

A Comparative Study of the Evolution of Higher Education in Three Asian Giants- China, India and Japan

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ABSTRACT

Higher education possesses a distinct position in Education as a whole attribute of human development. While education makes a person understand his life and make it, higher education goes much beyond that and enable her / him understand the environs and make it, or at least influence it.

Asia, with all its dramatic contradictions, has been a hub of human activities since ancient period and the testimonies are there that the education especially the higher learning has been at the centre of these activities in some archaeologically known places. India and China are such ethnicities while Japan picked up the thread in the later past and built a strong and assertive ethnic identity there upon.

These three nations are still working hard to pursue their obvious national cause of developing their Higher Education setup.. Due to their respective political course, China, India and Japan got their current political status in the end of the fifth decade of the current century almost simultaneously. Since then, their higher learning system are getting shaped based on their sovereign will and now they are considered significant globally for their own reasons,

These three nations have had their distinct political and socio-cultural dynamics that shaped their distinctive higher education systems and their consequent human resources. This study tries to understand higher education evolution and base on that analyse their current status along with their respective pros and cons. The study tries to look in to the quantum of people's participation to higher education and its impact on socio-cultural status in the society.

1. History of Global Higher Education Scenario

Evolutionary references of this study compels to have certain limitations that we will have to categorise it in two eras – the classical ancient with discontinued lineage and the one which run through the history and got evolved till what they are today.

The Classical (Old and Discontinued) Lineage:

In ancient India this discontinued known earliest lineage goes back to 5th century BC, the Buddhist and Hindu centre named Takshshila was founded and it ran through 5th century AD. A similar institution of higher learning named 'Pushpgiri Mahavihar' was also established. Another very famous such centre was named "Nalanda Mahavihar" was established in Pala Empire in 427 AD and ran through 1197 AD accommodating 2,000 professors and 10,000 students. Other such universities were Odantpuri, Somapura, Sharada Peeth, Jagaddala, Valabhi and Nagarjunkoda et al.

In China the ancient lineage of higher learning goes back to the end of Han Dynasty 3rd century BC to Qin Dynasty in 3rd Century AD when Imperial Academies with the name 'Taixue' were founded and run. Later the Academies of Classical Learning named 'Shuyuan' were also established.

From the global perspective, in ancient and discontinued HE institutions stream, in the western world, the chronology commenced during Hellenism in Greek Empire in Platonic Academy (387 BC) and later the Peripatatic School (335 BC). This legacy was further extended to the Museion of Alexandria.

In Europe, under the early Byzantine Empire, the University of Constantinople (425 AD) was established. Later the Preslav and Ohrid Literary Schools were established in 7th century AD by the first Bulgarian Empire in Southeast Europe.

In Western Europe, in 6th Century AD the Higher Educational centres with Christian overtures were founded with the names Cathedral Schools and Monastic Schools.

In Ancient Persia, the centre of Higher Intellectual Learning with the name 'Academy of Ghodishapur' was established in Iran during Sasanian Empire (3rd Century AD).

The Era of Evolved and Continuing Global Lineage of HE (Higher Education):

In UK, although the initiatives of establishing the HE institutions were much earlier but that system was not evolved as in the case of US, but was established by a royal charter or by a papal bull.

The History of Global HE with Continued Lineage:

Oxford University, the oldest (1096), University of Cambridge and later the University of Edinburgh were founded by the royal writs while the St Andrews, Glasgow and Aberdeen Universities were established by the papal authorities.

A major expansion of HE in the UK occurred in the 19th century when the of royal charters was issued to establish the St. David's College, Lampeter (subsequently part of the University of Wales), Durham University, King's College London, and University College London. Further in the later part of the century several foundations of medical, science and engineering colleges in UK's major industrial towns and some of them eventually combined together to become the universities of Birmingham, Bristol, Leeds, Liverpool, Manchester and Sheffield etc.

2. Chinese He – An Introduction

China, a country with 135.07 Crores, have had a history of political, social and cultural turmoil and with a very peculiar journey from an elitist feudo-Imperial governance of its educational set up to the mass-based management of the same has currently evolved into three types of HEIs (Higher Educational Institutions) :

Universities & other HEIs sponsored by Central Ministries
By Education Ministry; (b) By other Ministries

Universities & other HEIs sponsored by the regional governments

Private Universities and HEIs.

Additionally, China counts another streams of HEIs – those meant for Adult Education

China has a uniform HE Entrance Examination, (in Chinese ‘ gaokao’), a tough competition to get admitted in Chinese universities including the best ones viz. Beijing or Tsinghua Universities.

After rapid expansion now Chinese HE set-up is on consolidation on quality and ironing out the developed geographical disparities in its expansion.

Since mid 80s, there is an unfolding of a series of policy-directives of this effect.

Current action plans are based on 4 following points through China’s policy-directive “*National Outline for Medium-& Long-term Educational Reform & Development (2010-2020)*”;

Ensuring ‘Quality-Enhancement’ – Through developing a HE quality assurance system, which includes minimum input, quality control and teaching evaluation etc. by Ministry of Education.

Implanting ‘Innovation’ – By research universities and technological HEIs to partner with business-enterprises.

‘Structural’ Value-addition – Through **Project 985** (aimed to 39 universities) and **Project 221** (aimed to 110 universities) in which ‘they are strengthened in key disciplines’ and ‘they are made world-class universities’ respectively.

‘Internationalization’ of HE’ – Through exchanging the scholars with other countries, international research cooperation along with the cultural exchanges.

‘*The National Outline for Medium- and Long-term Educational reform and Development (2010-2020)*’ was a major document for the policy orientation which envisaged a modern school system running as per the law, under autonomous internal governance with democratic supervision and having public participation leading to a new relationship amongst government, HEIs & society.

