CHAPTER 4

Policies and Demand for Higher Education in West Bengal between 1961 and 1974

Political exigencies of bringing India at par with the advanced nations of the world by promoting her science and technology had propelled higher education in the sciences, technical and medical education during the first two five year plans after independence. But a different set of political priorities put higher education, particularly university education in the back seat in the third and fourth five year plans that covered the period between 1961 and 1974. The Indo-China war of 1961 for instance led to a curtailment of expenditure in higher education with the result that no new universities could be set up during the Third Five Year Plan period. The thrust on scientific research and technical education continued, however, with the result that compared to the availability of engineering jobs, there was an increase in the number of engineering personnel. Consequently unemployment among the engineers loomed large, there was an exodus of engineers to foreign countries for lucrative jobs and the government was aware of that.¹

4.1 Policies Undertaken by the Centre for Promotion of Women’s Education

A proposal had been made to the Prime Minister J.L. Nehru for providing adequate scholarships to boys and girls of merit more particularly those studying science and technology. The scheme had been included in the Third Five Year Plan and the Prime Minister hoped that with the financial aid of the Centre, the State governments would be able to carry out the scheme.² At the preparatory stage of the Third Plan, all responsible bodies highlighted the existing disparity between the education of boys and girls and men and women at all levels and stages of education.³ All of them recommended that the Government of India would sponsor special measures to reduce this gap and thereby create preconditions for equality of opportunity within the community. This plea was revived in August of the same year by the National Council for Women’s Education and the Education Panel of the Planning Commission in November and the supreme policy recommending body of the Ministry of Education, the Central Advisory Board of Education (CABE) in January of the same year.⁴

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² The Statesman, Calcutta, 12 April 1961, p.1

³ The Statesman, Calcutta, 27 March 1961, p.6 (See also the article by Durgabai Deshmukh, Chairman, National Council for Girls’ and Women’s Education entitled ‘Continuing Neglect of Women’s Education in India-Wasted Effort on many Special Schemes’)

⁴ Ibid
A substantial increase in enrolment of girls was envisaged at the middle, secondary and higher stages of education that would not only reduce the disparity but also meet requirements of women personnel. A special programme with a specific allocation was, therefore, projected, which had to be included in the Plan. The peculiar difficulties which women faced on account of socio-economic reasons were also cited and measures were sought to be taken to help women overcome them.\textsuperscript{5}

Among the measures suggested were schemes for increasing the number of women teachers. The logic behind this was that good teachers would be necessary if parents were to be encouraged to send their girls to school. Similarly, good quarters for teachers in rural areas, village allowances and other amenities were also some of the schemes suggested. Other schemes for increasing the enrolment of girls included attendance scholarships, grants of clothing, hostels, free or subsidized transport and sanitary blocks. Besides this, a planned programme for educating public opinion was intended to be taken up in collaboration with the National Council for Women’s Education and State Councils. But no significant results were to be expected in the Third Plan as the Ministry of Education had not made any budget provision for this scheme for 1961-62.\textsuperscript{6}

\textsuperscript{5} The Statesman, Calcutta, 27 March 1961, p.6

\textsuperscript{6} Ibid
The Prime Minister concluded that the growth of a nation did not depend on a privileged class alone, or a few fortunate people who had the advantage of education and specialization, but rather on widespread education; since education was the very basis of progress. Thus he approved steps to provide adequate scholarships to boys and girls on the basis of merit, especially those studying science and technology. This scheme had been included in the Third Five Year Plan and had to be implemented by the State governments with the financial help of the Centre. The success of the Third Plan, the Prime Minister believed, lay in the integrity of engineers. He urged that they should keep themselves up-to-date with the latest technological progress and give their technical advice. This line of thinking was reciprocated by the West Bengal Chief Minister Dr. Bidhan Chandra Ray at the 42nd Annual Convention of the Institution of Engineers.

