Indian Framework on Technical, Scientific and Medical Education with Special Reference to West Bengal Turkish Online Journal of Qualitative Inquiry (TOJQI) Volume 11, Issue 4, December 2020: 1784-1799

Indian Framework on Technical, Scientific and Medical Education with Special Reference to West Bengal

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Abstract:

Any study of women in higher education in the core sciences, engineering, and medicine in Calcutta, West Bengal during the period 1947–1974 would be inadequate without a consideration of the Union Government's policies in these sectors. Because the Constituent Assembly adopted "a cooperative federalism," which means increasing cooperation and interdependence between the centre and the states while upholding the federalist principle, a study of the central policies that influenced state policies in higher education, particularly in science, technology, and medicine, is now required. On the one hand, because the Congress ministries were in power both at the centre and in the state of West Bengal during the study period, developmental plans in the state appeared to move more quickly with the federal government, but because education was on the concurrent list, the state bore the brunt of the responsibility for its development.

Keywords: India, Policy, West Bengal, Technical, Science, Medical.

INTRODUCTION:

The period between the Bengal Swadeshi movement (1905–08) and the two world wars had already seen a boom in indigenous enterprise and industry. That science was critical to the Indian economy was a top priority for Indian nationalists, who wanted to make India economically self-sufficient. Thus, even before becoming India's Prime Minister, Jawaharlal Nehru stated at the

Indian Science Congress in 1938 that scientific institutions were the "temples of contemporary (secular) India." He, along with a slew of others, including Prof. Dr. Meghnad Saha, came to believe that science and technology development in India had become a sine qua non of growth, bringing the country up to par with the world's most advanced and industrialized nations. Nehru's "temples of contemporary (secular) India" comprised institutions of higher learning, particularly in the scientific sphere, as well as steel and power plants and irrigation dams. Prior to independence, India had a number of science-related higher education institutes. The Indian Institute of Science (IISc.) in Bangalore, established in 1911, the CSIR (Council for Scientific and Industrial Research) in 1942, the Central Glass and Ceramic Institute in 1945, the IACS, the Bengal Engineering College in Sibpur, the Jadavpur University in Kolkata, and the Medical College in Kolkata are notable examples. Most of the institutions maintained their pre-colonial bureaucratic structures, but the emphasis on science, technology, and medical education and research as a sine qua non for development was a change from the past. It is arguable that the fusion of nineteenth-century social reform movements with the nationalist fight for independence resulted in a significant shift in women's issues. Even after women's education had been recognised by society for a long time, women were not regarded as fit to study science. Perhaps they believed that all they had to do was cook, raise children, knit, write letters, or learn to keep a daily account. Sarala and Shanta attended Bethune College, which was a girls-only institution. There was no science taught there. Shanta was irritated. "During my time as a student, the inspector would come to the college every year and ask, "How many of you want to learn mathematics?" Some of us used to raise our hands every year. But four years went by with nothing happening. Sarala was more driven than Shanta; she, like her brothers, wanted to pursue physics. Bethune College didn't give her the chance. She wrote to the Education Directorate in vain. Finally, Mahendralal Sarkar, a friend of her father's, arranged for her to attend his Science Association's evening lectures. This incident exemplifies the demand for science education among girls even during the colonial period. The adoption of the ideas of equality of rights, position, and possibilities for involvement in the process of national development was aided by the nationalist movement's democratic philosophy and the necessity to extend the political base of the nationalist struggle. From the 1920s onwards, growing political participation by women in the independence struggle necessitated a fundamental redefining of gender roles [1]. However, the early women's movement was predominantly elitist in nature, and the ambiguity that existed between tradition-