However, complete autonomy still remained elusive as admission, issue of graduation certification; programmes and major setting-up decisions, personnel-transfer and faculty-promotion etc. were still to take approval of relevant bureaucratic agencies.

Since currently on behest of the government, each of the Chinese university strives for quality, the merit in the prestigious NHEEE-the National HE Entrance Examination (gaokao) becomes very important for any Chinese youth as it is key to a better life. Since the Tsinghua University or Peking University has high demand than that of a university / HEI located in Middle or western regions of the country, there is an intense competition to get admission.

Adverse Repercussions of Massive Educational Expansion:

As a result of massive expansion of the Chinese HE, some unwarranted repercussions were also developed:

Compromise on ‘Quality’.

‘Imbalanced’ Growth: For instance, the average national expenditure per student was US \$ 1803/- in 2004, with HEIs located in Beijing Region (Highest US \$ 3700/- and in Guizhou Region,(Lowest US \$ 979/-).

‘Outdated’ Curricular Structure: There was very little change in the curricula from those in the elite education age.

Financial ‘Appropriation’: In elite HE, the public funding was the sole source while in the new mass-HE, it was not possible and this paved the way for the beginning of ‘cost-sharing’ financial set up in China. (For example in 1997, 78.3% of its expenditure was met by the public money and in 2004 it fell down to 45.5% while the tuition increased from 14.8% to 30.4%.

This, however, led to another policy concern regarding the affordability in this cost-sharing arrangement. For instance, the tuition fees increased by 3.1 times between 1997 and 2004, while the net income in rural and urban China increased by 1.4 and 1.8 only.

Graduate’s ‘employability concerns: The erstwhile elite HE system was formed to supply manpower to the feudo-Imperial-system. The Chinese HE had to be transformed from the traditional mode in response to the new demand of the job market.

‘Paucity’ of faculty: This shift from the elite-HE to its mass-scale version, there was a felt shortage of faculty. In this set-up alteration, while the students’-enrolment became quadruple, the simultaneous increase in faculty engaged was only 1.7 time.

Evolution of HE in India:

HE with intense training with deep philosophical discourses has been the legacy of collective Indian intellect. Indians, based on their time-immemorial quest for knowledge, have always been characterized as a society of seekers of true knowledge and this legacy is continuing even today also.

As a matter of fact, the great Indian Ethos came into existence as a result of this great journey towards the truth only. The Indian intellect came much before even the first Indian scripture Rig Ved was created in around 1000 BC, as the earliest known accounts of ancient Vedic culture suggest that primarily this scripture was created and preserved through the ‘oral-transmission’ from one generation to its successor.

3. Indian He – An Introduction

The higher learning setup of the Vedic period was characterized by the household schools run by ‘Rishis’, better known as ‘Gurukuls’.

In this, early Gurukul system flourished in the Vedic and Upanishad period too and in the same course, huge universities came up since 6th century BC at Takshashila, Nalanda, Vikramshila and Odantpuri

Ancient India had two philosophical streams for higher learning: 1) The Brahmanical Philosophical order and 2) Buddhist Philosophical order.

These philosophical streams include several subjects viz. the Lokayatan system, Witchcraft, Astrology, the four Vedas and Vedangas, Astronomy, omens’ interpretation, the philosophical sub-system of Samkhya, Yoga, Nyaya and Vaisheshika, Music, Medicine, Magic, the art of War, poetry, and many of arts-man-ship and craftsmanship as well as Arithmetic. In this system of education, the Viharas functioned as residential schools where various groups of learners and teachers stayed together. TakshShila(Taxila) was the most famous seat of HE. It was famous especially for the school of Medicine, Law and Military Science which till the 6th century.

Medieval Indian Education: The very first Islamic invasions under Mahmud knocked down the temples and Buddhist Vihars in the important cities of Northern India. The astonishing Libraries at Nalanda and Vikramshila were burnt

and the teachers were brutally killed. With the demolition of the Vihars, this ancient learning stream was almost disappeared.

Medieval Muslim Education:

In 11th Century A.D. onwards Madrasas or Muslim-colleges came up as the centres of HE and learning with a distinctly religious Islamic overture and agenda. They were primarily theological institutions, providing instruction in language and other secular subjects as a secondary activity, and were sponsored and aided by the Muslim ruler of the time. The Madrasas were generally attached to mosques in the same way as there were Makhtabs.

HE in British India:

As a matter of fact, for the first time, in India, the Universities with western pattern were established by the British rulers only.

The British East India Company came and subjugated India with having business as their priority and so there was almost no efforts for educational promotion in India per say.

The secondary priority of Britons in this regard is evident from the fact that twenty-five years after the year (1858) of establishment of the first three universities, there had been an increase in the number of colleges from 27 to 75 and by 1923, there were 12 universities.

When India got independence, in 1947, there were 18 universities with total student strength of less than 0.2 million.

Higher Education in Independent India:

There were specific cardinal values inherent in the constitution as 'directive principles and they were conceived as the national goals and they reverberated in the country's HE policies as well. They were: (a) Democracy, (b) Secularism, (c) Elimination of poverty, (d) Creation of a socialist society, and (5) National integration.

Radhakrishnan Commission of 1948: Prepared by the first President of India who was a devoted teacher, Dr. Sarvapalli Radhakrishnan this report enumerated standards of formal education, courses and curricula, faculty and their working conditions and funding of HEIs.

Based on the conclusions of this report, the University Grants Commission was constituted in 1953.

Report of National Council of Education, Research and Training (1965) cried foul on less public money investment on Education and more so on HE.