Referring to a comprehensive review of the progress made by the engineering industry, especially during the decade covered by the two Plans, the Chairman of the Indian Engineering Association, observed that the industry was capable of producing a wide range of precision equipment, machine tools, diesel engines and processing machinery for big mass production units in the textile, paper, sugar and cement industries. The best indication of the enormous progress of

7 The Statesman, Calcutta, April 12, 1961, p.1
8 The Statesman, Calcutta, February 5, 1962, p.1
the engineering industry was that some of the manufacturers were able to provide new industrial projects with the technical know-how and collaboration which had formerly been obtained from abroad. The industry had suffered in 1961 from shortages of raw materials, transport, power and imports for which foreign exchange was needed. Production of precision manufactures needed steel of certain specifications and sizes. But steel of the desired quality was not obtained, when needed most as a result of the Indo-China war that took place at that time. The State government’s failure to implement its schemes and the growing unemployment in the State came to be criticized by the Opposition during the discussion on the State Budget.

As in the earlier periods the University Grants Commission’s grants to the different colleges were continued during this period and serious discussions were held to improve the salary scales of teachers. It was increasingly felt that the quality of education was dependent on the quality of teachers. Consequently efforts were made in the coming years towards improving substantially the conditions of work and service of teachers. It was important, the Commission felt, to attract and retain in the academic profession, men of outstanding ability, competency and dedication. Special consideration for the provision of staff

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9 The Statesman, Calcutta, March 31, 1962, p.9
10 The Statesman, Calcutta, March 31st, 1962, p.9
12 The Statesman, Calcutta, Sept. 6, 1961, p.8
quarter was also deliberated by the Commission.\textsuperscript{13} The opposition party, however, continued to criticize the ruling party’s neglect of education in the Third Plan period and expressed their deep dissatisfaction over the fact that adequate provision had not been made in this regard.\textsuperscript{14} They observed that the unholy presence of politicians in the existing educational system hindered the progress of education in West Bengal. This point was noted by no less a dignitary as the Rector of Jadavpur University, Dr. Triguna Sen.\textsuperscript{15} The absence of coordination between the different stages of education, primary, secondary and university continued to plague the educational set-up according to Dr. Sen.\textsuperscript{16}

One of the agendas of the University Grants Commission was to devise steps so as to raise the standard of university education. On the one hand, it attempted to provide cheap but standard text books to university students, on the other hand, it proposed to select a few of the Indian universities to introduce the practice of restricted admissions.\textsuperscript{17} While it was realized by educational experts that the tremendous increase in the number of students in universities would inevitably have some effect on the standard of education, it proposed to keep at

\textsuperscript{13} Minutes of the Syndicate, University of Calcutta, PT.III, No.20, 11th July, 1964, p.102

\textsuperscript{14} The Statesman, Calcutta, October 9, 1961, p.7

\textsuperscript{15} Ibid.

\textsuperscript{16} Ibid.

\textsuperscript{17} The Statesman, Calcutta, Nov.4, 1961, p.9
least post-graduate teaching in the universities at a high level. In view of the country’s developing economy, high priority was given to raising the level of education in science and technology. A fundamental task in the entire programme of university education, it was understood by the U.G.C. was to promote first rate schools for Post-Graduate Studies and research in the Universities. Further it was also recommended that the universities would have to avail the facilities provided by the National Laboratories and other research institutions and the services of outstanding scientists and scholars. It was contemplated that through this system, both the industries and the government would be benefitted. The need was also felt to identify gifted students and provide them with reasonable financial and other assistance so that they could devote themselves wholeheartedly to their work. In view of these recommendations, K.L. Joshi, of the Planning Group, who had already started preparing a draft, was requested to draw up a coherent policy and a plan for development of University education.

Promotion of research too, was not lost sight of by the policy makers of the West Bengal government. This was indicated by the Chief Minister in his convocation address at the Jadavpur University in 1961. He referred to the planned development in West Bengal and the steady increase in the allocation of funds

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18 The Statesman, Calcutta, Nov.4,1961,p.9
19 Minutes of the Syndicate, University of Calcutta, Part III, No.20, The 11 July, 1964,p.102
20 Ibid
for this. He felt that the country could not depend on the import of equipment and skill for the execution of its plans. They had to be created in the country. For this, promotion of research was essential.\textsuperscript{21}

The government was also aware of the existing imbalance between boys’ and girls’ education in India. At the inauguration of the seventh meeting of the National Council for Women’s Education, the Union Education Minister, Mr. M.C. Chagla, addressed the issue expressing his hope to remove the imbalance by the end of the Fourth Plan. He was of the opinion that no society could make any real progress so long as its womenfolk lagged behind men in education.\textsuperscript{22}

The Central policy at this time veered to keep within the Central sector as many schemes as possible for women in the field of such education. The Union government endeavoured to remove the hurdles with regard to women’s education in consonance with the National Council for Women’s Education and the State governments. The problem of shortage of teachers could be met by persuading educated women with plenty of leisure to take to teaching on at least a part-time basis.

