of girls' dropout, almost all of them replied that they were needed in household work and family occupation. The second reason which most of the parents gave is that 'what is the importance of education for them as they would do this kind of works in their future'. This reflects their attitude toward girls' education because of caste occupation. So the girls are made to dropout from education at an early age. However, OBC respondents belong to 'baddhei' (carpenter) and 'barika' (barber)

castes. Though girls do not contribute to their caste occupation of these cases, they are expected at home for household works.

If a girl belongs to a lower caste then she is doubly discriminated for her gender and for her caste. There is also a callous response towards Dalit children at schools which doesn't encourage them to move beyond different familial hazards like poverty or illiterate family environment (Nambissan 1996). On the other hand, differential treatment is manifested in subtle forms of discrimination, such as sitting arrangement in classrooms, sanitary works and so on. They happen to be back-benchers and most sought out for cleaning and other manual works on school premises. However, among the deprived castes, boys' do drop out; but they have a relative advantage compared to girls, which we can understand by looking into different specific causes behind leaving school.

Family Background

Parents constitute a required environment for the upbringing of kids. It includes both attitude and affordability. It can affect household characters such as income, occupation and education level of parents which determine accessibility, regularity and performance of kids (Ramachandran and Saihjee 2002). We will see how far familial aspects influence girls' education in the present study. Here familial features include birth order of the child among her siblings in the family, type of family, education and occupation of both father and mother.

TABLE 2
Distribution of Respondents on the Basis of Birth Order

<i>Birth Order</i>	<i>Frequency</i>	<i>Percentage (%)</i>
First Born	40	66.67
Middle Born	16	26.67
Last Born	4	6.66
Total	60	100

It was observed that most of the dropout girls were the first born child. Being elder determines their responsibilities and load of work (Ramachandran et al 2003). Insights from the field also inform that younger sisters of the dropped out girls are continuing schooling as they are not needed to take the work responsibility of the household because of the full time presence of the elder sister in the house and doing the household lots. As the younger children are free from the household work burden, they get time to read and revise the lessons which enable them to continue studies but they can continue their studies up to a certain limit which is being decided by many other factors.

There is also a relative difference in different types of families vis-à-vis girls' dropout in connection with household work. It can be realized by looking at the following table.

TABLE 3
Relation between Type of Family and Dropout of Girls

<i>Type of Family</i>	<i>Dropout of Girls</i>			<i>Total</i>
	<i>Primary</i>	<i>Middle</i>	<i>Secondary</i>	
Joint Family	11(39.28%)	9(34.61%)	1(16.66%)	21(35%)
Nuclear Family	17(60.72%)	17(65.39%)	5(83.34%)	39(65%)
Total	28(100%)	26(100%)	6(100%)	60(100%)

It is perceived in the above table (no. 3) that at all levels of education, dropout rate of girls is less in joint families compared to nuclear families. There are many reasons given by the respondents. In joint families, the existence of other siblings of same age group encourages someone for school as they find pleasure in going school together and also coming back together. Even siblings walking together to schools located far away somehow avoids security concerns of parents which is one of the causes to discontinue girls' education, especially after puberty, as there are only two high schools in the entire Basudevpur block (including one for girls). Another reason is that since so many people live under one roof, the number of women is more who share the household work. It enables the girls in the joint families to continue their education. However, this finding contradicts some earlier findings which found a negative impact of joint families on their education. A number of empirical investigations have concluded that larger families present educational disadvantage to their children as compared to smaller families (Knodel and Wongsith 1991; Anh et al 1998, cited in Choudhury 2006). These studies have confirmed the sibling rivalry as a factor associated with joint family which discourages educational attainment of girls.

Parental education has a positive impact on child's education. Parents may be regraded as the role models for children or they can guide children's education through their own education.

TABLE 4
Relation between Education of Father and Girls' Dropout

<i>Education of Father</i>	<i>Girls' Dropout</i>			<i>Total</i>
	<i>Primary</i>	<i>Middle School</i>	<i>Secondary</i>	
Illiterate	8 (28.57%)	6 (23.07%)	0	14 (23.33%)
Primary	19(67.85%)	14 (53.84%)	4 (66.66%)	37 (61.66%)
Middle School	1 (3.57%)	5 (19.23%)	2 (33.33%)	8 (13.33%)
Secondary	0	1 (3.84%)	0	1 (1.66%)
Total	28 (100%)	26 (100%)	6 (100%)	60(100%)

The Table No. 4 shows the dropout of respondents on the basis of their fathers' education. It is clear from the table that those respondents who have dropped out from Primary education, majority (67.85%) of their fathers have got education up to Primary level. The educational qualification of most of the fathers from among the respondents is up to Primary School. Combined together the Primary and the Middle School close to 85% of

them have not reached Secondary level. The situation of fathers' education is reflected in the girls' educational attainment as most of the girls have got education up to primary level and only 6 (10%) girls received education up to high school level. So it can be said that father's education certainly influences girl's education and dropout rate. It is an important indicator of one's social background and it determines the level of sons' or daughters' educational attainment. As education furnishes one's insights and makes one to think critically and rationally as well as enables one to broaden his/her mindset, father's education can certainly influence education of daughters. It can be said that in a patriarchal society like India where eldest male members dominate in the family and where his decisions carry enough weight, if the fathers have obtained proper education, they can realize the importance of education and encourage their daughters to get education.

Mother's education also influences daughter's education to much extent. If the mother is not educated, she cannot feel the importance of education and will make the girl work for the family instead of sending her school. Another fact which has been emphasized by the sociologists is that girls always imitate the mother. Hence, mother's education can significantly influence girl's education. Largest intergenerational same-sex effect on education is vital in case of girls (Dreze and Kingdon 1999).

TABLE 5
Relation between Mothers' Education and Girls' Dropout

<i>Education of Mother</i>	<i>Dropout of Girls</i>			<i>Total</i>
	<i>Primary</i>	<i>Middle School</i>	<i>Secondary</i>	
Illiterate	25 (89.28%)	22 (84.61%)	4 (66.66%)	51 (85%)
Primary	3 (10.72%)	4 (15.39%)	2 (33.34%)	9 (10%)
Total	28 (100%)	26 (100%)	6 (100%)	60 (100%)

From the above Table 5, we can ascertain the relationship between mother's education and daughter's educational attainment. It shows 85% of mothers are illiterate and only 15% have got education up to primary level. The situation of mothers' education is reflected in the girls' educational attainment as the mothers and the girls had very low level of education. But when the level of mother's education increases, girls' educational attainment also increases. So, here, it is clear that mother's illiteracy has led to girls' early dropout. It is found from the above table that those girls who have dropped out in primary school, 10.72% of their mothers are literate; who have dropped out in Middle level, 15.39% of their mothers are literate; and the girls who have dropped out in Secondary level, 33.34% of their mothers are literate. So, this table finds that some degree of mother' education reduces girls' early dropout and facilitates their higher level of educational attainment.

