

ANCIENT UNIVERSITY AND ITS CONTRIBUTION IN INDIAN ECONOMY

Dr.Dharmanshu Vaidya¹, Dr. Sunil Der^{2*}, Dr.Nilesh Pandya³, Dr.Minalba Jadeja⁴

¹Assistant Professor (English), Children's Research University, Gandhinagar, Gujarat, India.

^{2*}Associate Professor, Department of English, School of Arts and Humanities, Dr.Subhash University Junagadh Gujarat, India.

³Associate Professor (Education), Children's Research University, Gandhinagar, Gujarat.

Corresponding author: sunil.der@dsuni.ac.in²

ABSTRACT

It is a widely known fact that the learning of any country is closely associated with the intellectual and economic growth. No nation can thrive without exceptional generation of knowledge. In this connection, the mechanism of the University plays a very crucial role. Without a powerful university set-up, generation of innovative knowledge is not feasible. The present paper is an attempt to analyse the symbiotic relationship between universities and the economy, emphasizing their contributions to human capital development, research and innovation along with their contribution to GDP. With a close inquiry of historical records and available archival sources, this research paper sheds light on how ancient Indian academic units of higher education played pivotal in driving economic growth, fostering innovation and propelling the nation towards a knowledge-based economy in different temporal frames.

Keywords: Indian University system, Vihārā & Mahāvihārā& GDP.

INTRODUCTION

A tradition of Indian knowledge system, marked by its debating nature, is clearly visible across the major textual traditions of Indian antiquity. The emphasis on dialogue and textual analysis as integral components of the learning process is discernible in Indian intellectual history. The pursuit of knowledge through thoughtful discussion and rigorous textual examination was unequivocally at the core of Indian scholarly tradition. This tradition has at its core a rich spiritual tradition of the Vedas, Upanishads and other seminal texts, where seekers engage in profound discussions to understand the deeper meanings of existence and truth.

A root of this tradition lies in the Vedic age with Taxila emerging as a significant centre for higher education. The city's historical imprints suggest that the pursuit of knowledge and intellectual discourse was not a later development but an integral part of the Vaidik age. The emergence of higher academic frameworks can be viewed as a natural progression, deeply rooted in the foundational principles of Indian scholarship which has consistently valued the exploration of knowledge through intellectual debating and dialogue.

In this context, when one looks at the idea of university, it broadly becomes a centre generating higher level of knowledge with a promotion of academic discussion & deliberations covering range of subjects and disciplines. In other words, it is a place where great talents gather and acquire special skills through years of austerities full of intellectual toil. The root of the meaning of the word university lies in the Latin "universitas", which means whole. From this point of view, the task of the university is to awaken man's thirst for knowledge and make him socially useful, so that s/he can achieve the goal of a fulfilling life. The closest word we have to the word university is "Mahāvihārā". The word is very broad and is related to the word 'Vihārā', which means spontaneous wandering. In this context, a person becomes a real Mahālvihāri when one strives to go beyond one's own mental world and is prepared to challenge one's own beliefs and narrow-mindedness. The Mahāvihārā or university tradition in India has its roots in the Mauryan period and there is abundant

⁴Assistant Professor (Education), Children's Research University, Gandhinagar, Gujarat.



archaeological and literary evidence available, which testifies to the existence of the Universities of Taxila, Nalanda, Valabhi and so on. But before talking about these wonderful institutions, it is necessary to see what factors were responsible for the emergence of these centres of knowledge and learning.

ARCHAEOLOGICAL AND EPIGRAPHIC EVIDENCES

In this line, Taxila falls first and its earliest references can be found in the Jātak tales. In this line, the Namasiddhijātaka comes first, since one can see the following Pāli sentence in it, "AtīteTakkasilayamBodhisattodisapāmokkhoacariyohutvāpañcamāṇavakasatanimantevācesi Tass' ekomanavoPapakonamanamena…" (p. 402)

Here, a mention of Taxila as a prosperous place is visibly noteworthy. Besides, the reference to it also recurs in Pañcagarujātaka which is as follows:

AtīteBäränasiyamBrahmadatterajjamkarente Bo-

dhisattobhātikasatassakaniṭṭhoahosîtisabbamheṭṭhāTakkasilajatakevattanayen' evavitthäretabbam. Tada.. (p. 469-470)