That there was an increasing demand for technical training among women was a new trend in women’s education at that time. This found expression in several of the leading newspaper columns that focused on the raising of the marriageable

\textsuperscript{21} The Statesman, Calcutta, December 25, 1961, p.1

\textsuperscript{22} The Statesman, Calcutta, February 16\textsuperscript{th}, 1965, p.5
age among women as an important factor behind the increasing demand for the setting up of vocational colleges for girls and home science Colleges in particular. Home science seemed to have been one of those subjects that was entirely dependent on the mercy of changes in educational trends. Fifteen years ago it was a subject of ridicule so much so that the University Commission of 1948 had to plead that ‘through educational counseling and by example the prevailing prejudice against the study of home economics and home management should be overcome.’ It became popular in the 1950s but it seemed that it was on the verge of another period of decline.²³

The changing mentality among girl students was reflected in the demand for technical training of post-high school standard. This was interpreted in one of the leading newspapers of the times as one of those sudden and startling developments in present-day women’s education. Girls wanted to be welders, turners, machinists, sanitary inspectors, civil engineers, draftsmen. Women’s polytechnics were becoming popular all over India, one being set up at Calcutta itself in 1964. It had as its Principal India’s and Bengal’s first woman mechanical engineer Ila Majumdar. The institution catered to the educational aspirations of the middle and lower middle class Bengali women who had access to jobs after completion of their course.²⁴ The demand for technical education among the girls of this generation was attributed to the post-world war II period. They

²³ The Statesman, Calcutta, October 25, 1962, p. 6

²⁴ Ibid
demanded training in subjects like radio engineering and pharmacology and asked for new courses like architectural design, dress making and interior decoration, - the latter three were considered to be the logical professions of the future years.25 This was also the opinion of the first Principal of Calcutta’s first Polytechnic for Women, Ila Majumdar, who attested the fact that since a diploma from a polytechnic gave the women a scope of being employed and as the cost of this education was less expensive than in an engineering degree college, there was a huge rush to join such an institute.26

The scheme of polytechnic was so promising that a further composite scheme embracing three stages of education had already been drawn up by the Ministry of Education. This was meant to cover the period from the age of eleven years to the post-high school period. Each polytechnic institute was to accommodate 200 to 250 students. Voluntary organizations also offered to start private polytechnics for which the government had promised 75% financial support. Perhaps this would provide the answer or at least one of the answers to the demand for diversification of courses after secondary education, at least as far as girls were concerned.27

On account of the Indo-China War of 1962, provisions for education in the Central sphere during 1963-64, (that is to say, the third year of the Third Plan)

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25 The Statesman, Calcutta, October 25, 1962, p.6
26 Interview of Ila Majumdar by the researcher dtd. 29.04.2016, Calcutta
27 Ibid
underwent a cut of over 25%, resulting in a saving of Rs. two and a half crores. This meant that the establishment of new universities had been ruled out during this period.\textsuperscript{28} The Third Plan provision under education also saw curtailment in the respect of States. The Union Education Ministry directed the states to readjust their plans in such a way that the progress of universal education at the primary stage was neither hampered nor the provision for greater facilities at the secondary stage upset.\textsuperscript{29}

According to official sources, although the proposed pruning of the provision for education would not affect key programmes, it was apprehended that the existing tempo of expansion might be slackened. The emergency that followed the Indo-China war of 1962 seemed to have produced certain ‘healthy trends’ in as much as emphasis was being shifted to technical and vocational education and the study of science.\textsuperscript{30}

\textbf{4.2 Policies Adopted At the State Level towards Women’s Education}

The demands of higher education were not ignored at the State level either. At the Assembly proceedings, the State Education minister of the time, Rai Harendra Nath Chaudhuri admitted that the demand for higher education was so much on the increase that the facilities which could be offered by the colleges

\textsuperscript{28} The Statesman, Calcutta, 24 December, 1962, p.1

\textsuperscript{29} Ibid

\textsuperscript{30} Ibid
and the Calcutta University were proving too inadequate to cope with the growing numbers particularly in respect of post-graduate classes.\textsuperscript{31}