The Table No. 6 shows the relation between father's occupation and girls' dropout rate. It is evident from this table that majority of the fathers are engaged in agriculture & wage labour (46.66%) and next to agriculture comes fishing which is done by 31.66% of fathers. We observed that in occupations like fishing and agriculture, more labour is demanded to get the things done but as they are poor households, they cannot hire outside labour. They depend on the familial labour which results in girls' early dropout. By pulling out the girls from school, they save the opportunity cost or indirect cost of girls' schooling. It is also

observed during the field study that they were holding very less amount of land, so their income was also very less to spend it on the direct cost of girls' education.

TABLE 6
Relation between Occupation of Father and Girls' Dropout

<i>Occupation of Father</i>	<i>Girls' Dropout</i>			<i>Total</i>
	<i>Primary</i>	<i>Middle</i>	<i>Secondary</i>	
Agriculture & Wage Labour	10(35.72%)	15 (57.69%)	3 (50%)	28 (46.66%)
Business	2 (7.14%)	0	1 (16.66%)	3 (5%)
Private Employee	1 (3.57%)	2 (7.69%)	0	3 (5%)
Fishing	11 (39.28%)	7 (26.92%)	1 (16.66%)	19(31.66%)
Not Applicable	4 (14.29%)	2 (7.69%)	1 (16.66%)	7 (11.66%)
Total	28 (100%)	26 (100%)	6 (100%)	60 (100%)

Moreover, both agriculture and fishing are seasonal in nature. In peak periods they earn something but in other times they have nothing to do for livelihood. So their economic rewards are uncertain. In case of small business and private employment, the response to educational attainment of girls is better. Only 5% of my respondents are from such families. Although education is free in Government schools, it is not free absolutely. Tilak (1996) argues that households have to spend a lot to get primary education as government incentives are not available for all. One has to spend on different fees as well as private tuitions and on buying stationeries like pen, pencil, notebook etc. 'Whether it is boys or girls whose education receives preferential investment is a function of the underlying culture and customs of a country' (Quisumbing and Maluccio 2003 cited in Afridi 2010:132). Hence, income of the head of the household, which is measured through occupation of father, does play an important role in determining education of girls and their dropout rate.

In the present study, it is found that the mothers of the dropout girls were mostly busy in household works and family's related occupational work, such as fishing, farming etc. But in few cases it was found that in case of death or sickness of the father, mother worked as bread winner for the family. These widow mothers are busy in agriculture, wage labour and small business like small grocery shops in the village. This work participation of mother results in dropout of their daughters from education, because somebody is needed to manage the household chores and to take care of the younger siblings. Increased female work participation leads to an increase in the number of dropouts in primary schooling (Kar and Kar 2002).

Sengupta and Guha (2002) argue that the strongest factors with regard to school participation, enrolment and dropout are household factors relating to parental background, especially maternal schooling, household income and father's occupation. The relationship of parent's education and occupation with daughter's education can be explained by cultural capital theory of Bourdieu. Educated parents would value their kids' education and specifically importance of educating females. If parents are doing job that is surrounded by an environment which values education and more specifically girls' education, then this

habitus can certainly influence parents' mindset and condition family environment that may encourage their daughters' education.

However, parental education and occupation have a complex impact. Attitude to education of children and attitude to educating daughters vary and accordingly produce different results. Similarly affordability which is linked to parental occupation may have variations in effecting girls' education too. Low socio-economic and educational status of the parents is significantly correlated with the phenomenon of dropping out (Chugh 2011). It may be worse with girl child.

Major Causes behind Dropout

Gender as a basis of girls' educational disadvantage is being realized when one finds that the major cause of girls' dropout is 'domestic work responsibilities'. The reasons of dropout as said by the respondents are given below:

TABLE 7
Reasons for Girls' Dropout

<i>Reasons</i>	<i>Frequency</i>	<i>Percentage (%)</i>
Domestic work responsibilities	31	51.66
Poverty	18	30
Failure	5	8.33
Lack of interest in studies	4	6.66
Personal health problems	2	3.33
Total	60	100

It is found that more than half of the dropped out girls were engaged in domestic work responsibility as the prime reason for discontinuing school. It was observed in the field that all the dropped out girls are busy in doing various household chores which includes cleaning, cooking, washing clothes, bringing water, taking care of younger siblings, helping parents in their familial occupation etc. Here one can notice the trend of reasons of dropping out from schools. As domestic work responsibilities pull the girls from school, it can be a product of one's socialization and gendered mindset. In a male dominated society like India, it is the girls who do the works like washing clothes, cleaning utensils, sweeping and the like from their childhood. Boys are never encouraged to do such works for gender based division of labour. It is also found that often girls' need for education conflicts with mother's need for girls' assistance within the households which creates obstacles in girls' education.

It was observed during the field work that the dropped out girls were busy with household chores and only one girl, due to her health problems, was not doing any kind of household chores while another girl was doing so in spite of health issues. During the informal interaction with the girls, it was intended to enquire about the link between doing household chores and their dropout. Most of them have obtained education up to primary level. Some girls said that as they grew older and became eligible for maintaining the household chores and take care of siblings, parents decided to stop their education as they could take the responsibilities. As boys are supposed to supplement the family income by

earning, their education is least affected by household work responsibilities. This stereotype restricts a vision of future for the girl child. Due to social practices attached to patriarchy like patriliney, patrilocality and so on women hold the subjugated position and men dominate in all the arenas of society and enjoy a superior status. They are expected to marry and continue their household work. For the same reason early marriage is another hindrance to their education and promote dropout (Chanana 2001).

The income position of the family and the dependency load, that is, the proportion of earners to dependents, reflects the family's economic status. Various studies have found that the opportunity cost of girls' schooling is higher among the poorer households (Oxaal 1997). Girls' labour is used to substitute for mothers' work such as caring for siblings, cooking, fetching food and water, caring for animals and pounding grain. The loss of girls' labour during school hours has an impact on mother's ability to raise household income either doing agricultural labour or wage labour. A very similar case was also found by Chaudhury (2006) in his study of Assam, which aimed at revisiting the issue of family related factors and its contribution to dropping out from school. He found a strong association between familial duties and dropping out. His findings show that compared to children who never or rarely do familial duties, those who do them regularly are 3.7 times and 5 times respectively more likely to dropout. It was observed that the burden of familial duties distracts and gradually pull out the child from educational activities leading to school discontinuance.

Conclusion

Girl's educational attainment is socio-culturally defined and determined. If we consider the issues like mother's work force participation, doing full time house hold work, birth order, type of family, economic background of the family, parental education and occupation, and caste, we have seen that all of these factor have a stake on girls' education. One can find a common thread running through these variables and that is the consideration of gender. The socio-cultural biases and emphasis on domestic role and their permutation with poverty has much detrimental effect on the participation of girls in education.

Other social categories like caste further deteriorate the situation. Poverty ridden caste groups avoid education for their kids, more specifically for girls. Though economic factors seem to have an adverse effect on education, the socio-cultural consideration remains latent in it. At this point, one can say that concept of cultural capital has sufficient answer to explain this grave situation. One has to realize that dropout is multi-causal. Different types of dropouts must be looked into separately by locating them in their socio-cultural context. Since different causes influence each other it is one of the imperatives to see multiple layers of deprivation and its effect accordingly.