As observes in the aforementioned quotation from this tale of five teachers, the reference of Taxila city recurs very often. Based on this, one can curl out that this region used to hold tremendous importance in ancient times, since it fell on the main trade route. Over and above, the excavations carried out at the site of this University also support the claim of its learning facility which covers different disciplines including Darshans, Grammar, Medicines and so on. In this context, Nasim Naqvi states in his seminal article that discovery of surgical instruments at this site of learning offers unequivocal validation of its standing in surgical practice. (p. 90) The same was the case with Nalanda. Similar to its former counterpart, this site of learning holds its mark on three forms of sources i.e., the literary, the epigraphic and the archaeological. The earliest mention of Nalanda in Buddhist literature is in the Brahmajälasutta, wherein find. one can "AthakhoBhagavaAmbalatthikayamyathabhirantamviharitvaāyasmantamAnandamamantesi, "Ayām Ananda yenaNalanda ten' upasamka- missāmāti." (p.10) In Chinese sources, Hsüan-Tsan mentioned that Dharmapal according to tradition, went to Suvarnadvipa, i.e., Java-Sumatra. (p. 16) According to the account given by I-Tsing, the pupil after attending to the service of his teacher, reads a portion of scripture and reflects on what s/he has learnt. He went on to describe different forms of education being imparted on this ancient site of learning which includes (1)Sabdavidya (grammar & lexicography); (2) Silpasthana-vidya (arts); (3) Chikitsavidya (medicine); (4) Hētuvidya (logic); and (5) Adhyatmavidya (science of the Universal soul or philosophy). (p. 17) This university was largely public funded and it used to govern monetarily with mostly on the alms it received. In this context, inscription of the reign of Divapiladéva, mentioning Nalanda is incised on the back of a female image, which was excavated from the site and is preserved in the Nalanda Museum as it reads, "Ari-Divapaladeva-rajyaRajagriha-vishayeiri-Nalanda-mahipatal(a) vistavyakumhara-Vedemapå(u)ttrsGötakapattra-Ujakadilikakumhari-kumhara-irisriDevapratipälitamitibiti..." (p.88) The name of the donor or donors mentioned in it is not clear name of his father and grandfather. The evidence of the seals described above proves to the claim that Nalanda had its own administration and was funded by a generous alms.

The seals of the great University of Nalanda were found in large numbers in different areas from the site and the majority of them comes from the monastery marked No. 9 where no less than 690 seals have been found stored in one chamber which must have been the record room of the establishment in that area. In one such seal, the following words get inscribed, "Sri-Nalanda-Mahāvihariyāryabhikshusanghasya." (p. 36) From these ample evidences, the presence of these universities become visibly clear. In addition to this, Valabhi University, which was situated in what is now known as Saurashtra, is also referenced in I-Tsing's



account. According to his narrative, similar to Nālandā, Valabhi was also successful in attracting students who came from distant regions. These were the two educational institutions that students in I-Tsing's era typically frequented in order to attain a discernible mark of cultural and intellectual refinement, subsequent to completing their customary secondary education. As the same perceptive traveller aptly notes, "Thus guided by their mentors and serving as mentors themselves, they spend two or three years, usually at the Nālandā in central India, or in the vicinity of Valabhi in western India." He goes on to assert, "These two locales," he continues, "are akin to Chin-ma, Shih-Chu, Lungmen, and Chue-li in China. In these distinguished centres, erudite and accomplished individuals congregate in large numbers, engaging in discussions of both plausible and implausible doctrines. Subsequently, having their perspectives affirmed by sagacious scholars, they gain renowned for their sagacity." (p. 187-188).

A RELATIONSHIP BETWEEN STRONG UNIVERSITY SYSTEM & ECONOMIC DEVELOPMENT

It is evident, in fact, that the origins of these ancient institutions may be traced back to a variety of cultural sources, including the ancient traditions of Chinese, Indian, Tibetan and Greek civilizations. Their presence carried a great deal of importance because it had a significant impact on the state's economic development. In order to enhance the understanding of this statement, it is necessary to refer to the Angus Madison World GDP Share table. Upon closer examination, it becomes evident that the United States has emerged as a major actor in the global economy, particularly in the aftermath of the 20th century, with an impressive growth trajectory. It had only contributed 0.3% of the world GDP in 1600, which was a small amount at first. But as its academic infrastructure expanded throughout time, there was a noticeable upsurge that culminated in a surprising 27.3% share by the year 1913. This significant uptick corresponded with the emergence of a robust university system and the era's great economic growth. As a result, the United States reached its peak in the early 20th century when it commanded a dominant 27.3% of the world GDP, more than any other country at that time. Through the middle of the 20th century, this dominance persisted, with shares reaching 21.9% in 1973 and 22.0% in 1950.

When it comes to the case of India, it has unmatched economic power in antiquity. India controlls a large portion of the world GDP from the beginning of recorded history until the year 1000, ranging from an astounding 32.9% to 28.9%. This emphasizes India's historical leadership in economic affairs as well as the existence of a robust university infrastructure during these times.

However, commencing from the 1500s, India's share began to undergo a decline, reaching 22.6% in 1600. The subsequent centuries witnessed a further reduction, with shares of 24.4% in 1700, 16.0% in 1820, and 12.2% in 1870. This decline can be attributed to various historical factors, including the impact of colonialism and shifts in the dynamics of global trade.

By the mid-20th century, India's share had significantly contracted to 7.6% in 1913, reflecting a relative diminishment in its economic prominence. This trend persisted, with shares of 4.2% in 1950 and 3.1% in 1973, signifying India's evolving position in the global economic landscape.