With a view to ensuring that greater facilities could be made available to the ever-growing student population in West Bengal and to prevent overcrowding within the jurisdiction of the Calcutta University, legislation was undertaken to establish a new teaching and affiliating University in the northern part of West Bengal whose jurisdiction would extend over the districts of Darjeeling, Jalpaiguri, Cooch Behar, Malda and West Bengal.\textsuperscript{32} The establishment of the Jalpaiguri Engineering College in the State’s Third Plan had been approved by the Planning Commission. The college sponsored by the Government of West Bengal, that started functioning in 1961 provided five year integrated degree courses in Civil, Mechanical and Electrical Engineering. It was affiliated to the North Bengal University. An ad hoc grant of Rs. 5 lakhs was made by the West Bengal government to start the college. A further grant of Rs. 10 lakhs had also been sanctioned.\textsuperscript{33}

Apart from the usual Humanities and Science subjects, the proposed University was expected to provide facilities for teaching of special subjects and for professional education like engineering and medicine. This University would serve in particular the needs of the area within the jurisdiction of the University

\textsuperscript{31} Proceedings of the West Bengal Legislative Assembly 30\textsuperscript{th} session, 1961, p.193

\textsuperscript{32} Ibid

\textsuperscript{33} The Statesman, Calcutta, July 26, 1962, p.8
i.e. the five northern districts of North Bengal. These attempts, notwithstanding, low salaries failed to attract good professors towards University teaching at the post-graduate level.

In consonance with the Third Plan’s thrust on technological progress and economic development, Padmaja Naidu, the then Chief Minister of West Bengal admitted that her government too was conscious that education was the most important factor in achieving progress. She also laid stress on the development of the human being and human personality and laid emphasis on the fact that investment in man was more important than material investment and argued that the programmes for educational advancement were the basis of the efforts to develop the natural and human resources of the country. Moreover it was believed that educational institutions if properly guided could play a role in fostering a sense of national unity and social cohesion.34

Thus in order to raise the standard of education in the State, the government under the Chief Ministership of Shri P. C. Sen, intended to appoint a high-powered committee to suggest measures to raise the standard of education in the State.35 The expenditure on education too was increased in the Third Plan period. Already a sum of Rs.22 crores had been provided in the second plan towards educational development. This target was far exceeded and the expenditure was over Rs. 30 crores. So during the Third Plan an even larger

34 Proceedings of the West Bengal Legislative Assembly, 31st session, March 1962, p. 11
amount of Rs. 36 crores was provided for the expansion of educational facilities.\textsuperscript{36}

**4.3 Affiliation in science subjects particularly for Girls’ Colleges and grant of funds at the under-graduate level**

The State government maintained that there was an impressive growth in education in West Bengal. The number of primary and secondary schools and of colleges in the State had more than doubled since the attainment of independence.\textsuperscript{37} In the Third Plan period the North Bengal University and the Rabindra Bharati University had become functional. Two new engineering colleges had been started in the Third Plan period at Jalpaiguri. Another one was planned to be set up at Dakhineswar. A large number of polytechnics were also sought to be set up.\textsuperscript{38}

Simultaneously large amounts were disbursed for the development of the Jadavpur University. Provision of stipends to draw good students to science and arts courses was one of the main features of the Jadavpur University’s 7.4 crore draft Fourth Plan which had been sent to the centre.\textsuperscript{39} The stipends for science students were indirectly expected to have a sobering influence on good students who joined engineering courses without any special aptitude for the profession.\textsuperscript{40}

\textsuperscript{36} Proceedings of the West Bengal Legislative Assembly, 31st session, March 1962, p.11

\textsuperscript{37} Ibid

\textsuperscript{38} Proceedings of the West Bengal Legislative Assembly, 31st session, March 1962, p.12

\textsuperscript{39} The Statesman, Calcutta, 21st May, 1965, p.7

\textsuperscript{40} Ibid
There was also a proposal to increase the number of seats in science classes especially at the post-graduate level.\textsuperscript{41} This was necessary in view of the preference shown by good students in general for engineering studies, irrespective of their special aptitudes. According to University sources, students who went for engineering were at times more suitable in degree and post-graduate science sections rather than in engineering classes.\textsuperscript{42} While the number of aspirants to college education in the country increased annually by over 10\% and was expected to be nearly 650,000 in 1963, the increase in admissions to technical courses, including engineering, agriculture and medicine was 20\% a year. Admissions to science courses increased at the rate of 15\% a year. \textsuperscript{43}