In spite of several policies the obstacles to girls' schooling hasn't been eradicated properly. Barriers being infrastructural, economic and socio-cultural, policy makers need to move with a holistic approach. Infrastructure might include schools in a reachable distance with mandatory toilets for girls and also recruitment of sufficient number of women teachers along with behavioral training to all of them for sensitivity. So far as economic aspect is concerned, along with more and more lucrative incentives, regular curriculum should be accompanied by different vocational trainings such as tailoring, weaving, computer training etc. that would facilitate their future prospect of earning livelihood. It was suggested by a few of my respondents' mothers and they added that since it is not

convenient for girls to go outside village it would open up opportunities within their village. Socio-cultural aspects need to be addressed by different awareness building activities in rural areas.

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Book Reviews

RAJAN S. Irudaya (2014): *India Migration Report 2014: Diaspora and Development*, New Delhi: Routledge, ISBN: 978-1-138-78819-0 (Hard Cover), Pages: 314, Price: ₹ 850.

India Migration Report 2014: Diaspora and Development is a collection of scholarship on migration, diaspora engagement and consequent developments in the native country. In its fifth year of publication, the *India Migration Report 2014* is a comprehensive overview on theoretical aspects of diaspora and enumerates fundamental socio-political and economic trends that result in internal and international population movements. The annual volume is edited by S. Irudaya Rajan, an authority on migration at the Centre for Development Studies, Thiruvananthapuram. The 2014 edition is composed of 20 chapters that focus on the development of Indian diaspora around the world, India's foreign policy measures to engage the Indian diaspora, role of diaspora in the development process of India and the changing nature of diaspora due to changes in global financial environment and domestic laws of the host countries.

Diaspora and Development: Theoretical Perspective

Opening chapter by Dilip Ratha and Sonia Plaza of India Migration report 2014 explores various definitions of "Diaspora". Scales like dispersion, collective memory, commitment towards homeland and presence of issue of return were used to qualify a group of migrants as diaspora. A brief attempt is also made to estimate the size of the diaspora by taking into account the first generation and second generation migrants, but the author claims lapse in calculations as there is a large chunk of migrants which is unaccounted for. Coming to India's definition of diaspora, India uses three categories: NRI, PIO (Person of Indian Origin) and OCI (Overseas Citizens of India) which totals to around 44 million strong diaspora population. Showing a positive linkage between diaspora and development, the authors acknowledge the role of remittances in the achievement of Millennium Development goals and highlight the role of diaspora in the development of trade, investments, skills and technology transfer. The Chapter by Alwyn Didar Singh defines diaspora in terms of "Connectedness" and argues that migration and diaspora are integral parts of the development process. To understand the relationship between migration and development, the author discusses two theoretical models – 'Balanced growth' migration leads to skill development and overall development and 'Systematic view' migration often distorts the development process through 'brain drain' and widening of income disparities. Extending the argument further, the chapter discusses subdued level of diaspora engagement before 1991 economic restructuring, but after 1991 and especially in the early 2000s the Indian government realised the importance of diaspora which resulted in the formation of the Ministry of Overseas Indian Affairs. Second part of the chapter deals with issues of Indo-EU diaspora. The author says that it is a result of interplay of various historical, political, economic and cultural forces, e.g., migration between India and UK extensively related to

colonial history. An estimated size of the Indian diaspora in all of Europe is around 2.5 million (2011) which is categorised as 'indenture-origin migrants' but post-Independence, the situation is different and migrants started taking the host country citizenship, thus showing a substantial increase in NRI population and a larger flow of students for educational purpose. The next chapter by Amba Pande took theoretical perspectives to discuss diaspora engagement with their host country. Relationship between diaspora and host country is discussed under five broad avenues – brain gain/circulation and skill transfer, remittances, investments, philanthropy and tourism. Substantiating through figures and studies done on these five broad avenues, the author confirms positive synergy and association of the Indian diaspora with their homeland, but at the same time highlights the need of coherent and constructive policy approach to maximise the benefits of diaspora engagement. The following chapter by Ajay Kumar Sahoo takes a historical perspective on the development of the Indian diaspora. Before the 18th century, the Indian diaspora was not significant in numbers and the majority consists of traders. With the spread of socio-cultural relations, by the end of the 18th century, Indians were found in all south East Asia and due to incorporation of India into British empire by mid 20th century, the Indian migrants reached Caribbean and African countries. Elaborating on the history of modern Indian diaspora, the author says that the first phase of Indian diaspora consisted of third to fifth generation descendants of early migrants during mid 19th century to British and other colonies. Second phase consists of professionals and skilled migrants during the second half of the 20th century and third phase consists of Indian labour to the countries of west Asia and the Gulf. While mentioning the existence of informal channels of remittances such as "hawala" transactions, the chapter acknowledges the role of diaspora in economic, socio-cultural and political development of the homeland. The chapter by Smita Tiwari explores the complexities of foreign policy making for the engagement of Indian diaspora through two approaches—Interest approach and rational choice approach. Interest approach focuses on the fact that policies are fundamentally about economic, political and social capital interest whereas rational choice approach works on balancing costs against benefits by depending on the information available about the diaspora in various countries. The author traces the history of diaspora policy of India to 1890 in which the Indian National Congress demanded equal rights and status for the overseas Indians. In 1929, further institutionalising the concern of the overseas Indians, the Overseas department under Jawaharlal Nehru was formed. Contemporary efforts to address the issue of diaspora is seen in the form of constituting a dedicated ministry, institutionalising scholarship programmes, establishing community welfare fund in Indian missions abroad and providing customised banking services, etc.

Diaspora and Its Engagement: Case Studies

Chapter by T. L. S. Bhaskar is a case study on diaspora engagement in the healthcare sector. The role of diaspora doctors, alumni associations of three medical colleges – Andhra Medical College, Visakhapatnam, the Guntur Medical College and Rangaraya Medical college, Kakinada were explored to ascertain the role of diaspora engagement. The study found that alumni associations take demand driven approach to philanthropy and extend strategic as well as physical support in the form of providing equipment and required training to their native institutions, thus establishing a progressive relation. The next chapter, a survey –