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based views recommending a clear demarcation of men and women's public and private roles continued to dominate higher educational policies in India for some time after independence. While one of the difficult tasks confronting the Indian government immediately after independence was the reconstruction and expansion of the educational system, steps were taken to reorganize secondary and higher education and promote the rapid expansion of scientific and technical education required for the development of industry and agriculture. In the area of education, the Indian Constitution stipulated that child up to the age of fourteen must get universal, compulsory, and free education within ten years of the Constitution's adoption. There were also plans to expand amenities for the community's most disadvantaged members, such as the Scheduled Castes, Scheduled Tribes, and other backward classes. Scholarships were granted to them as a means of equalizing educational opportunities. True, top-ranking leaders such as Nehru thought about women's rights to equality in education and employment. In truth, Nehru, India's key architect of planned development, had declared his libertarian views on women's education from the beginning. He believed that a country could not flourish if its women were oppressed. Indeed, the post-colonial period's development of science and technology became synonymous with Nehru's concept of science, to the point where researchers like David Arnold have labelled the period's science as Nehruvian science. The Nehruvian era encompassed the first years after independence. Nationalist historians have tended to extol this period and Nehru's contributions to nation-building efforts. He was also the creator of India's scientific programmes, seeing science not just as a tool for overcoming economic backwardness and promoting national progress and wealth, but also as a universalist, rational, and progressive force. The Central Advisory Board of Education (CABE), which was first founded in 1920 and then reactivated in 1935, was made up of the Central Education Minister as chairman and members, as well as several specialists. It was established as a consultative group whose decisions had a near-binding effect on both the federal and state governments. Apart from disbursing huge grants and subsidies, the All-India Council for Technical Education, created in 1946, and the University Grants Commission, established in 1952, worked as cementing factors in India's educational framework [2]. Another component of the Union Government, the Planning Commission, was founded in 1950 to guarantee uniformity in educational standards and policies. After examining the country's material, capital, and human resources, the five-year plans were developed. They have become a component in assuring consistency in educational goals, objectives, and standards across the country. The intellectual thinking of the education ministers of the time also shaped the educational policy of the time. Maulana Abul Kalam Azad, the first Union minister of education, aimed to offer a "national education" in which education, which had previously been given under the colonial system, would be reformed and have a vital place in our system, no less significant than food and clothing. The University Education Commission Report of December 1948–August 1949, also known as the Radhakrishnan Committee Report, was the first important document in the post-independence period in terms of education. In keeping with the Constitution's democratic objectives, the Commission set out to remove educational hurdles for scheduled castes and backward populations. The Commission devoted itself to the demands of women's education while emphasizing the significance of education as a powerful weapon of social emancipation and a leveler in society.

STATUS OF WOMEN IN THE CENTRAL POLICIES BETWEEN 1947-1974:

While acknowledging that women were not in any way inferior to males in terms of competence, the Commission emphasised that specific fields of employment were more suited to women and that they would be better prepared for home and family life. It was also thought that while women's and men's education should share many components, they should not be identical in every way. Thus, while fighting for equal opportunity in education and employment for Indian women, policymakers did not overlook the Victorian image of women as "homemakers." In fact, it was suggested that "the greatest occupation of women is, and presumably will continue to be, that of homemaker." In line with the country's national industrialization policy, the Commission recommended that professional colleges, such as agricultural, medical, and engineering, be established to produce the required number of graduates, as well as technical schools be established throughout the country to supply the large number of technicians required. Science and technology advancements were also seen as important for the realisation of democratic principles of justice and freedom. The importance of post-graduate training and research was emphasised by the Commission in terms of higher education, that is, education at universities. As a result, the Commission encouraged the creation of research fellowships in the major fields of knowledge. Scientific research was also given a lot of attention in the country. The Scientific Manpower Committee, which was established in 1948, contended that the quantity of scientific personnel in the country was significantly lower than the demand for scientific employees. The