The bulk of the Government’s limited resources would have to be devoted to the expansion of technical and science education. The UGC allocated 15 post-graduate Research Scholarships of the value of Rs. 200 each to the University for that academic year, out of which 9 were for research in Humanities and 6 for Science. \textsuperscript{44} The expansion of education in the general stream was, therefore, to be restricted. The University Grants Commission was also against double shifts in colleges.\textsuperscript{45}

\textsuperscript{41} The Statesman, Calcutta 21 st. May, 1965, p. 7

\textsuperscript{42} Ibid

\textsuperscript{43} The Statesman, Calcutta, 25 May, 1963, p. 7

\textsuperscript{44} Minutes of the Syndicate, University of Calcutta, Part I, No. 1, 1965, p. 87

\textsuperscript{45} Ibid
Thus in continuation of the previous period from 1947 to 1961, the admission of students to degree classes continued to be an acute problem in spite of the opening of few new colleges in and near Calcutta. In 1963 the decision of Surendranath College to discontinue Honours courses in Botany, Zoology, Physiology, Political Science and Philosophy aggravated the admission problem of the students. The three year degree course having been adopted by the Calcutta University on the terms laid down by the U.G.C., the State Government had to accept additional financial burden for the development of the existing 135 colleges and more colleges in the future to meet the situation that had arisen owing to the enforcement of the U.G.C. directive to bring down the enrolment of the big colleges to 1500 or 2000 only. As a result of the U.G.C. decision 13 new colleges were established in and around Calcutta and 5 more colleges were to be set up within and outside the city which were expected to function from the next academic session starting from the year 1963.\textsuperscript{46} In view of the heavy pressure of admission to colleges, the programme of reduction in the roll strength for the year 1962-63 was deferred. The U.G.C. made queries regarding the extent to which the big colleges of Calcutta had implemented the programme of phased reduction in enrolment and also about the implications of suspension of the programme for the existing session.\textsuperscript{47} Accordingly the University explained to the U.G.C. that since new colleges had not been started in sufficient numbers in

\textsuperscript{46} Proceedings of the West Bengal Legislative Assembly, 35\textsuperscript{th} session, 1963,p.817

order to absorb the students left out due to the phased reduction in roll strength, there had been an extraordinary rush for admission in Calcutta colleges. The University authorities also added that if the implementation of the programme was suspended during the existing session then many of the students, who had been refused admission to the colleges, could not be admitted to the colleges.\footnote{Minutes of the Syndicate. University of Calcutta ,Part I, No.7, Feb.19 th.,1963, p.588}

The University, however, further stated that with the gradual elimination of the School Final and Pre-University Examinations, it was expected that the rush for admission in Calcutta colleges would not be so acute during the next session and it would be possible to continue the programme of phased reduction as usual from the subsequent session.\footnote{Ibid}

There was also an attempt to wed higher education and research by the U.G.C. The apex body had been thinking of utilizing the services of Research Fellows who had been awarded Fellowships in Humanities and Science subjects and in engineering and technology by the Commission for teaching and tutorial work, in view of a shortage of well qualified teachers in the Universities and colleges. It was further stated that such association of research fellows in teaching activities would not only strengthen the teaching staff but would also enable the participants to gain some experience of teaching in their respective fields.\footnote{Minutes of the Syndicate. University of Calcutta ,Part I, No.7, Feb.19 th.,1963, p.588}
The University, therefore, suggested that as far as practicable all research fellows approved by the University Grants Commission were to be assigned some kind of work in teaching and tutorial assignments in the University/college to which they were attached. In order to safeguard the interests of the research fellows the University recommended that the teaching load to be assigned to the research fellows should not be such as to impede the progress of their research work. A schedule of 5 to 9 hours teaching, practical or tutorial work was considered to be reasonable.\textsuperscript{51} The matter was referred to the Councils of the University College of Arts, Commerce, Science and Technology.