National Education Commission (1964-'66) [Kothari Commission]: This Commission was formed in 1964 which submitted its report in 1966 with advocating for the huge public investment (of 6% of GDP) on Education, qualitative-improvement of HE and research along with recommendations on organization and administration.

Educational Policy 1986:

This policy's main points were Expansion of HE, Quality-Improvement and Job-oriented education.

National Education Policy (Revised) – 1993: This report added new dimension of 'Distance-Learning' to HE through Open Universities. Subsequently Indira Gandhi Open University was established at centre. Many states also followed suit.

Establishment of the National Assessment and Accreditation Council (1994) Yashpal Committee Report (2009)

A veteran cosmic rays scientist, Prof. Yashpal and his committee presented their report to the Ministry of HRD with recommendations:-

Creating a unified regulatory body, seven-member 'Commission for H.E. & Research' having constitutional status.

Abandoning of the Deemed category of universities.

Limiting the roles of professional regulators viz. MCI (Medical Council of India), BCI (Bar Council of India) etc.

National Commission for HE and Research:

This commission was formed under an act passes by the parliament in 2010, for the determination, co-ordination, maintenance of standards in, and promotion of, HE and research, including university education, technical and professional education (other than agricultural and medical education).

4. Japanese Higher Education- An Introduction

After the reign of Emperor Tenji (AD 661-672) and his Taiho Code of 701 (a Japanese Imperial treatise for Institutions for higher learning), in the Heian Period (794-1185 A.D.), the height of Japan's aristocratic age, educational institutions continued to be focused on the nobility. However, the curriculum of the Daigakuryo made a transition from Confucianism to the arts, reflecting the great emphasis on aesthetics during the Heian Period.

In comparison with any other time in Japanese history, this period placed the highest value on the ideal of patriotism through poetry, music, visual art, calligraphy, and dance. Such refinements were, however, reserved for those privileged to be educated in the court.

Medieval Period:

During the Kamakura Period (1185-1333) and the Muromachi Period (1333-1573), Japanese education scaled through the militarism of that time in addition to the religious training.

A departure from the aesthetics of the Heian Period, the medieval education for warriors included training in weaponry and horse-riding, while still teaching young samurai the importance of good manners and knowledge of their culture. Schooling revolved around the warrior's home, the estate of his lord and the local temples and was meant for the Shogunate and the ruling families only.

Towards the end of the medieval period, Japan's educational system was subjected to a new influence—Jesuit Catholic missionaries, that began with the arrival of Francis Xavier in 1549 that led to establishment of schools and churches emphasizing general education, vocational training, western technology along with their core mission, the Christianity.

Japanese HE in Modern History Phase:

In the active process of westernization during the **Meiji Restoration in 1868**, Japan tried to revitalize its entire education system, especially at the HE level to transmit Western knowledge for modern industrialization.

In 1881, the Japanese government further decided to convert its institutional model to a strict German model of HE.

Its modern HE system became a catalyzing impetus that propelled Japan's development as a modern nation. Japan incorporated many attributes found in HEIs of Germany as the German Empire at the time was similar to Japan in terms of goals for colonial expansion and development of national might. The German model continued to inspire the Japanese HE system until the end of World War II.

Even during the American occupation of World War II, Japan kept incorporating HE ideas developed in the United States to modernize its setup for the contemporary era.

Modern Japanese HE Setup:

Public universities (More so the 7 national universities) are considered more prestigious than their private counterparts: Universities of Tokyo, Kyoto, Tohoku, Kyushu, Hokkaido, Osaka and Nagoya.

Unlike the usage of grade point averages (GPA) used in countries like the U.S. and Canada as a yardstick for eligibility, entrance to universities in Japan is based largely on the scores that students achieved in a unified entrance examination.

In 1987 the schedule of the coveted national achievement test was changed to allow students to opt for admission in more than one universities and in 1990, its content was also reviewed and changed.

Private institutions accounted for nearly 80% of all university enrolments in 1991 but the public universities especially, the seven national universities are the most prestigious.

5. Analysis:

Higher Education's Numeric Growth:

These three countries have not only been the major nations of Asia, but cumulatively they represent every corner of the continent also. They all have their own distinctive ethnic roles in characterizing the civilisation of the continent Asia since the earliest date's history that the mankind ever knows.

Even today, as prominent countries of the region, these three nations have their say in every geopolitical deliberations of this part of the world or even beyond.

HE is considered as the vehicle over which these countries make their journey towards a brighter future.

Number of the higher educational institutions:

Number of HEIs, by and large, represents the dynamism and abilities of a country in getting through to achieve its desired level of high literacy and subsequently the same of its human capital index. Though among these three countries, the pace of establishing such institutions is certainly deferent among them, their total number, however, reflects its ability to revamp its human capital index.

As stated before, the Chinese HE fraternity has seen a rapid mode of horizontal expansion and though many risks get involved in such a drastic move but through this China got desired results from 1022 no of HEIs in 1998 to 2631 in 2017. Though a similar quantitative growth was recorded in Indian HE-set up too but it was an organic growth which seamlessly grew from 256 universities and 2806 colleges to 2000-01 to 903 Universities and 1338* (notable) college in 2017-18 along with 11139 Stand alone skill based higher learning institutions.