study done by S. Irudaya Rajan, V. Kurusu and Saramma Panicker C. K. explores the relationship between return migration of diaspora and global financial conditions. The study is based on a survey done on 1106 highly skilled professionals who returned (during 2006-2011) to India and settled thereafter. Findings show that there was an increase in return migration during 2006-2010 due to a global financial crisis. On the basis of the data collected, 61 per cent returnee migrants are employed in private sector, 188 returnee got government jobs and 133 are self employed. The chapter also highlights the findings of OECD study which says that 20 to 50 per cent of the immigrants go home or move to a third country within five years of their arrival due to reasons related to family, marriage, contract, visa, recession, self employment and better opportunities in home countries. Highlighting the problems faced by immigrants such as low infrastructure, slow government functioning and non-acceptance of foreign degrees authors make suggestions on the line of fine tuning government assistance to returnees and augmenting infrastructure to harness the potential of returning diaspora. The next chapter by Kaveri Qureshi and Filippo Osella discuss specifically Punjabi diaspora and its role in the development of the educational sector. The study explores linkages leading to educational development through transnational and diasporic connectivity. This chapter also explores historical processes of interaction and how with changing socio-political profile of the country, along with a drive for privatisation of education leads to the involvement of diaspora in the educational sector. Further insight reveals that along with business interest, philanthropic investments are also boosting educational sector in Punjab and as an added advantage, this involvement of diaspora leads to the channelling of aspirations of parents and students as a route to emigration for foreign studies. Presenting a conflicting perspective within the domain to migration studies, Steve Taylor explores that how with the advent of globalisation and liberalisation, land use and holding patterns have shrunken and moving abroad is seen as a new status symbol in Punjab. A case study of Doaba region of Punjab reveals that there is a conflict and division between NRIs and local residents as NRIs display their status through 'diaspora spaces' a way of showing a different lifestyle through conspicuous consumption. The next chapter by Milly Sil is a comparative study to show the similarities and variations in emigrants' profiles and remittance patterns in two highly emigrating villages of – Dharmaj, Gujarat and Mangalam, Kerala. An indicative study shows the remittances pattern and end use of remittances by households in both villages. For e.g., in Dharmaj, agriculture income is the primary income and remittances form the secondary source of income whereas in Mangalam, remittances are the primary source of income and agriculture/salary income forms the secondary source. Although nothing substantial could be generalised on the basis of the trends explored in this chapter, but it certainly provides a starting point to do further research on the remittances – consumption – infrastructure development interrelation. The following chapter is based on 2012 study by S. Irudaya Rajan and Neha Wadhawan revealing three major reasons behind the migratory trend of Indian Students to U K – shortage of domestic opportunities, commercial value of a foreign degree and learning and experiencing another country and culture. The study also reveals that international educational migration is often seen as the gateway for permanent stay in the host country, thus improving the overall lifestyle of the migrants. The study acknowledges colonial historical links between India and UK which facilitates migration of Indian students to UK. On the issue of funding, as the education in UK is quite costly, the pattern shows that most of the students take loans and thus prefer to work in the host country as it is much easier to return installments in

foreign currency. Facilitating migration further, this study mentions institutional linkages like 'UK-India Education and Research Initiative' launched in 2006 to facilitate student movement. The next chapter by Amit Singh explores the impact of India's diaspora policy with regard to ethnic Indians in Southeast Asia. The author mentions that politico-economic and socio-cultural ties between India and Southeast Asia exist from pre-Christian era but consolidation of diaspora happened during the Indian freedom struggle in 20th century. The author claims that Southeast Asia figured secondary in India's international relations policies and thus India followed the policy of disassociation with regard to its diaspora residing in Southeast Asia. It was only after 1991 restructuring that 'active-association' with Southeast Asia started. Initiation of 'Look East Policy', becoming full dialogue partner of ASEAN in 1995 were landmarks in engaging with Indian diaspora in South-East Asia. The Author suggests that with growing influence of China in the Indian Ocean region, now it has become imperative to restructure the diaspora policy and fine tune engagement of Indian diaspora in Southeast Asia.

Indian Diaspora in West Asia

The book is incorporated in four chapters dedicated to the study of Indian diaspora in West Asia. The chapter by Veronika Deffner discusses the status of Indian diaspora in Oman. Quoting the oil-economic boom in 1970s in Oman leading to swift and intensive modernisation, the author deduces it as one of the main reasons behind the demand of foreign workers. The contemporary scenario shows that majority of the economic activities are dependent on foreign workers, but Oman maintains a clear distinction between 'economic space' and 'socio-cultural space' thus, relations with migrants are clearly driven by economic interests. The stay of Indian migrants is mainly driven by the intention of making money to have a better life back home. For skilled Indian workers Oman is merely a place to boost their professional career and live a comfortable life. Due to strict domestic laws of Oman and restriction on free movement of migrants, a common viewpoint among diaspora is to return home. It could be perceived as 'diaspora as a resource' as domestic conditions of Oman are not favourable for the integration in the host country. The following chapter is a study by Radhika Kanchana and S. Irudaya Rajan extending understanding on the conditions of Indian migrants in Oman and Bahrain. A study reveals there exist two key problematic areas in both countries—passport retention of expatriates by the employers and neglect of the dimension of justice. The author claims that in comparison to migrants in other Gulf countries, migrants in Oman and Bahrain are better off in terms of job profile, living conditions and duration of residence. A study reveals that both societies are relatively open and provide greater socio-cultural space to migrants, thus ensuring better integration prospects. The next chapter by Zakir Hussain discusses 'Nitaqat' programme of Saudi Arabia. The author says that growing level of formal education and rising young population in Saudi Arabia bring in the problem of unemployment. Threats of Arab spring also alerted Saudi Kingdom that rising unemployment among youth could turn into a rebellion. Briefly discussing the history of saudisation, it was conceived with the idea of increasing employment for Saudi nationals, reducing and reversing over-reliance on foreign workers and recapturing—reinvesting income which would have flowed overseas. In the present context 'Nitaqat' is meant to limit private-sector companies' employment of expatriate workers. To accomplish this task in a rational way, technical measures are taken in the form

of dividing companies into four categories – silver, green, yellow and red, depending on the degree of adherence to quotas of saudisation. The economic rationale of the programme is discussed by keeping the facts alive that huge cash available with the Saudi kingdom will lead to diversification and more employment opportunities. On the other hand, where government officials are confident that this new provision will solve unemployment problem within five years from 2012, the private sector has some apprehensions in case they have to replace skilled workforce and take fresh Saudi recruits. The author suggests that to ensure the success of 'Nitaqat', the government should overhaul the education system and the required infrastructural facilities and fine tune Saudi minds towards education and employment responsibilities. Considering the demographic and socio-cultural factors which act as pull factor, a study by K. C. Zachariah, S. Irudaya Rajan and Jolin Joseph discusses migration trend from Kerala to Saudi Arabia. Oil sector led economic boom of 1970s led to the demand of foreign workers but coming to 21st century, rising unemployment in Saudi kingdom forced authorities to restructure its saudisation programmes of 1994, thus marking the advent of 'nitaqat' programme aimed at increasing Saudi citizen share of employment. Discussing emigration trends from Kerala to Saudi Arabia, the authors say that from 1998-2003, numbers decreased by 4 per cent, between 2003-08 numbers increased by 2.7 per cent and between 2008-11 numbers increased by 14 per cent, thus showing an uneven path. The reason behind steep rise in 2008-11 numbers is attributed to global recession and its impact on UAE, thus workforce moving to Saudi Arabia instead of UAE. The chapter points that migration trend would remain more or less stable. Although there are apprehensions that concern unemployment among Saudi youth will bring in stricter domestic laws but India-Saudi emigrations persist notwithstanding three decades of increasingly restrictive immigration policies and the financial crisis.