Among the new colleges that were to be established in connection with the programme of phased reduction of numbers in the big colleges, it was directed that a men’s college for 1000 students would be set up in the north Calcutta at Belghoria, followed by the Rahara college for men and the Dum Dum Women’s college. In southern Calcutta, the New Alipore Women’s College was proposed while at the southeastern part of Calcutta, the Kasba College for both men and women students also featured in the proposed list. The expenditure of each of the colleges towards its development, including acquisition of land, up to a ceiling of Rs. 6 lakhs was to be borne by the University Grants Commission. The

\textsuperscript{51} Minutes of the Syndicate, University of Calcutta No.7, 19 February, 1963, p.22
balance of the expenditure was to be borne by the University, State Government and College Management.\textsuperscript{52}

The government started construction work of the new colleges according to plans and estimates drawn up by the Chief Engineer, Construction Board, in conformity with the regulations of the Calcutta University regarding teaching accommodation. Interestingly the Syndicate of the University of Calcutta requested the U.G.C. to establish a co-educational college at Belghoria instead of the initial proposal to establish a men’s college only.\textsuperscript{53} This was an indication of the continued demand for collegiate education among women of Calcutta and the districts even in the 1960s. A sponsored college was set up in Behala, in the southwestern part of the city and granted affiliation in science subjects like Physics, Chemistry and Mathematics up to the Three Year Degree level. Extension of affiliation was also granted to the Vijaygarh Jyotish Ray College in Physics, Chemistry and Mathematics up to the Pass Course standard only.\textsuperscript{54} This indicated the lack of adequate infrastructure in terms of space, equipment, infrastructure and laboratory facilities to upgrade the colleges to the Honours level in the core science subjects. The Lady Brabourne College applied for extension of affiliation of the college in Physics in the B.Sc. Honours standard of the Three year degree course from the session 1963-64. Subsequently in 1966-

\textsuperscript{52} Minutes of the Syndicate, University of Calcutta No.42, 16 Nov., 1962, p.84, letter from the U.G.C. to the Registrar, University of Calcutta. Letter no. dt. 29.9.1962

\textsuperscript{53} Minutes of the Syndicate, University of Calcutta Part IV, No.42, 16 Nov., 1962, p. 125

\textsuperscript{54} Minutes of the Syndicate, University of Calcutta, Part IV, No.44, lst Dec.1962,p.303
67, the D.P.I requested that the Bethune College, Calcutta, should be granted extension of affiliation in Physics up to the B.Sc. Honours standard from the session 1966-67. It was stated that a new Science Block had to be constructed at the Bethune College and grants provided for furniture and fittings in the new Physics Laboratory of the Bethune College. Subject to the fulfillment of certain conditions as deemed fit by the University Inspector of colleges and Prof. S.R. Khastagir the college was to be granted extension of affiliation in Physics up to the B.Sc. Honours standard from the session 1963-64. The Gurudas College was granted extension of affiliation in Chemistry up to the B.Sc. Honours standard during this period. An inspection report of the Dum Dum Motijheel College was also presented in the syndicate meeting for affiliation of the college in Physics to the B.Sc. Honours standard from the session 1964-65. The Inspectors stated that the existing Physics laboratory was adequate for the Pre-University Science and B.Sc. Pass classes. There was no additional space for setting up the Physics Honours Laboratories. As the setting up of the laboratory would require some time, the management of the college was advised not to press for the sanction of extension of affiliation in that year.

55 Minutes of the Syndicate, University of Calcutta, Part I, No.7, Feb.18th, 1966, p.581
56 Minutes of the Syndicate, University of Calcutta, Part.I, No.25, 18 June, 1963,p.1005
57 Minutes of the Syndicate, University of Calcutta,Part III, No.27, 5 July, 1963,p.5
A girls’ College, St. John’s Diocesan Girls’ College expressed the need to introduce science courses at both Pass and Honours standards from the session 1964-65 in their College. The College authorities reiterated that there was a strong demand for the core science subjects such as Physics, Chemistry and Mathematics among the students that had to be addressed.\textsuperscript{60} The Anandaram Jaipuria College applied for extension of affiliation in Physics and Chemistry up to the three year B.Sc. Honours level.\textsuperscript{61} The Dinabandhu Andrews College, Baishnabghata, was granted extension of affiliation in Chemistry to the B.Sc. Honours standard with effect from the session 1965-66, with permission to present candidates in Chemistry from the B.Sc. Pt. I Honours Examination in 1967, and the B.Sc. Pt.II Honours examination in 1968. \textsuperscript{62} The continued demand for science education was reflected in the demand for extension of affiliation in science subjects such as Physics, Chemistry, Mathematics, Zoology and Botany in the Pass standard from the session 1963-64.\textsuperscript{63}