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Committee also stated that if all available training facilities at universities were completely utilised, annual turn-out would be just 30–35 percent of the country's entire needs [3]. As a result, there was a significant disparity between the likely requirements and the projected production, which the committee correctly identified as both qualitative and quantitative. It was thought that this gap could only be remedied if existing post-graduate training and research facilities at universities were considerably expanded, and new research departments were added to those universities that did not have them at the time. According to the recommendations of the Scientific Manpower Committee Report of 1948, a significant number of post-graduate and research scholarships, as well as free university places, were to be established, and teacher salaries were to be increased. This was necessary in order to recruit the best students to the teaching profession and keep university education at a high level. This was a recurring theme in the West Bengal Assembly, with opposition party members harping on the necessity to enhance the pay of college and university professors in order to ensure excellence in higher education. The Scientific Man-Power Committee attempted to address the shortage of science teachers in colleges and universities by offering commensurate salaries to first-class scientist-teachers, relaxing their retirement age limits, relieving them of routine administrative duties, and increasing grants to expand their research facilities. In addition to the existing scientific laboratories and institutes such as the Indian Agricultural Research Institute, Indian Veterinary Research Institute, Indian Forest Research Institute, and the Geological, Zoological, and Anthropological Surveys, the nationalist goal of using scientific research to aid agriculture, engineering, industry, and medicine necessitated the establishment of several new scientific laboratories and institutes. Because scientific research in these facilities requires a lot of individual research, university research departments dealing with fundamental sciences needed to be increased [4]. The Scientific Manpower Committee's findings were useful in justifying the rationale for research at the university level, especially in terms of resource allocation for research. According to the estimates of the above committee, in order to implement their development plans for higher scientific education and research, the central government should provide an additional capital grant of 494.735 lakhs and a maintenance grant of 60.0806 lakhs per year (excluding medical, agricultural, engineering, and technological fields), over and above what had already been provided by the central and provincial governments. When compared to what the United Kingdom did for its advanced scientific education, this was a pretty reasonable demand. In September 1946, the Royal Society's Council suggested to the government that the average prewar maintenance (recurring) grants for fundamental sciences, which were 3.66 lakhs pounds (£366,000) per year, be increased to 10 lakhs pounds (£1,000,000) each year. Recognizing the importance of fundamental research at universities, the British government tripled their pre-war recurring grants in 1946-1947 and increased their expenditure on five fundamental sciences alone at universities to about 135 lakhs per year, in addition to giving them capital grants of about 85 lakhs rupees. On the other hand, the Union and state governments in India have frequently failed to provide enough financial assistance to universities, resulting in a reduction in student quality and the admission of large numbers of students. At multiple times, Maulana Azad expressed his unhappiness with the Planning Commission's advice that the education ministry rethink its plan and scale down its proposals for financial allocation. Finally, he had to accept a reduction in higher education spending on the grounds that planning must be based on the community's economic resources. First and foremost, the national income had to be raised, and the problems of unemployment and underemployment had to be addressed. Nehru's modern (secular) India's temples featured not only steel and power plants and irrigation dams, but also institutions of higher learning, particularly in the sciences. During the First Plan, the Council of Scientific and Industrial Research established high-powered national laboratories and institutes to conduct fundamental and applied research in the following areas: physics, chemistry, fuel, glass and ceramics, food technology, drugs, electrochemistry, roads, leather, and construction. The Atomic Energy Commission was established in 1948, setting the groundwork for India's future achievements in nuclear physics and allied fields. This was in addition to the remarkable expansion of science and technology educational options at universities and institutes. Each plan saw a rapid increase in national spending on scientific research and development [5]. The issue of establishing a national system of basic and secondary education was another source of concern for the education ministry at the time, given that India's literacy rate was as low as 15%. However, when it came to the development of technical education, the Education Commission and the Ministry of Education appeared to agree on resource allocation. The All-India Council for Technical Education adopted the interim report of the Sarkar Committee at its first meeting in April/May 1946. They agreed that, in order to address India's postwar demands for high-level engineers and technologists, four regional higher technical institutions should be constructed in the East, West, South, and North, modelled after the Massachusetts Institute of Technology.

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During the first quinquennium of 1947, the government approved the creation of two such institutes, one in the East near Calcutta and the other in the West near Bombay.