Last four chapters of the book discuss various aspects related to migration. First in the series, it is an attempt to explore a direct link between migration and inequality. Raju John follows a statistical approach using consumer expenditure data of Kerala Migration Survey (KMS 2008) to establish a cause and effect relationship between migration/remittances and inequality. A generalised description from statistical calculation says that 1 per cent increase in remittances will increase inequality in consumption expenditure by 0.06 per cent, thus remittances seem to have a direct impact on inequality. As per the data available on asset holding and housing conditions from KMS 1998 and 2008, asset based SOLI (Standard of Living Index) was used to compare the role of migration in inequality. Study reveals that inequality between migrants and non-migrants households contributed to 7 per cent of total inequalities in 1998 and 6 per cent in 2008, thus confirming migration's role in creating inequalities in standard of living between migrant and non-migrant households. Next chapter is a limited preliminary study by Soumi Roy Chowdhury on health sector with India as favoured medical tourism destination. Study quantifies the inflow trends of foreign medical patients in Thiruvananthapuram covering 20 super speciality hospitals conducted in year 2010-11. Study shows that there is an increasing trend in the inflow of foreign patients and hospitals are accordingly reforming their services. This study shows that medical tourism is on the rise in India and opens whole new vistas of research on medical tourism in India. Pinak Sarkar conducts capability level study of migration from northeastern states to other parts of India. Study reveals various aspects like quality of migrants from the region, skill level of migration and availability of educational infrastructure in the region. Calculation from the census 2001 data shows that north-eastern states have higher

migration rate than that of all India plus there is higher outflow of illiterate migrants. Along with this there is education-led mobility due to lack of higher education opportunities in the region. To quantify migration trends further, study explores dominance of cohort groups from the northeastern states to the four major destinations – Delhi, Maharashtra, Karnataka and west-Bengal. Based on the trends of education led and employment led migration, the study concludes that Nagaland cohort group is strong in Delhi, Manipur cohort group is strong in Maharashtra and Karnataka and Tripura cohort is strong in West Bengal plus out of all the northeastern states, Manipur is emerging as a major migratory region from northeast India. Last chapter of the book by C. Valatheeswaran focuses on the distress migration of Tamil population from Sri Lanka to Tamil Nadu. A sample study is an attempt to generalise the condition of over one lakh Tamil refugees officially residing in camps or outside in Tamil Nadu. Using primary survey data from 100 households and 12 case studies on two refugee camps out of 115 refugee camps in Tamil Nadu, the study generalises on following five capital assets – human, social, natural, physical, financial. On human capital front, since mid 1980 there were on-off facilities provided for the education and health of refugees with recent findings showing that there are facilities/reservations in higher education sector and government health schemes are also forwarded. On social capital, lack of earning opportunities and formalised employment structure forced refugees to expand their social networks and get employment in informal-labour market. On natural capital front, there was lack of clean drinking water; they cannot own land and agricultural activities. On physical capital front, lack of proper shelter, only half of the samples own livestock and half of the samples have access to government subsidised kerosene for cooking purpose. On financial front income is from cash doled from state government, labour income and remittances. Overall, the study shows that the conditions of refugees are not as per the dignified living standards. Providing a way forward, the author suggests a comprehensive policy to rehabilitate refugees by coordinating with Sri Lankan government and refugees who have kinship ties in India should be rehabilitated according to Indian citizenship rights.

India Migration Report 2014 is an indispensable collection to understand the role of migration in development of diaspora and role of diaspora in the development of the native country. Through the lens of theoretical, ethnographic and quantitative research, the collection is a substantive addition to diaspora studies and scholarship. Along with opening new vistas of research in diaspora studies, available knowledge of the collection could be used by government establishments to fine tune foreign policy initiatives and to reinvent institutional mechanism to engage diaspora further.

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YUCHI Zhao, Liu Jing and Awol Endri (eds.) (2015): *Developing Support Systems for Rural Teachers Continuing Professional Development*, Sage Publications, ISBN: 9789351501206, pp. 288, Price: ₹ 1050/- (Hb).

This is an interesting and a timely collection of case studies from different parts of the world that turns the spotlight on the challenge of supporting and motivating rural teachers

in many countries. This is of particular importance to Indian policy makers, administrators and educationists because we have been struggling not only to provide adequate teachers in our rural schools, but also to design and manage an effective continuing professional development programme for them. On the one hand, India has been home to some of the most fascinating teacher professional support initiatives like *Shiksha Karmi* Project of Rajasthan and on the other hand, we have continued with mechanical training programmes through national programmes like DPEP and *SSA* that have given teacher training a very bad name. A publication like this could, hopefully, trigger serious introspection in India.

This volume brings together five case studies from Cambodia, China, Ethiopia, Mozambique and Romania. The contexts are very different and so are the strategies designed to support rural teachers. This volume is part of the ongoing work supported by UNESCO and the International Research and Training Centre for Rural Education (INRULED). The objective of the research and the publication is to “identify the fundamental similarities and features of successful rural teacher support systems in different countries...”. There are two running threads of all five approaches. They are (a) all five strategies local and as close to a rural teacher as possible, and (b) they provide for two-way communication between the teachers and trainers. The models discussed may be very different – yet the above two features are common. These two features are essential to move away from a “deficit model¹” to a “reflective model”. Teachers’ training is not about filling the knowledge gap in teachers (a common didactic approach) but as a process that ‘builds on teachers personal classroom experiences’. In India we have talked ad-infinitum about teachers as reflective practitioners, yet our teacher education and professional development is yet to create a meaningful two-way process that enables teachers to bring their classroom experiences into the training arena.

The introductory chapter by Helen Drinan is a comprehensive summary of the work that UNESCO has been engaged with as well as the case study. Given that most administrators do not have time to read books, this section provides a good summary of issues and strategies. The challenges that rural teachers face in most countries are three-fold: (a) poor resources and poor access/communication which give teachers a feeling that they are ‘out of the system’; (b) rural areas tend to get less experienced teachers or untrained/under-qualified teachers; and (c) little or no professional support leading to low morale and a sense of isolation. How have different countries addressed these formidable challenges?

Describing the Romanian experience, Ana Maria Sandi explains, “School based professional development in which mentors played the main role is a useful way to reach and assist teachers in rural schools... This approach was particularly helpful in making teachers understand the need to shift teaching and learning from rote forms, based on memorisation of facts, to active forms which emphasise critical, analytical and problem-solving skills, as well as helping them change classroom practices...” (p. 50) one of the biggest challenges faced by Romania was that rural teachers were under-qualified. In 2001 the government took serious note of the situation and the Rural Education Project (REP) was introduced in 2003. This project moved away from centralised training to delivering training through mentors to teachers in schools. These mentors were trained and equipped to provide hands-on support to teachers and respond to the specific needs of each teacher.

¹ Teachers needing to be provided with something they do not have – as explained by Day and Sachs (2009) quoted in the book reviewed.

This well funded pilot ran from 2003 to 2009. Schools were formed into communes (a unit comprising of several villages) and the teachers were both given training at the commune level as well as on-site support by mentors. Like most pilots, this programme was documented and reviewed at different stages. The evaluation found that this approach was not only cost effective (as compared to centralised teacher training) but the teachers felt energised. A serious finding was – like most pilots – the REP was not embedded in the system and it worked as an isolated project. This is so similar to Indian experiences like Rajasthan Shiksha Karmi or UN supported Jan Shala – projects that worked well as long as they were protected, nurtured and supported. The minute they were merged with the mainstream, they ceased to be effective. The big lessons of the REP of Romania were (a) projects cannot sustain in isolation, (b) they need to be combined with nationwide policies and actions, (c) school-based professional development varies from school to school and there can be no “one model”, (d) solving transportation issues critical for mentoring rural teachers, (e) right incentives essential to ensure success, (f) pedagogical support and space for innovation and (g) strong organisational support is essential.