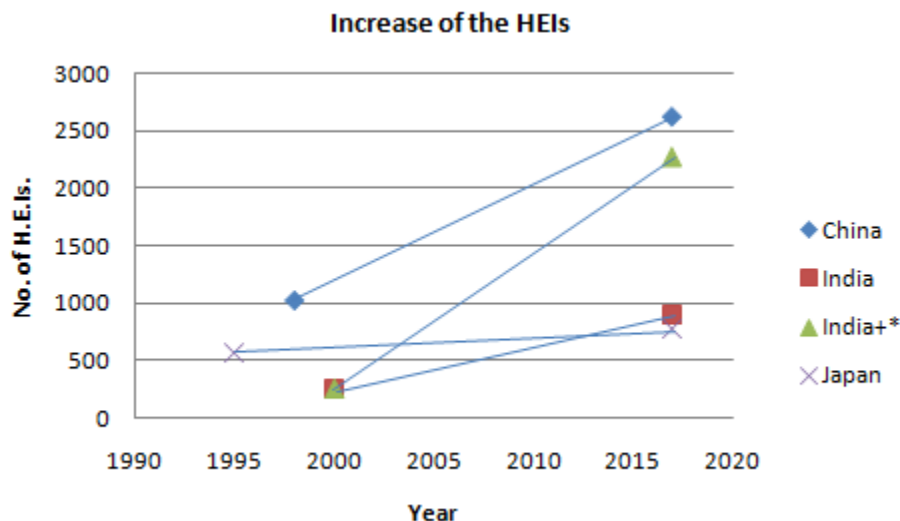
After independence, in India a huge part of horizontal expansion of HE was contributed by social sector of the country and there are now 37977 privately established and nurtured colleges in both the categories - aided and unaided with public funding.

As on 2000-01, the total number of HEIs in India: **Universities: 256 & Colleges: 2806;**

As on 2018, total number of HEIs in India: **Universities 903 & Colleges: 37977***; (= 903 Universities + 1338* Colleges = 2271 HEIs)

(In the depiction no 1, two graph lines are being shown representing Indian H.E. growth, in which the first represent the said growth in only in the number of UGC recognized 'universities'. But since more than 50% student-enrolment is contributed by the students studying in Indian private colleges established by social sector in an enormous number of around 40,000 must also be taken into cognizance.* As per the AISHE Report, of these 37977 Colleges, only 3.6% run Ph.D. Courses and also that similar ie 3.6% of the colleges have enrolment more than 3000 students, so of these approx 38000 colleges, **1368** can be considered as regular notable HEIs)

In Japan, the HE expansion rode on its fast yet natural industrial and social development from 565 HE institutes in 1995 to 778 in 2010.



(*The above graph 'India' represents the trend of growth of Indian universities alone as HEIs, while 'India+' shows the same of Indian universities along with the colleges with Ph.D. research facility as well as a sumptuous number (>3000) of student-enrolments)

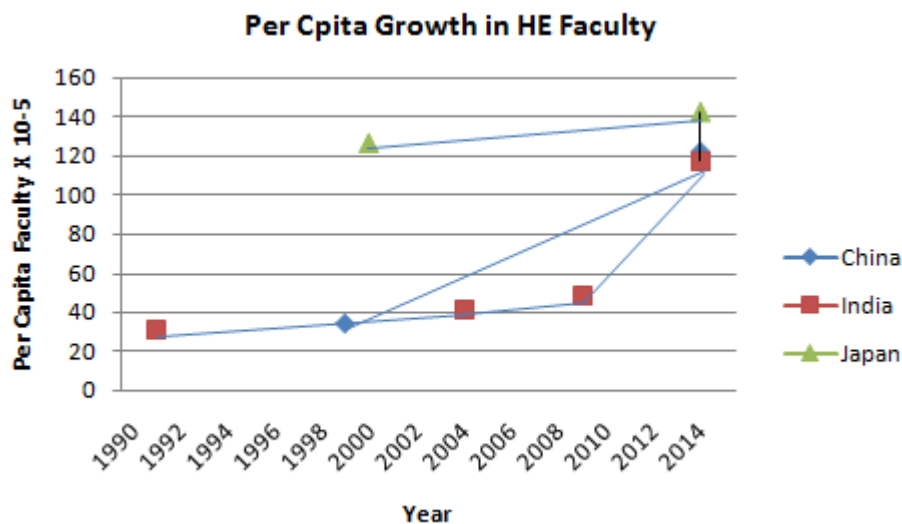
Number of the higher educational regular-instructors (full time faculty-members):

China, India and Japan, owing to their national priorities and inherent societal character have always been having the development of 'instructors' as prominent national agendas to train and develop human resources.

China, as the graph suggests, have had a steep rise in the number of its HE faculty members since the year 1999. It was

the year when China, overcoming the devastating after-effects of the merciless **Cultural Revolution**, embarked upon its great leap forward in every sphere of life, including prominently the HE.

Japan as it is shown in its graph has had a steady growth in its fulltime HE faculty strength. Keeping in mind the stage of development of HE in Japan as compared to the other two, there is a healthy organic growth in it.



Total Expenditure on Higher Education:

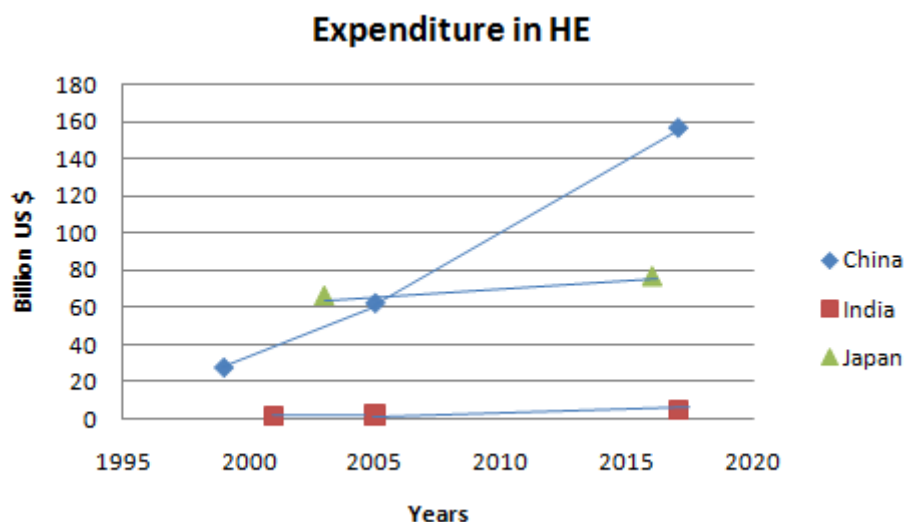
China, in its 'Long Leap Forward' mode of rapid development, has made a dramatic growth of its HE sector, with turning its number of HEIs, more than double in one decade. So is the trend in its concerned capital investment also. The inclination of such a graph poses the risk of maintaining the quality of the delivery by such a rapidly inducted faculty. Also 'years of experience' also carries an equal weight for the necessary quality HE-classroom delivery. China, being a totalitarian system, may manage to overcome the risk and time will tell its outcome.

This, however, could have been an unmanageable challenge, had it been a case of a society with pluralistic intellectual values, typical to democracies.

India's case in this regard has an altogether different problem and this is related with establishing and sustaining a HEal set up which is characterized with low-capital endeavours. It is ostensibly clear from the following depiction that India's HE system is the lowest cost intensive among the three national trends here.

However, that gain imposes an adverse repercussion of another extreme here and that again opened a hornet's nest in return. That problem is of under-paid and therefore demotivated hoard of faculty members. An estimated 67% of un-aided part of the private colleges typically characterized with stringent cost-saving organizational set-up and working processes viz. over-loaded work schedules, engagement with non-academic works and / or with un-related knowledge-domains.

Japan's case of similar trend represents the healthiest pattern among the trends here. As the depiction shows, the trend's launching point is pretty high and is of the tune of over US \$ 60 Billion. The less inclined growth pattern of this also indicates towards more of the organic growth Japan's tend of expenditure on HE. However, Japan's 'closing-in' pattern towards 100% GER = Gross Enrolment Ratio and therefore a bare marginal growth in new enrolments could also be the reason of its less steep graph in the depiction 'Expenditure in HE'.



6. Role of H.E. In The Socio-Economic Development of The Nation:

Impact of Higher Education on China's Social-Order:

Due to its very nature and political-social national psyche of Chinese society, the major areas of impact of HE on it can be understood in three frames of references:

- Its economy

- Towards a relatively open society
- Government's roles
- Social-Institution of 'family'.

In Economy:

The Chinese government could successfully implement its decision to transform its economy from a 'planned' `economy to

a free flowing 'market' economy. This was necessary for a rapid growth in national GDP and the HE enabled to make the entire Chinese society to work in tandem to maintain and sustained 7.8% growth from 1978 through 2012.

This effect further left its impact on altering the proportions and levels of skills of its work force: While in 2001, the Chinese labour-force was 14.38%, 45.15% and 40.46% in primary, secondary and tertiary working / professional skills respectively, in 2011, it became 10.12%, 46.78% and 43.10% respectively.

Thanks to coordinated efforts in HE, the information-technology industry reached a new height of US \$ 493 Billion in 2013*. Ostensibly, the China is knocking the door of the global IT-Industry for its share of participation.

In other sectors also, the production has turned from labour-intensive to technology-intensive modes. Another major change is that the economic and other civic policies are more de-centralized than ever before in China.

However, there are repercussions of this altered scenario too. Due to phenomenal growth in HE, the imbalance geographical development can create huge social tension also and therefore, this has become a challenge for the Chinese government currently. For example in the Guizhou and Inner Mongolia regions of China, per student expenditure on HE were US \$ 1220 and US \$ 1394, the same in Jiangsu and Beijing regions have been US \$ 2409 and US \$ 4453 respectively.

More Open Society: Urban China has seamlessly adapted with pure western culture's ingredients for instance, Coca-Cola is one of the most popular soft drinks. McDonald and Kentucky Fried Chicken are widely spread over China. Nike shoes and fashion blue jeans are new fashions in urbane Chinese society. Hollywood movies, Korean pop singers, Japanese cartoons and game software are very popular among Chinese youth.

A Changed Role of Governments: Contrary to the erstwhile an all pervasive role of government, now it is monopolized by the CCP, and has confined itself with the policy formation, guidance monitoring and assessment.

The new Chinese Family, its Values and Realities:

Chinese society, specially its urban part, has accepted the government's 'one family one child' slogan and even has gone beyond that and adopted the concept of child-less family. As a result, China's population growth rate has been declining continuously. It was 15.04 ‰ in 1989 and declined to 4.79‰ in 2011.

Another side of the fact is the Increase of Divorce Rate: In China, 9.059 million Couples got married and 1.693 million couples divorced in 2012. This is a dramatic change in typical Chinese family values.

Increased Disposable Family Income: The disposable income per capita in urban areas was US \$ 194 in 1989 and US \$ 347 in 2012, and the net income per capita was US \$ 86 in rural areas in 1989 and US \$ 1120 in 2012. This notable change has brought a good fast paced growth in the consumer life and lifestyle therein too.

7. Role and Impact of Higher Education In India:

With this densely rich educational legacy, as it was discussed before, Indians shaped their cultural, intellectual and socio-political psyche though many of the sects and creeds got marginalized and lagged behind in this evolution too.