THE FIRST THREE FIVE-YEAR PLANS:

The University Grants Commission was created in 1956 during the First Plan period. The Commission assisted institutions in upgrading post-graduate teaching facilities and started the process of improving residential and other student facilities. However, it is possible that significant development was made in the sphere of technical education. Thus, Maulana Azad did not overlook the need to provide "highest type" facilities to technical institutes such as the Indian Institute of Technology Kharagpur. The education minister agreed totally with the Prime Minister that developing India's economic and material resources was absolutely required in order to improve the people's standard of living-a concern that had been deliberately neglected or unspoken throughout the colonial period. The transformation of the Eastern Institute near Calcutta into the dream institution of the Indian Institute of Technology at Kharagpur in 1951 was aided in part by "the generous help received from the Government of West Bengal, who gave to the Institute a plot of 1200 acres, free of cost, and a fine building." On the recommendation of the All-India Council for Technical Education, the Union ministry of education sanctioned a scheme for the strengthening and improvement of fourteen engineering and technological institutions located throughout the country, which was already in its third year of operation by 1951. Thus, the Indian government was aware of the need to expand technical education in the country and to provide post-graduate and research facilities in reputed institutes to outstanding under-graduates as early as 1951. However, while efforts were made to develop technical education facilities in the country and put India on a firm footing in terms of science and technology, there was no policy to exclusively promote women's education. In 1952, during the fifth annual meeting of the Central Advisory Board of Education, the education minister stated his pleasure with the country's progress in the field of technical education over the previous five years. Large amounts of funding were distributed to universities and other technical institutions around the country, as well as the Indian Institute of Science in Bangalore, based on the recommendations of the All-India Council for Technical Education and the Scientific Manpower Committee. As a result of the funding, the Institute was able to conduct post-graduate instruction and research in many of the core fields of science and technology as a result of the funding. International organisations have also offered assistance and collaboration. In 1952, the Colombo Plan received an offer of six mobile theatre vans, which would be effective in extending audio-visual and social education programmes. The UNESCO Technical Assistance Programme provided the students with the assistance of numerous eminent technical specialists as well as nine scholarships and fellowships. A total of \$100,000 in equipment was also awarded. Several teachers have benefited from Fulbright and related programmes, which have allowed them to get training or engage in study tours overseas. Through the organisation of community projects, the Ministry of Education, in cooperation with the Planning Commission, planned to reconstruct the new nation's education system by developing improved methods and procedures in the fields of primary, basic, secondary, and teacher education. However, while provisions for the extension of educational facilities for students from Scheduled Castes, Scheduled Tribes, and Backward Classes were established, there was little provision for female education, particularly higher education-an area where the government kept a deafening silence [6]. The University Education Commission has advised that engineering and technical colleges and universities work more closely together. It was thought that because engineering was largely a result of discoveries in basic sciences, an engineering college would thrive best in an environment conducive to scientific study and research. However, history will show that there was no proper telescoping of industrial growth and research in scientific institutions in India. Humayun Kabir, the education minister, believed that the country's major need in higher education, such as university education, was to consolidate and strengthen current facilities. Overcrowding, a focus on primarily theoretical disciplines, and a lack of possibilities in rural regions were the fundamental reasons for the establishment of the Indian University Education Commission in 1948, which was chaired by Professor Sarvepalli Radhakrishnan. Even before the planning period began in 1951, India's first education minister, Maulana Azad, foresaw comprehensive cooperation between the Centre and the states to solve the educational problem. Education was undoubtedly a provincial concern, but he believed such a distinction could be preserved only if educational goals were met. Until then, the central government and the provincial governments should share responsibility. This view of the education minister reveals the importance of education in the post-partition period at the national level. The official position was that the First Plan approved the pattern of specific-purpose grants to states for assistance. The Ministry of Education approved a set number of schemes in each educational sector and set the grant-in-aid rates for them. Grant-in-aid rates were different for