Liu Jing’s case study of the Southwest Basic Education Project (SBEP) of China reinforces the lessons of Romania. Like India, national statistics on enrolment and transition hide huge rural/urban diversities. Primary school completion rates in rural areas could be as low as 78 per cent and transition to upper primary/secondary is even lower. While poverty is seen as the main reason for low completion and transition rates, the author explains that it is not the only reason. The Government of the United Kingdom supported the SBEP project. The interventions were as follows: (i) living subsidies and improving the conditions of rural boarding for Junior Middle Schools; (ii) EMIS system that is based on individual teachers and students to provide services; (iii) need based participatory training of teachers through country teacher support system, establishing a resource centre for teachers and professional development; (iv) education equity training to teachers, head-teachers and educational administrators to make them able to provide local leadership, and simultaneously strengthen female leadership; and (v) developing and implementing school development plans. A key aspect of the five-fold strategy is to ensure that the Teacher Support System (TSS) is responsive to the needs of teachers and that interventions are designed afresh. Top down approaches to teacher training were set aside. Peer observation and feedback was an important dimension of a mentoring system – where teachers supported each other. Like Romania, understanding the daily challenges faced by teachers and responding to them was important. In-service training (INSET) was provided through the Teaching Learning Resource Centre (TLRC), school-based training and external or provincial level training. Observation of teachers in the school and feedback informed the content of all three levels of training. Like most time-bound externally aided projects, evaluations found that the strategy was effective, teachers were happy and children were learning. However, the case study is silent on what happened once the project ended.

F. Helen Drinan’s case study from Cambodia describes the school cluster system. As a part of the nation-wide school education reform process, the School Cluster System was introduced in 1995. After an evaluation in 1998, the cluster boundaries were redrawn “to create more reasonable entities in terms of distance between schools and to facilitate decentralisation...” (p. 151). Teacher professional development activities involved eight activities: (i) stand alone teacher training, (ii) on-the-job support; (iii) refresher training twice a year; (iv) embedding active learning methodologies into the curriculum; (v) support

for trained staff any time/need based; (vi) teacher meetings, group discussions on challenges of implementation of new pedagogies; (vii) annual evaluation of teacher classroom instruction and effectiveness of using new pedagogies and (viii) feedback and follow-up with teachers and school officials. Was this approach successful? The author starts by explaining the dependence on donor funding and the problem of sustaining donor-funded programmes beyond a point. Like other pilots and projects, the effectiveness lasts as long as it is a project and then gradually dissipates. She also explains the prevalent rivalry between bilateral projects. Educationists in India may recall the rivalry between the UN system supported Jan Shala and the *Sarva Shiksha Abhiyan*/DPEP which were funded by a consortium of donors led by the World Bank and DFID India. It is really interesting to note that this kind of unhealthy competition is a fact of life for donor-assisted projects. The author explains that – apart from the issue of sustainability, shortage of teachers, double shift system, and contract teachers – especially in ethnic minority areas posed a huge challenge. While the idea of school cluster has been there for a long time, we are left wondering if this case study actually depicts a “good practice” or is it one more case of an idea that did not take root?

The Mozambique case study by Development Aid from People to People (ADPP) describes pedagogic workshops as a rural teacher support system. The last of the five case studies is from Ethiopia by Theodros Shewarget Belew. These two case studies are weak and essentially describe the policy level intent. The reader is left wondering if these two interventions were really effective – because the descriptive account of what the policy is and what the intervention is does not throw light on whether these two strategies have been effective.

The concluding chapter rightly turns the spotlight on the sustainability of projects and pilots. Helen Drinan argues “too often programmes and projects funded by donor agencies rely on foreign experts or institutes to advise and suggest systems and models... (leading to) mismatch of expectations of foreign donors...” (p. 240). This ‘learning’ is not new. For over six decades the education community has been aware of the problem of transferring models from one country to another without really understanding the nitty-gritty of educational administration in the recipient country. The Cambodian example is a case in point. If teacher shortages, unqualified teacher candidates are a problem – especially in rural and remote areas that are inhabited by ethnic minorities, then a nation-wide school cluster model is not likely to make a difference. Organisations like UNESCO need to be more discerning before they publish case studies (like the last two case studies in this book) that really say nothing. May be a critical review from an external researcher would throw more light on issues than a report by an implementing agency.

Notwithstanding these shortcomings, people engaged with teacher development would find this book interesting – as many of the issues, challenges and lessons resonate with the Indian experience.

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JAYARAM, N. (2015): *Sociology of Education in India*, (second edition), Rawat Publications, ISBN: 9788131606957, pp. 400, Price: ₹ 995/US\$65, (Hardback).

Sociology of education as a sub discipline of sociology primarily deals with mapping the nature of relationship between education and social institution such as economy, polity and culture. It also makes an attempt to understand the role of education in reproduction of ideology and ideological state apparatuses. Though sociology of education is an established branch of knowledge in sociology in the western world but its origin and development in India is relatively a new branch of knowledge rooted within the discourse of modernisation on Indian society in the post independent era.

The current book under review is one of the most popular books in the field of sociology of education in India. This book is a collection of 19 articles written by N. Jayaram over the last four decades. This is divided into five parts. Part one titled *Introduction* consists of four articles which contextualise the history of educational sociology and sociology of education in the western countries in general and India in particular. Here, major themes and perspectives in sociology of education in addition to the methodological protocols developed in this branch of knowledge are discussed. This section ends with an essay on colonial and neo-colonial orientation of education policy in India.

The second part of the book titled *Education and Economy* highlights the debates on the issues and challenges in education and employment. It also throws substantial importance to role and relevance of sociology of youth in understanding the political economy of demographic dividend and youth discontent in Indian society. Part three of this book titled *Education, emancipation and social change* discuss the key debates on the role of education in addressing the inequality and social mobility on the one hand and its potential role in social transformation of the traditional society like India on the other hand. The author invented some of the best powerful concepts such as 'education as passport' and 'protective discrimination' as a means to buy peace and build social harmony among the historically depressed classes of India, thus reflecting social motion of class/caste and religious across the states of India. The essay titled 'value-oriented education' highlights complexities associated in defining the meanings and ideologies of value systems, its importance in inculcating the spirit of nation with dynamic ethical framework. The most important essay of this book is on the educational saga and ideology of Dr Ambedkar thus, bringing to the fore the educational experience of Ambedkar in schools and his reflections on education as an agent of emancipation for the depressed classes, which is very much relevant even in the present education context. Furthermore, the essay on ethnicity and education presents the educational backwardness of muslims in India. In explaining the reasons for the backwardness through historical sociology method, the author argues that religious, linguistics and political economy of partition of country are responsible for the muslim backwardness in India. This essay here reflects the concerns of Justice Rajendra Sachar commission on the socio-economic and educational backwardness of muslims in contemporary India.

Part four of the book presents the key issues and challenges of teachers and students in the university system. The politics of teachers and students on educational policies and politics of state are discussed in detail through the case studies. The author highlights the advantages and limitations of teacher and students' movements. This section also dealt with

the issues and challenges confronted by the university system in India. The author opined that universities in India, of late, are compromising on the quality of education.