Post Independence Higher Education and its role on India's Socio Economic Dynamics:

After, independence, the Indian leadership, inspired by its public's unanimous support, was highly motivated to build a nation with not only ironing out all its socio-cultural and

economic defects and adverse-attributes but also to build an ideal and prosperous society.

So much so that Indians selected Dr. S. Radhakrishnan, a noted educationist and renowned teacher, as its head of state – President. Overwhelmed with this national-honour, India's first president guided about the operational side of HE with conferring the responsibilities of financing and regulating the HE to both the Central as well as the State governments and further advocating for the control of centre through its constituted University Grants Commission with establishing, authorizing, financing and regulating the universities in the country.

8. Impact And Role of On Japanese Socio Economic Life:

Formal education in Japan began with the adoption of Chinese culture, in the 6th century AD. Buddhist and Confucian teaching as well as sciences and life-sciences, calligraphy, divination and literature were subjects that were taught at the courts of Asuka, Nara and Heian in the past. Scholar officials were chosen through an Imperial assessment system. But as against in China, the Japanese system never indulged in court's set up and instead remained hereditary family possessions only. The rise of the Bushi, the military class, during the Kamakura period ended the influence of scholar officials but Buddhist monasteries remained influential centres of learning.

This practice of education lasted even up to the 17th century as well, in the form of warrior/ feudal-family's sponsored education for the entire clan's youth. Later the same values were trickled down in the two persons' (husband & wife) education units in which a married couple was teaching a hoard of their pupils.

The education and specially the advanced education in Japan's history have been with in-depth nationalist overtures with warrior's preparedness.

In post WW II Japanese socio-economic scenario, due to a prolong history of education and an elevated stature of educated persons in Japanese society, all the family-oriented conventional values have been diminishing rapidly to reach the current scenario where birth rate has reduced remarkably to 1.43 which is well below the desired figure 2.07 leading Japan suffering its biggest population decline on record this year. In the same course, the Gross Domestic Product per hour's work in Japan has come down by 0.4% and at a rate of US \$ 41.3 it is behind the same of US \$ 65.2 and 64.4 of France and Germany respectively.

Japan's Remedy of the Configurative-slowdown:

To come out of this configurative socio-economic recession, Japan has adopted engaging women folk and elderly and promoting innovation and entrepreneurship to pull the economic-vigour. Higher-Education, in Japan, is therefore an obvious and the most suitable tool through which this can be done.

However, the Japanese HE is inflicted with some serious lacunae which had been surfaced due to the less public investment in HE. It is surprising that though Japan maintains a high 68% HE-GER. But standard of education students receive has another grim picture of it. Japanese universities have large average class population, blurred grading systems and no self-study / self practice assignments. According to a study by Benesse Educational Research and Development Institute in 2008, over 80% of students do less than three hours per week off-class study, which included 32 percent who do not study at all, out of the class room lectures.

In nut shell, its HE system, through which Japan intends to explore its panacea for the socio-economic slowdown, is ailing with following:

Less public spending on HE (1.8% of GDP in 2012)

Reducing the size of the HE market (from 2.05 million to 1.18 million number of 18 year old youth).

Increasing number of HEIs (from 500 to 780 universities in 2012). With reference to the earlier point of reduction in college ready student population, this creates more supply than demand and the subsequent money starved HE with deteriorating practices leaving less scope for the much desired 'Innovation' and 'entrepreneurship'.

As a result of the above, many of the Japanese graduates are not able to fulfil the Labour / job market's expectations and there remains a clear gap between the skills acquired and the expectations of the corporations. As its result, out of 3 jobs offered, 1.34 incumbents leave them because of the said skill-gap and the subsequent generated stress at their work place. Not surprising that the current Japanese Youth's preference is for getting a part-time instead of a full time job.

9. Analysis: Higher Education Enrolment Trends:

If HE is undoubtedly the key for a rapid socio-economic transformation of a country, then student-enrolment is the driving force of it which ensures the supply of educated / skilled population to stimulate and catalyze the social and economic dynamics prevailing and excels them to give favourable growth indices.

China, India and Japan are nations with their distinctive socio-cultural and political histories. China, a communist society has governance with dictatorial-high handedness, while India, a democratic society marred with many social and other disparities and Japan, a democracy with a society with a devastating defeat in WW II yet integrated with patriotism, hard work and discipline present a variegated mosaic of their exclusive shades of causes and effects.

China is no doubt a country with an astounding performance with respect to the growth of higher education in the last decade. Though the country's recent past was havoc for the higher education academia in which 0.5 to 2.0 million of people lost their lives in which entire part of the Higher education fraternity which were having adverse opinion with the ruling communist party of China. The biggest loss in this course was the HEIs' Professors, Researchers and Students and thus left the Higher Education of the country in utter chaos and partial vacuum.

A well orchestrated all out efforts and projects were commenced in higher education after the Communist Country unfolded its policies of reformation and rapid growth. Though the quality of China's phenomenal growth is matter of debate*, but through this China has been brought forward to rub its shoulders with the most forward league of nations globally. Compounded with adopting the free-market system of economy replacing the old planned economy pattern, this Higher Education GRE growth has created many economic

and social marvels in the country viz. China's per capita income as USD 1760, Infant Mortality Rate as 8 per 1000 and life expectancy rate as 76.25 years etc. as of now along with militarily and on economic fronts, China's aggressive strategic clout, regional and global is another visible set of testimonies.