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recurrent and non-recurring costs and varied from scheme to scheme. The overall number of schemes was likewise quite enormous, and each one had its own account. Education, on the other hand, was almost completely overlooked when the Planning Commission was formed and the initial draught of the First Plan was written. After realising the importance of education as a cornerstone to success in all aspects of planning, a member for education was appointed to the Planning Commission. Some provisions for education were incorporated in the final draught of the First Plan, but they were woefully inadequate. As a result, there was no agreement between the Education Ministry and the Planning Commission in terms of policy execution and resource allocation at the policy-making level. The Ministry of Education attempted to expand education funding, but was unable to do so since state governments had already committed all of their resources and were unable to give more money for educational activities. During the first fiveyear plan, one of the most significant challenges was a lack of cooperation between the central and state plans. These were debated separately rather than as part of a larger national strategy [7]. As a result, when the Centre proposed development initiatives, the States were frequently unable to fully implement them because their resources had already been allocated to their own unique projects. The insistence that the states find matching money to obtain the central quota exacerbated this lack of coordination. Because state resources were targeted for their own programmes, only the wealthier states received a larger share of central support, while underdeveloped states were unable to fully benefit from the schemes. As a result, the gap between industrialized and developing countries has grown even wider. National well-being necessitates balanced development across the country, with no significant disparities between different regions. In terms of women's education, a higher emphasis was placed on the subject during the years 1955-56, the last year of the First Plan. As a result, the number of different types of institutions for women as well as scholars has increased. Apart from what was being done through state enterprises, a special emphasis was placed on the creation of non-government entities in this field. To avoid repeating the mistakes of the First Plan, state governments were consulted from the beginning of the Second Plan, 1956–1961. As a result, the Central Ministry of Education convened a series of meetings with the Planning Commission and state governments. Finally, in October-November 1954, a conference of Education Secretaries recommended the establishment of three new engineering colleges in states that lacked engineering colleges altogether, the establishment of three more higher technological institutions, one each in the West, South, and North, the conversion of existing degree courses into three-year degree courses, and the improvement of university teacher salary scales in accordance with the recommendations. Interestingly, there was a suggestion at this time to exempt the scheduled caste and scheduled tribes from paying tuition fees at all levels of school, but such proposals were never considered in relation to women students, especially those from backward areas. The Planning Commission accepted the Ministry of Education's physical aims in the Plan Frame it published, but when it came to implementation, the Commission proposed that the programme be changed and the cost considerably reduced due to a funding shortage. At the outset of the Second Five-Year Plan, the state governments were confronted with the difficulties of reorganisation of territories and unification of their administrations. As a result, the education required to carry out the plan effectively received little attention. Furthermore, the programme for the construction of educational facilities was drastically reduced, not only due to a lack of cash, but also due to a lack of cement and steel. Despite these problems, the central budget for education expanded dramatically from Rs 2 crores to Rs 30 crores in a decade. The programme for the growth of technical education was strengthened even more in the second five-year plan. There has been a significant expansion in both quality and quantity in the sector of technical education. In comparison to the first five-year plan's overall provision of Rs. 23 crores, the second plan supplied a sum of about 50 crores, which was nearly double the amount awarded in the previous plan. In 1947, there were just five colleges offering post-graduate and advanced courses; by 1956, there were 15 such institutes in the country. Three new higher technological institutes, similar to the Kharagpur Institute, new engineering colleges, and polytechnics, were sought to be established in order to increase the annual output of engineering graduates and certificate holders. The Engineering Personnel Committee proposed that more funding be made available for the establishment of 18 engineering colleges and 62 polytechnics. The committee also proposed that existing institutions' training capacity be enhanced by 20% at the bachelor's degree level and by 25% at the diploma level. The necessity for qualified teachers and students in educational institutions was also acknowledged. Steps were also suggested for attracting and retaining teachers and students with the necessary abilities, such as establishing conditions for their retention and expanding the pool of scholarships available to students pursuing technical degrees. While India's development strategy in the 1950s was mainly reliant on planning, the first two five-year plans addressed issues of women's education and attempted to link higher professional