The last section of this book is titled *Political aspects of education in India*. Here the essay on multiculturalism highlights the role of education in cultivating the spirit of unity and diversity in the Indian social fabric despite regional, religious, caste, creed and ethnic complexities. The author argues that education has the potential role to strengthen the participative and progressive democracy on the one hand and peaceful nations for universal peace and human harmony on the other. The last essay of this book titled *New educational policy 1985a critique* highlights the strengths and weakness of the then new education policy in the context of post green revolution era.

An overview of the 19 essays demonstrates the conceptual foundations, thematic expression and methodological orientation in sociology of education in India. Any ordinary student and researcher can follow the core argument on the essential conceptual foundation of sociology of education in India. All these papers deal with diverse issues of education in India such as education policy, emancipation, value orientation and marginal social groups in India. Though these articles have been published over a period of four decades, they still represent the changing policy discourses and social orientation and discontent against the very same policies in post independent India. This book is the best introduction to the practitioners of sociology of education in India. All the essays are well written reflecting the different phases of historical junctures of education policy in India. The common thread that binds all the articles is the diverse dimension of educational policies and practices and its sociological implication for social groups in India. The only limitation of this book is the data which is not updated.

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RAJPUT, J. S. (ed.) (2014): *Education of Muslims: Islamic Perspective of Knowledge and Education – Indian Context*, Nobel Education Foundation – Shipra Publications Ltd., Delhi, pp. xviii + 412, Price: ₹ 1500/- (Hb).

This book is a very informative collection of 15 articles from eminent educationists from India, on the topic of Education of Muslims in India, edited by Prof. J.S. Rajput who held several educational assignments including as Professor at NCERT and later Director of NCERT from 1999-2004. The book starts with Editor's note as well as a very elaborate context setting by Prof. Rajput covering educational concerns before the muslim community in India.

The editor's note is a very interesting perspective on issues concerning muslims in India. In his storytelling style, Dr Rajput has described an incident from his school days in UP. The school where he was admitted had two drinking water tanks separately for the hindus and muslims – "Hindu Tanki" and "Muslim Tanki". On the first day of the school, not knowing the arrangement, he drank water from a "Muslim Tanki" and was cursed by all others. However, his father – instead of cursing him like all others, preached the first lesson of religious equality and respect for all religions. The discrimination like this was termed by

him as “*ashiksha*” – “no education”! He was very fortunate to have this kind of secular teachings from his father in his early age, which is a very important aspect of education, especially in a country like India where there are many religions co-existing. This story is an apt beginning of the book which deals with various issues concerning muslim education in India including discrimination and alienation of muslim children from early ages as one of the reasons for their educational backwardness.

In the same note Prof. Rajput has further advocated having a process of making the students acquainted with the basics of all religions, the values inherent therein and also a comparative study of the philosophy of all religions should begin at middle stage in schools and continue up to the university level. As put up by him “advent of Islam in India has enriched India and added strength”, and accordingly the aim of this book is stated as “generating awareness of rich Islamic tradition of acquiring knowledge” Accordingly, this book has very interesting information on various aspects of Islam and Education and also an elaborate description of various aspects of Islam as religion. This will be useful for researchers as well as social activists working on education for muslim community.

During the context setting chapter, it is clearly stated that “educational backwardness of muslims is a widely known, regularly discussed, committees and commissions are appointed by successive governments, and these generally submit informed reports” (p.1) Thus this implies that this is the context in which all chapters in the book are discussing various aspects of Islam and education of muslims in India. The context chapter gives very interesting viewpoints from various sections of muslim leadership before independence as regards education – such as Sahibzada Aftab Ahmad Khan, Sir Sayyid Ahmad Khan, Liaquat Ali Khan, Dr Zakir Hussain and Maulana Azad. Sahibzada Aftab Ahemd Khan at 36th All India Muslim Education Conference at Aligarh in December 1923 stated the aim of education as a desire to revive the true Islamic spirit and a “man- making education”. Liaquat Ali Khan in 1945 opposed the famous Wardha scheme of basic education by Gandhiji – *Buniyadi talim* – on the grounds that this model is anti-Islamic. It also describes the differences between Sir Sayyid Ahmad Khan and Dr Zakir Hussain’s perspectives on education stating that Sir Sayyid’s view of education was utilitarian – which is matching with current concepts – whereas Dr. Zakir Hussain has had an idealistic and Gandhian view. However, the chapter does not capture the views of Gandhiji on muslim education or takes any detailed view of the same. Also contributions of Maulana Abul Kalam Azad, having a broad outlook and bold action, are noted in this chapter. It is further noted that it was the realisation of the significance of secular education within the community that resulted in the establishment of institutions like Aligarh Muslim University in 1875 and Jamia Millia Isalmia in 1921 and later Osmania University. Maulana Azad had a view that moral education should be an essential part of education in free India and “sound and healthy religious education” has a definite role in the same (p.5). Prof. Rajput has further advocated the role of religious teachings stating that “religion has invariably contributed positively to the inculcation, development and nurturance of the eternal human values which are common to all civilisations and religions, and there is no reason to be apologetic on religious education as is being imparted in *madradas* and true interpretation of secularism in consonance with the spirit of the Constitution of India”(p.20). A debate is further necessary in this regard about what are the actual implications of this on *madrasa* education since then, till date and the extent to which this needs to be adopted in other mainstream education, whether it has helped the community to progress in comparison with all other communities, etc.

Islam and Education

The book contains many chapters about Islam and through detailed quotes of verses from the holy Quran and religious texts; importance of knowledge and education is emphasised. As quoted in the book (p, v), The holy Quran says ‘Read, in the name of Thy lord who createth, created man from clot Read and Thy Lord is the most Bounteous, Who teacheth by pen, teacheth that which he knew not(Surah-al-Alaq)’. This is the central theme around which these chapters further describe how education has been professed in The Quran, and thus how it is deeply embedded in the religious texts.

The chapter on “Spirit of Islam” by Akbarul Wasey explains in detail as to how Islam is a natural religion which wants to turn man into a better man through application of his efforts, and the three foundations of Islam. This chapter further throws light on how “The Prophet launched a message on popularisation of education was made acceptable amongst “ummis” (untutored persons), at a time when particular classes used to monopolise knowledge, science and arts “ (p.44). “The Prophet had announced glad tidings of jannat (paradise) for imparting good education and training.... not only to the people themselves.... but to the lower sections of the society which comprised maids and servants ...” (p.44). This reaffirms that as regards eligibility of education; in Islam, all are having equal access and rights, which is very different from contemporary civilisation.

The second such chapter is “Spirituality in Islam” written by Farida Khanam – who is associated with Jamia Millia Islamia, New Delhi, and is an authority on Islamic mysticism and comparative religion, and deeply involved in the mission of peace and spirituality. She describes spirituality embedded in Islam through various processes like “*Tazkia*” or purification of self. As stated “According to Islam, spirituality is an intellectual activity. In fact worldly life is made more meaningful by the role effectively played by spirituality in the refinement of the intellect and the consequent progress of humanity” (p.50). The chapter is a very informative collection of thoughts on spirituality in Islam.