India's historical trend in the growth of GER in higher education, with its organic growth, has an altogether different shade. Although from 2005 through 2010, the growth is a bit extra-rapid, but this is on account of synergy created after crossing the threshold in this respect. India, in 2005, through National Knowledge Commission's report, initiated some revamping administrative and other functional measures especially in its higher education set up. Though they are were directed towards making a knowledge based economy, its result can be seen, however, in higher education enrolment too. This growth, in the opinion of some known educationists in India, is considered healthy and encouraging, but still this rapid increase left its repercussions too. According to the **Annual Employability Survey 2019** report by Aspiring Minds, a private firm in education business reveals that 80% of Indian engineers are not fit for any job in the knowledge economy and only 2.5% of them possess technical skills in Artificial Intelligence (AI) that industry requires. Similar results can be seen in the field of management sciences too.

The current national government and states governments are taking initiatives to address this issue. Meanwhile some hyper brand coveted institutions viz. IITs, IIMs, IISc and the like once are creating one of the world's best human resource too.

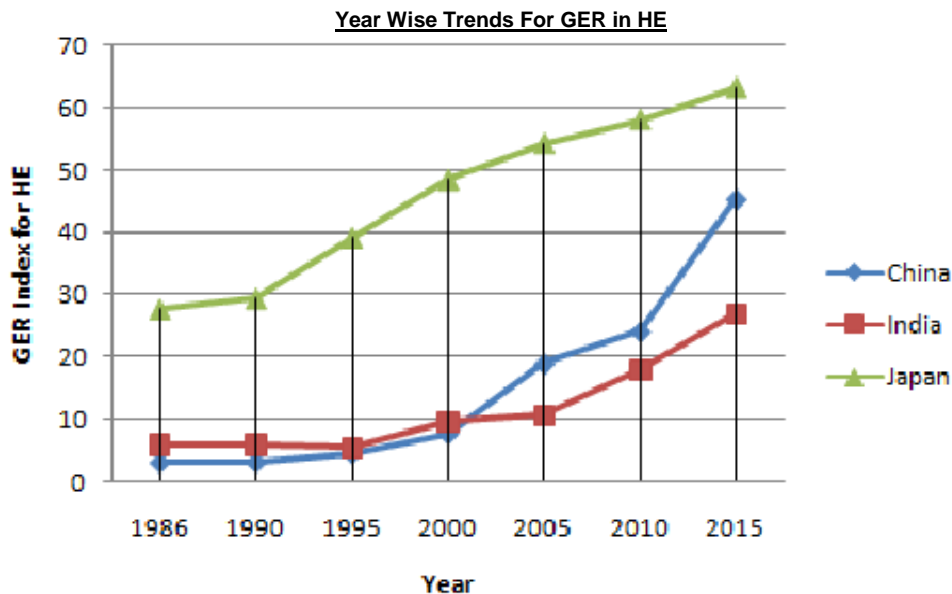
During the current reign of the nationalist party at the centre, it is likely that some drastic actions have to be taken to revamp the structure and expedite the enrolment-growth along with ensuring an stringent quality control measures in Indian higher education sector.

Among the three nations, Japan has had a much different historical course and dynamics therein. Despite having an Imperial lineage, the Japanese society remained a coherent socio-economic structure. Besides, the decisive and a vision oriented structural revamping in higher education were conducted in as early as in 1868 in Meiji period. This era represents the first phase of the Imperial Japan in which its people moved from being an isolated feudal society vulnerable to fall prey to European powers on colonising-spre to the modern, industrialised nation-state and one of the emerging great world powers, influenced and revamped by Western scientific, technological, political, legal and aesthetic ideas.

In the following graph, the gap of initial points of the Green Line (Japan) to Blue (India) & Red (China) entails the depth of westernized advanced social values and practices implanted in Japanese society much earlier than the same in the case of other two – China and India.

Year Wise Country Wise GER Tally

	1986	1990	1995	2000	2005	2010	2015
China	2.96	3.01	4.48	7.62	18.85	24.05	45.35
India	6.01	5.96	5.55	9.55	10.73	17.91	26.88
Japan	27.65	29.36	39.1	48.43	54.26	58.09	63.24



Socio-cultural Impacts:

Digging further in this data of HE-Enrolment and weeding out the exclusive enrolment data for females in these countries and their analysis throws a good light on the socio-cultural aspects of the evolution of three societies. The following table and its graphical representation represent the trends in Female HE-Enrolment of these three Asian nations in chronological order. The female HE-Enrolment reflects not only the extent of productive participation of the half of the population of a society but it highlights several other socio-cultural aspects attached to it too. Family health consciousness, better child rearing, an advanced family finance-management and its all positive results along with a healthy political participation are a few examples of the same.

If we can see the graphical patterns of Japanese HE-Enrolment (M&F) and the same for Females in the given depiction, we can see that both the lines run almost in parallel. This represents the fact that Japanese society has achieved a reasonable maturity with respect to the growth in HE-Enrolment trend. If we combine this trend with the trend in HE-GER with the corresponding years, we will find that a huge female participation in socio-cultural and economic activities was ensured in an otherwise strict-patriarchal Japanese society.

It's another adverse result is its lower fertility rate. By and large, a higher female participation in economic activities leads to an individualist nuclear family life style and with the consequent 'one-child' or 'childless-family' norm. As a matter of fact the total Japanese fertility rate has been hovering around 1.4 since 2012 after hitting a low of 1.26 in 2005. It fell below

2.00 in 1975 which was a large decline from 4.54 in 1947. Currently the huge and efficient higher education system in Japan is facing the dearth of students for new admissions in the universities and colleges, especially those with below average accreditation-ratings.

In the case of India and China, the concern trends have started their HE-Enrolment journeys almost from the same point. Both the countries sat on their respective countries' driving seat on almost the same point of time. Being a dictatorial political system, China, almost in every phase of this chronology so far has been having an edge in maintain the HE-Enrolment over its liberal-democratic neighbour India. However it is remarkable on the part of India that notwithstanding a total absence of strict regulatory teeth, akin to those in Chinese system, has achieved a reasonably good enrolment growth which is much better than the same of its other continental counterparts.