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education with jobs. The Committee on the Education of Women's Report of 1959 provided several recommendations that helped to focus attention on higher professional education in later plans. However, if we consider the discrepancies in curricula between men and women that survived, it is evident that inequities between men and women persisted in the field of education. Apart from the socioeconomic barriers that limit women's access to science, higher education, and professional advancement, the first two five-year plans showed shortcomings in policies and programmes to address the issue. They emphasised the promotion of basic education and the building of a socialist society. The quick spread of women's education cannot be attributed to any coordinated attempts by the state to improve access, but rather to other socio-economic factors that resulted from India's split. The 1974 Report of the Committee on the Status of Women backed up these claims [8].

DURGABAI COMMISSION ON WOMEN'S EDUCATION:

In July 1957, the Planning Commission's Education Panel recommended that a suitable committee be appointed to look into the various aspects of the question of the nature of education for girls at the elementary, secondary, and adult levels and to see if the current system was assisting them in leading a happier and more useful life. The Government of India at the Ministry of Education established the National Committee on Women's Education in accordance with Government Resolution No. F.34-12/57-B.5 on May 19, 1958. The group, which was chaired by Durgabai Deshmukh, was made up primarily of women, and it was without a doubt the first of its type in India's history. The Chairman and members visited as many states as possible, holding interviews with teachers and parents, educationists, administrators, social workers, and other education stakeholders in order to improve the welfare and education of women in general, and in the state in question in particular. The Chairperson and members were able to gather a significant amount of information as first-hand evidence as a consequence of these long trips, which ultimately aided them in developing the recommendations. A questionnaire with ten sections and 204 questions was created to address the education of girls at the primary and secondary levels, as well as the issues that limit their advancement, such as waste, stagnation, and co-education. Adult and social education, the role of volunteer organisations, and the supply of female teachers were among the questions investigated by the committee. The fundamental right of a woman as an individual was reaffirmed, as was her right to education. The woman's standing as an individual with the same status, dignity, and importance in society as a man was made a criterion in determining the woman's educational needs—a point that had previously gone unnoticed by the committee. This group did not address the subject of higher education for female students, and its conservative mindset was mirrored in the curriculum for female students as well. The members of the committee frequently towed the public's views and opinions, as well as the sentiments and opinions of state governments, heads of training institutes, secondary schools, education officials, and voluntary groups. When it came to primary school, the general consensus was that boys and girls should have the same curriculum. However, in the middle of the process, the country's consensus was not unanimous. Boys' and girls' curricula, according to state governments, secondary schools, training institutions, and educational officials, should be separated [9]. After much deliberation, the group came to the conclusion that a change in the curriculum, syllabi, and even the contents would be necessary at the midpoint. The distinction was justified on the grounds that the nature of tasks and responsibilities for males and females in adulthood differed, and that the majority of girls would not continue their education beyond this point. The Committee's observations on secondary education, on the other hand, suggested an alternative curriculum for girls and boys. The reason for this report of the National Committee on Women's Education (May 1958–Jan.1959), Ministry of Education, Government of India, Publication No. 408, Ministry of Education, Government of India, 1959, New Delhi: Government of India, 1959, p.85, was that girls' education often stopped at the basic level, and that they would have to prepare for domestic duties and obligations that would eventually fall on their shoulders. The Committee, on the other hand, drew attention to the fact that the textbooks and other reading materials utilised by children in school were dominated by a boy's perspective and an urban perspective. There was a blatant disregard for a woman's needs and difficulties. The Committee strongly suggested that this inequity in our educational system be addressed. This vacuum had to be filled, and difficulties with the non-allocation of special funding for the growth of women's education in both the federal and state budgets and plans had to be addressed. Both the Second and Third Five-Year Plans were criticized for widening the gender gap and causing delayed progress in rural areas, according to critics. This was also the first time the Committee advised that women's education be regarded as a separate issue for a few years. It could be considered a forerunner to the Report on the Status of Women in India, which was issued sixteen years later, in 1974. Despite much waste and stagnation at the primary and secondary levels, a number of recommendations were made to