Table 1: World GDP Shares

Year	0	1000	1500	1600	1700	1820	1870	1913	1950	1973	1998
France			4.4	4.7	5.7	5.5	6.5	5.3	4.1	4.3	3.4
Germany			3.3	3.8	3.6	3.8	6.5	8.8	5.0	5.9	4.3
United Kingdom			1.1	1.8	2.9	5.2	9.1	8.3	6.5	4.2	3.3
Total Western Europe	10.8	8.7	17.9	19.9	22.5	23.6	33.6	33.5	26.3	25.7	20.6
Eastern Europe	1.9	2.2	2.5	2.7	2.9	3.3	4.1	4.5	3.5	3.4	2.0
Former USSR	1.5	2.4	3.4	3.5	4.4	5.4	7.6	8.6	9.6	9.4	3.4
United States			0.3	0.2	0.2	1.8	8.9	19.1	27.3	22.0	21.9
Other Western Offshoots			0.1	0.1	0.1	0.1	1.3	2.5	3.4	3.2	3.1
Total Western Offshoots	0.5	0.7	0.5	0.3	0.2	1.9	10.2	21.7	30.6	25.3	25.1
Mexico			1.3	0.3	0.7	0.7	0.6	1.0	1.3	1.7	1.9
Other Latin America			1.7	0.8	1.0	1.3	2.0	3.5	6.7	7.0	6.8
Total Latin America	2.2	3.9	2.9	1.1	1.7	2.0	2.5	4.5	7.9	8.7	8.7
Japan	1.2	2.7	3.1	2.9	4.1	3.0	2.3	2.6	3.0	7.7	7.7
China	26.2	22.7	25.0	29.2	22.3	32.9	17.2	8.9	4.5	4.6	11.5
India	32.9	28.9	24.5	22.6	24.4	16.0	12.2	7.6	4.2	3.1	5.0
Other Asia	16.1	16.0	12.7	11.2	10.9	7.3	6.6	5.4	6.8	8.7	13.0
Total Asia (excluding Japan)	75.1	67.6	62.1	62.9	57.6	56.2	36.0	21.9	15.5	16.4	29.5
Africa	6.8	11.8	7.4	6.7	6.6	4.5	3.6	2.7	3.6	3.3	3.1
World	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

While India's share experienced a modest increase to 5.0% in 1998, it is important to note that this still represents a fraction of its historical prominence. Thus, until the year 1000 C.E., India's economic prominence reached its zenith. Subsequently, one can discern a gradual diminishment thereof in the ensuing millennia. It is noteworthy that during epochs when the establishment of universities wielded substantial sway within the country, economic growth and stability attained their apogee. Regrettably, a sombre denouement befell this system in the 12th century, as BakhtiyarKhilji, propelled by an iconoclastic fervour, wrought extensive destruction upon them. (p.170) This act of demolition precipitated a lamentable decline in the national economy, which continued to wane in the ensuing years following their demise. Hence, it would not be unwise to claim that a robust and well-established university system constitutes an indispensable cornerstone of a nation's intellectual and economic prosperity. The symbiotic relationship between a strong university set-up and economic growth is multifaceted and profound. Firstly, universities serve as crucibles of knowledge creation and dissemination, fostering a culture of innovation and critical thinking. Through cutting-edge research and development, they generate novel technologies, products, and services, which in turn fuel economic advancement. Moreover, universities are instrumental in nurturing a highly skilled and adaptable workforce, equipping graduates with the expertise and analytical acumen needed to thrive in an increasingly competitive global market. Furthermore, a flourishing university ecosystem attracts both domestic and international talent, engendering a diverse and dynamic intellectual landscape that further catalyses innovation and economic diversification. Thus, a robust university set-up is integral to the cultivation of human capital, the generation of intellectual property, and the facilitation of innovation, all of which collectively contribute to sustained economic growth and national prosperity.



CONCLUSION

The study of ancient universities and their contribution to the Indian economy highlights the deep interconnection between education, culture, and economic development in early civilizations, Institutions such as Takshashila, Nalanda, Vikramashila, Vallabhi, and Odantapuri were not merely centers of learning but also vibrant hubs of economic activity. They attracted scholars, students, and travelers from across Asia, fostering international exchanges of knowledge, culture, and trade. The influx of learners generated local economic growth through increased demand for food, accommodation, manuscripts, and other services, thereby stimulating artisanal and agricultural sectors. These universities also played a critical role in creating skilled administrators, philosophers, physicians, and economists whose contributions strengthened governance, commerce, and technological progress. By promoting knowledge in astronomy, mathematics, medicine, and political science, they laid the foundation for sustainable development and intellectual leadership in India's history. Moreover, their international reputation enhanced India's cultural and economic diplomacy, making it a global center of learning and trade. In conclusion, ancient universities were not only educational institutions but also powerful engines of socio-economic progress, reinforcing India's historical legacy as a land where knowledge and economy evolved hand in hand to shape prosperity and cultural influence across the world.

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