The Sri Shikshayatan College was granted extension of affiliation in Physics, Chemistry and Mathematics but only up to the B.Sc. Pass standard.\textsuperscript{64} It was around this time that the Victoria Institution, a girls’ college in Calcutta started

\textsuperscript{60} Minutes of the Syndicate, University of Calcutta Part IV, No.44, 7 Dec.1963, p.328
\textsuperscript{61} Minutes of the Syndicate, University of Calcutta Part I, No.3, The 13 Jan., 1962, p.413,
\textsuperscript{62} Minutes of the Syndicate, University of Calcutta Part III, No. 26,1964, p.453
\textsuperscript{63} Minutes of the Syndicate, University of Calcutta, Part IV, No.44, 1962, p.303
\textsuperscript{64} Minutes of the Syndicate, University of Calcutta, Part I, No.6, March 7\textsuperscript{TH}, 1964, p.552
asking permission to continue the morning session up to the session 1966-67 in view of the continuing demand for collegiate education among the girl students at this time.\textsuperscript{65} As the college was sponsored by the Government of West Bengal and granted permission to open the Morning Section by the Syndicate in July 1961 it was permitted to continue the same up to the session 1966-67.\textsuperscript{66} The Bethune College, Calcutta was granted extension of affiliation in Physics to the B.Sc. Honours standard from the session 1966-67.\textsuperscript{67} This was followed by a surge of applications from the Principals of various girls colleges in Calcutta such as the Sarojini Naidu College for Women, Dum Dum, and Lady Brabourne College asking for affiliation in the Chemistry ‘A’ course from the session 1966-67, apart from other coeducational institutions such as the Scottish Church College and the Presidency College also - indicating the fact that there was a growing awareness to promote science education among students in general and also a keen demand for these subjects among the girl students as well.\textsuperscript{68}

This was also the time when there was an ongoing debate over the issue of opening a separate department of Chemical Engineering parallel to the three

\textsuperscript{65} Minutes of the Syndicate, University of Calcutta, Part III, No.33, 18 Sept., 1964, p.968

\textsuperscript{66} Ibid.

\textsuperscript{67} Minutes of the Syndicate, University of Calcutta, Part III, No.26, 6 Aug.,1966, p.234

\textsuperscript{68} Minutes of the Syndicate, University of Calcutta, 1966,Pt III ,p.368
year degree course in Chemical Technology. The issue was finally resolved and in 1966 the department of Chemical Engineering was established 69

That foreign collaboration in scientific disciplines was not lost sight of particularly when it came to the promotion of science and technology in India, can be traced to the decision of the Council of Scientific and Industrial Research. On the insistence of the Council of Scientific and Industrial Research the University of Calcutta decided to sponsor Dr. Mrs. Ashima Chatterjee, Khaira Professor of Chemistry to be inducted into a team of scientists who would visit scientific research institutions under the Union of the Soviet Socialist Republics Academy of Sciences under Indo-Soviet Cultural Exchange Programme.70

Foreign collaboration was also forthcoming in the projects that sought to promote science and technology in India. The UNESCO had drawn up a plan of operation for the Technical Assistance Programme in India. This Plan had been approved by the UNESCO and the Governments of India and U.S.S.R. Under this programme, assistance was provided by way of Scientific Equipment, experts from USSR and training for Fellows (teachers).71 Exchange of faculty between two universities was also promoted. For example mention may be made of The Leverhulme Trust Fund, Black Friars London which assisted higher education in India taking upon itself the responsibility to appoint eminent professors to lecture

69 Minutes of the Syndicate, University of Calcutta, Part III, 1966, p.306
71 Minutes of the Syndicate, University of Calcutta, Part IV, No.43, 30 Nov., 1963 p.716
and support research at two selected Indian universities. They were to be known as Royal Society Visiting Professors. Emphasis was placed on the scientific fields (Mathematics, Physics, Chemistry, and Biology) because it was felt that therein lay the greatest need and the most fruitful opportunity for help.  

In 1965 there was yet another attempt by the U.G.C. to send to the U.S.A. about 20 Indian University college teachers in Science, Engineering and Technology for purposes of advanced training in a University in the U.S.A. and requesting the University to suggest the names of suitable candidates in the fields of science and technology. This was made possible by dint of an agreement between the U.S. Agency for International Development and the U.G.C.