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improve girls' education at these levels. It was also suggested that a National Council and State Councils be established for the education of girls and women. It was also suggested that a special programme for the development of girls' and women's education be implemented for the remainder of the Second Five-Year Plan and into the Third Plan. The Third Plan for Education, which ran from 1961 to 1966, exposed the existing disparities in schooling between boys and girls and men and women at all levels and stages of education, and it was recognised by all responsible entities involved in education. The acceptance of this fact boded well for the future of women's education, as the Central Advisory Board of Education (CABE), the Ministry of Education's supreme policy-making body at the time, proposed special measures to reduce gender inequalities and create equality of opportunity within the community. Surprisingly, policymakers acknowledged that such circumstances discouraged women from pursuing higher education and even acted as a disincentive for nearly two decades after independence among urban women [10]. The aim was to increase the number of female teachers in order to encourage parents to send their daughters to rural and urban schools and institutions. The third plan, however, was not expected to produce major results because the Ministry of Education had not budgeted for it in 1961-62. As a result, the Third Plan focused solely on women's primary and secondary education. On the one hand, it advocated for merit-based scholarships for females pursuing university education, but it also fostered the construction of a few select institutions dedicated specifically to women's education in some situations. During the first three plans, the allocation of public funds for education rose as the planning period continued, with higher education (university education) receiving more cash than primary and secondary education [11].

THE HANSA MEHTA COMMITTEE REPORT 1961:

The Committee on the Differentiation of Curricula for Boys and Girls, 1961 was appointed by the National Council for Women's Education in consultation with the Ministry of Education in 1961 under the Chairmanship of Hansa Mehta to examine the present curricula of school education and to determine the extent to which they could take care of the individual and social needs of women in the prevailing circumstances of the country.Provision of vocational courses at the secondary and higher stages of education was far from adequate. Immediate steps were to be taken to extend this provision to the largest extent possible both for boys and girls.In continuation of the conservative approach of the Durgabai Commission of 1958, the possibilities of employing women on a larger scale on a part-time basis in as many vocations as possible were to be explored, since a large percentage of married women were in a position to undertake employment on a part-time basis only. In the Third Year of the Third Plan period, there was a cut in the Union budget for education by over 25% on account of an emergency during 1963-64 that followed the Indo-China war, no new universities were set up in this period. This was also replicated in the states but the progress of primary and secondary education was not affected in that period [12].

THE NATIONAL POLICY ON EDUCATION (1964-66):

The National Policy on Education (also known as the Kothari Commission Report) called for a comprehensive programme to promote a scientific mindset in education, increase research capacity and quality, and encourage institutional collaboration. It aspired for women's education to be used as a tool for social transformation rather than as a value or right in and of itself. Education: A National Policy, 1968— A primary priority of the Indian government and the states in the post-independence period was to place greater emphasis on education as a critical factor in national prosperity and security [13].

THE FOURTH FIVE YEAR PLAN (1969-1974):

Education was expanded at all levels throughout the Fourth Five-Year Plan. The number of people enrolled in school, particularly university education, increased from 0.74 million to 1.69 million. Engineering and technological universities' degree admittance capacity has also doubled, going from 13,824 to 25,000. To address the growing need at the university level, provisions were developed for science instruction. Postgraduate study and research, as well as scholarships and stipends, were encouraged, but no distinct provisions for women were made [14].