The chapter on “Sufi shrines and Education of Muslims in India” by Mohammad Arshad Abad further provides some more insight in the Indian context and examples on Sufi movement in India, its people orientation, the four major Sufi orders in India, history of the famous shrines and their contribution to education of muslims in the form of many educational institutions and philosophical support.

The other chapters which are dealing with Islam and education describe how education has been prominently appearing in Quran and other holy texts, thereby emphasising the point that Islam has regarded education as a highly important topic.

The chapter entitled “The Quranic Approach to dissemination of Knowledge” by Shakeel Ahmad describes how dissemination of knowledge is a crucial aspect of studies on human development regarding which the holy Quran describes its unique approach.

In an another chapter titled “Knowledge pursuit in Islam” by Mohammad Fahim Akhtar Nadvi, an interesting information is put up as - “free education for all” is a principle set in Islamic law – “there is no remuneration can be charged for teaching “(p.145), and according to Islamic concept “education is free and it is the right of every individual in society“. Ahmed feels that this should be surely a guiding principle for states, particularly in developing countries like India where costs of education are increasing with an alarming rate, making these prohibitive for economically weaker marginalised communities and thus creating an issue for access to education.

The other chapters such as “Teacher – Learner Characteristics: Islamic perspective “by Anis Ahmad Khan, and “Education and Human values: an Islamic perspective “by Khwaja Iftikar Ahmed, also provide a great insight on the respective topics. In the later chapter, the detailed description of human rights as incorporated in Islam and various teachings supporting the modern notion of universal human rights should be very educative and an eye opener for all those who possess misgivings about Islam. It also suggests a definite curriculum based on human rights (p. 384) which is the need of the hour.

Further, a lot of interesting information is provided in detail in the chapter entitled “Islamic contribution to science and technology: by Prof Abdul Ali from AMU. It provides great details how muslims could achieve distinction in the cultivation of scientific knowledge by providing educational facilities on a large scale (p.308) this knowledge was transmitted to west through translations of Arabic books into Latin and English, and how it has contributed to western Renaissance. Indeed a very rare information and thanks to the author for putting up in a well-researched manner, however, what has not been elaborated in this chapter and probably it remains a matter of further exploration how the process got degenerated after the medieval age and how muslims lost their leadership in scientific knowledge thereafter.

Madrasas and their relevance today

Madrasas have been key component in education systems for muslims and the chapter “*Madrasas: Contemporary relevance* “by Mujaffar Alam – who has been an authority on *madrasa* education, provides great information and various aspects about the same. With the advent of Islam in India during 8th century *madrasa* system of education was introduced in this land, and is a matter of high attention till date. Having Mughal patronage in pre- British period, it was marginalised with the introduction of British education system. The chapter provides details how it helped to preserve oriental culture and also contributed to communal harmony and provided great leaders for national movement in past. The author claims that “It is a pro-poor system with high access to all and the author claims that this system is in line with Swami Vivekananda’s vision of generalisation of education and Mahatma Gandhi’s ideas as well. “The students from *madrasas* do not ask government to provide jobs but resort to self-employment and lead a non-consumerist society. ...They are more comfortable with their lives than their counterparts in modern education system ...” (p. 196). This is rather a debatable conclusion and needs to be confirmed by further support and to be verified with other sources, and it is also to be explored that why in spite of this muslims are standing at lower-most step in the progress of education and prosperity. Further, in the same book in another chapter “Education of muslim children in India” by Aejaz Masih and Arshad Ikram Ahmad, the role of *madrasas* is seen as probably responsible for decline of Muslim education, and hence the need to be seen in this context as well.

Secularism and Islamic Education

There are two other chapters that are dealing with the contentious issues of secularism and Islamic education. The chapter by Ishtyaque Danish on Islamic interpretation of secularism and its link to education, states that “the duality of religion and secular education was introduced by the European colonialists in the Muslim world and was not supported by

the prophet or by the Quran. There is no need to make a choice and muslim community needs to acquire both in an Islamic perspective”.

The other chapter dealing with secularism is titled as “Dini and secular Education” by Iqtidar Mohammad Khan. It acknowledges two types of education existing simultaneously in India – the Dini education – which is based on the holy books of Islam and given in *madrassas*, and secular education – which has national objectives, is flexible and is provided in public education system by the government and other agencies. Both these systems are described in a detailed way in the chapter and a good discussion on what should be adopted by the muslims especially in India. The final recommendation emerges as Indian muslims have to reconcile with both at present.

The ground realities of status of muslim education in India

Finally I would like to specially mention two chapters in the book which are discussing the ground realities of the actual status of muslim education in India and are dealing with facts and figures, and going beyond the discussions of religion alone. Zeenat Shaukat Ali in her chapter, has discussed Education of muslim women in global as well as Indian context. Her article provides information about great women in the history of Islam, women leaders across globe in various countries and the details how “Muslim women were and are in the forefront in different fields of endeavour including both education and establishment of educational institutions, contradicting the stereotypical view of muslim women as marginalised, secluded or restricted (p. 221). After providing various details from census 2011 in India on various parameters related to muslim women, she has concluded that, “however, despite some progress of education of women in muslim majority countries, there is still a long way to go. It is necessary to state that there is much to be desired to improve both, the status as well as literacy of muslim women in India and elsewhere” (p. 222).

The other chapter which provides great details about ground realities is “Education of muslim children in India” by Aejaz Masih and Arshad Ikram Ahmad. It provides a large amount of statistical evidences and data, and has taken a review of various commissions and their recommendations. It brings out the fact that despite the various constitutional measures, muslims in India are the most backward and marginalised, they do not figure more than three to four per cent in any of the economic sectors, and unlike *dalits* they could not yield benefits from protective discriminations in the Constitution so far. The chapter discusses various factors such as gender, child labour, identity, rise of hindu fundamentalism, medium of instruction, role of religion, discrimination, lack of accessibility, etc. in keeping these children away from education. It clearly brings out debate whether *madrassa* education has led to decline of educational or economic position of the Indian muslims in the present environment and discusses the nature of Islam centric teaching not being friendly to the job market in the contemporary world, It highlights the role of cost and quality education in the current crisis. Finally, it states that “although a lot is done, it is not creating enough results, and a lot is still needed both by the government and the community members themselves to ensure education to muslim children, and this is the only way to make “India a secular, stable and strong state” (p. 93).

Concluding Remarks

Summarising on the above note, I will conclude that the book presents a very diverse information about Islam and education and the issue of muslim education in India and is very useful for research scholars and activists working on the issue of muslim education in India, and the efforts put in by editors and publishers are certainly commendable. The book raises curiosity on the neglected issues, provides information which is not being popularly shared so far, which puts forth realities in an authentic way against myths, and this is the great success of this book.

I would like to put up a point for consideration here. Except some chapters, many other chapters are much more elaborate on information of Islam as religion, putting up issues mainly in the religious context. As I observe, the book discusses education of muslims mostly - with some exceptions - in the context of religion and not taking enough cognisance of the ground realities. The question that can be debated is - Can we not see these as issues being basically as citizenship rights of muslim men and women, concerning equal opportunities to get educated, wherein we -- as country -- have failed to provide such an opportunity so far to the largest minority. Further it will be useful if it can be debated why their rights cannot be exercised in a Constitutional way and bring them into mainstream education and the national economy with proportionate presence.

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