In female HE-Enrolment, the Indian pattern remains the same – that is it remains almost half of the combined i.e. 'male-female' data. In China's case, the growth in female HE-Enrolment maintains a faster pace than the similar growth of 'male-female' combined data trend from 1997 to 2005. The former got slowed down after 2005. This indicates a deliberate 'pulled' growth in Female HE-Enrolment in China.

It is, however, a good and separate area of study as to what is the nature of the phenomenal HE-Enrolment growth in china and its fall out in the quality of passed out graduates in that country.

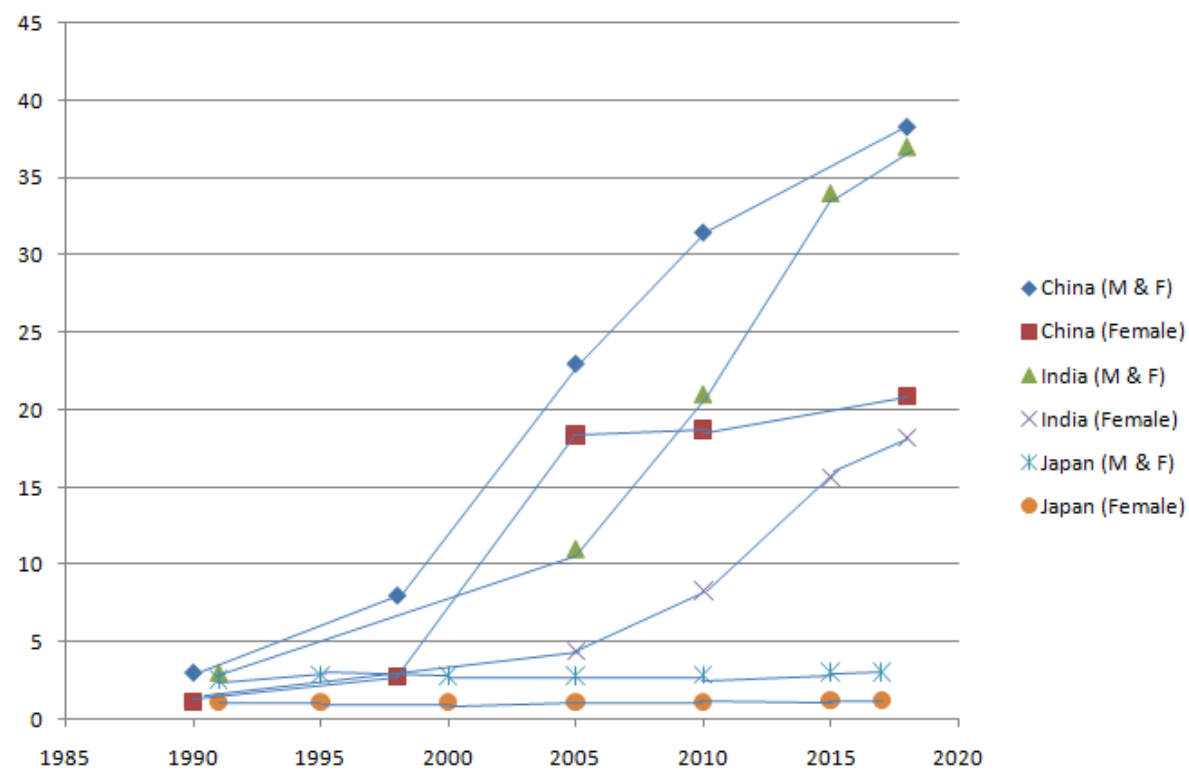
Category	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
China (M & F)	3							8							23						32								38
China (Female)	1.2							2.8							18.4						19								21
India (M & F)		3*													11						21					34			37
India (Female)		1.2*													4.4						8.3					16			18
Japan (M & F)	2.6				2.9						2.8				2.8						2.9*	3.1*	3.2*	3.3*	3.4*	3.1	3.1*	3.1	
Japan (Female)	1.15*				1.16*					1.17*					1.18*						1.2	1.2	1.2	3.3	1.2	1.2	1.35*	1.3	

* Back-Projection of the Enrolment-data, based on forward factual ones.

** Calculated on factual corresponding combined Enrolment (M & F) data along with the Gender Parity Indices of concerned years.#

'Gender-based Education Inequality in China and India' By - Abigail Murphy (Global Majority E-Journal, Vol. 9, No. 1 (June 2018), pp. 15-28)

Trends of Enrolment (M & F) along with the corresponding Enrolment (Female) of Three Countries



10. Conclusion

As it is clear in the discussion so far here, the Chinese HE-set up has been a highly 'intervened' and 'over-regulated' growth in its evolution process, the Indian system is advancing in its natural organic growth. Japan, on the other hand, being an already advanced society, has grown naturally with its chronology of political-history so far and it is way ahead in its respective HE-Indices.

Though, India and China both have still a huge scope to get their respective HE systems grow qualitatively, but with China's fast pace of achieving almost near half of eligible populations participation in higher education must raise expectations to see the relevant outcomes in Chinese society

at large. It can be, however, further studied as to what are the pros and cons of a 'fast-paced' over-regulated growth especially of higher education and its consequent contribution in economy and society, Its current foreseeable economic favourable result is, however, ostensibly clear today and much more is expected in future too.

It also churned out from this study that though socio-cultural indices get improved remarkably by a good female HE-enrolment, however in advanced stage of development, something more than this is required to address the basic challenges like decrease in national average birth rate and work-productivity et al.

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