TOWARDS EQUALITY 1974:

The committee argued that for the next few years, women's education should be regarded as a unique topic. It was the first report of its type, and it was a harsh condemnation of India's achievements in the first twenty-five years of independence in ensuring Indian women's constitutional rights to equality, justice, freedom, and dignity. It was a report about women and

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their "status" in India, which accounted for about half of the population. Dr. Phulrenu Guha, the Chairperson, stated that the country has reached its quarter-century mark. Scheduled castes, tribes, and backward classes have all had their conditions and positions reviewed, but women have never had theirs. The plan was to form a commission to investigate all aspects of what had happened to women throughout the years [15].

CONCLUSION:

Thus, it is reasonable to say that post-independence educational strategies at the national level were characterised by an overarching aim to lead India's progress through scientific and technological advancement. Second, it upheld the Constitution's democratic ethos by granting equality to all Indian citizens, regardless of caste, gender, birthplace, or religion [16]. However, it was archaic in that it did not alter the patriarchal society's core framework of inflexible gender roles. It unwittingly continued the colonial practise of limiting the educational choices and career aspirations of the majority of Indian women, even as a small group of them began to carve out a niche for themselves within the patriarchal, competitive society, making the most of the Constitution's democratic provision of the right to equality.

REFERENCES:

- David Arnold, Nehruvian Science and Post-colonial India, Isis, Vol.104, No.2, (June 2013), The University of Chicago Press, http://www.jstor.org/stable/10.1086/670954, Accessed on 24.04.2015 03:32, p.361.
- Ila Patel, The Contemporary Women's Movement and Women's Education in India , Netherlands:Kluwer Academic Publishers,1993,p.160.
- 3. Bipan Chandra ,Mridula Mukherjee, and Aditya Mukherjee, India Since Independence,(NewDelhi: Penguin Books,2008),p.88.
- 4. Humayun Kabir, Education in New India, (Great Britain, George Allen and Unwin Ltd., 1956,)p.5.
- Scientific Man-Power Committee Report (Mimeographed Document), Annexure V, Summary ofFinancial Implications of Development Plans), pp.1,4-5 as in The Report of the UniversityEducation Commission, Vol.1, Simla, Government, Delhi, 1949, p.162.

- 6. Bipan Chandra, Mridula Mukherjee, Aditya Mukherjee India Since Independence, (New DelhiPenguin Books, 2008,)p.454.
- Report of the University of Education Commission December 1948- August 1949, Vol. 1, Simla,Government, Delhi, 1949, p. 241.
- 8. Amrik Singh et al. Science in the Indian Universities, Vol. 30, No.1 (March 1992), Springer, http://www.jstor.org/stable/41820864, Accessed on 24.04.2015, p.53.
- 9. Review of Education in India-1947-1961 National council of Educational Research and Training, Ministry of Education, Government of India, New Delh, p.11.
- Report on Public Instruction in West Bengal-1955-56, West Bengal Government Press, WestBengal,1963, p.50.
- Karuna Chanana-Treading the Hallowed Halls-Women in Higher Education in India, Economicand Political Weekly, Vol.35, No.12,http://www.jstor.org/stable/4409055,Accessed on24.04.2015, p.1012.
- Veena Poonacha-Uncovering the Gender Politics of Science Policies and Education, Economicand Political Weekly, Vol.40, No.3, http://www.jstor.org/stable/4416081, Accessed on 24.04.2015, p.243.
- Report of the National Committee on Women's Education-May 1958-Jan.1959, Ministry ofEducation, Government of India,1959, Publication No. 408. New Delhi , Government of India1959,p.1.
- 14. Bal, Vineeta, Women Scientists in India: Nowhere near the Glass Ceiling,www.jstor.org/stable/4415389, Economic and Political Weekly, 2004, 24.04.2015
- 15. Ahmad, Karuna, Studies of Educated Working Women in India: Trends and Issues, www.jstor.org/stable/4367850, Economic and Political Weekly, 1979,24.04.2015
- Hancock, Mary, Home Science and the Nationalization of Domesticity inColonial India, www.jstor.org/stable/313194, Cambridge University Press,2001,27.11.2014