The twin questions of granting assistance to promising young Indian scientists working abroad and finding suitable jobs in India had been under consideration of the central government for quite some time. The cabinet through several important meetings had taken significant resolutions on that matter. One such decision was to authorize the CSIR that operated as the controlling authority of the Scientists’ Pool to shoulder the task of providing immediate and temporary appointments to well qualified Indian Scientists and Technologists, who had returned from abroad. The ceiling of the strength of the Scientists’ Pool was abolished and no competent person was kept out of the Pool. It was decided that all possible steps would be taken to hasten the absorption of scientists in

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73 Minutes of the Syndicate, University of Calcutta, Part II, No.13, April 10th., 1965, p.95
regular appointments in research and other institutions as well as in industry in the public and private sector; and that such institutions would be authorized to create a certain number of supernumerary posts for the appointments thus made.\textsuperscript{74}

In pursuance of this decision, it was further stated that all Pool Officers who would complete one year’s service or more would be considered for appointment to supernumerary posts. The grades and the initial pay were to be decided in the light of the candidate’s qualification and performance. The Government of India attached great importance to the absorption of well qualified Indian scientists in suitable appointments as early as possible. Out of Six Pool Officers working under the University of Calcutta, two were women officers, namely, Mrs. D.Ghosh and Mrs. R.Basu. They were appointed to permanent posts.\textsuperscript{75}

But almost during the same period, women students were conspicuous by their absence among the recipients of UGC Research Scholarships awards in Science in 1964-65 in the core sciences of Physics, Mathematics and Chemistry. In disciplines such as Botany, Geology, Zoology, and Anthropology however, there were girl students who qualified for the research scholarships.\textsuperscript{76} The reasons explaining their absence in these fields could have been varied. While some may attribute this to the prevailing notion that long hours in the laboratories were

\textsuperscript{74} Minutes of the Syndicate, University of Calcutta ,Part II, No.18, 25th., June,1964,p.969

\textsuperscript{75} Minutes of the Syndicate, University of Calcutta ,Part II, No.18, 25th., June,1964, p.970

\textsuperscript{76} Minutes of the Syndicate, University of Calcutta Part IV, No.34, 1Oct.,1964,p.67
considered to be unsuitable for girls and saving money for the daughter’s dowry was more profitable than investing it in a rather expensive domain of research such as the pure sciences; others might argue that even after completing one’s education, pecuniary considerations forced the women to take up careers rather than pursue higher education. Finally, it may be linked to the idea that a girl might also give up her profession after marriage. At any rate this pushed the attrition levels of scientific research among girls even higher, which explains the absence or the low numbers of women scholars in this period.

Several other proposals were directed by the U.G.C.to the Vice-Chancellor of Calcutta University to upgrade higher education. The U.G.C. invited suggestions and proposals for the development of higher education in general and special reference was made on the projects that were to be undertaken during the subsequent Plan. The Chairman further suggested that the University might appoint a small planning group to go into the matter and prepare a Development Plan for the University.77

The Fourth Five-Year Plan (1966-1971) was under way. An Education Panel under the Chairmanship of the Member-in-charge of Education had been set up. A Central Planning Group on Education had been constituted by the Ministry of Education. It was understood that education was vital to all aspects of national development and prosperity of the country. Also, in planning education

development, a long term view of the needs and objectives and the specific projects to be undertaken in a particular plan period was harped upon by the Chairman of U.G.C.\textsuperscript{78}

The proposal to start three new polytechnics including one for women in Calcutta was placed at one of the Assembly proceedings in 1963 by the Minister for Education in West Bengal, the Honourable Rai Harendra Nath Chaudhuri. Emphasis was also laid on science education at the secondary and university levels of education by one of the members of the Assembly, Shri Panchu Gopal Bhaduri who highlighted the Centre’s stand to uphold education as the most important factor in achieving economic development and technological progress.\textsuperscript{79} Lack of provision of funds to improve the laboratory facilities for some colleges like Vidyasagar College, Surenrdranath, City, and Bangabasi College which were facing a deterioration of academic standards was an issue raised on the floor of the house by the opposition party.\textsuperscript{80} By the late 1970s the problem of overcrowding in the Calcutta colleges continued to be a problem as there was a dearth of under-graduate colleges in the mofussils. Science education continued to be in great demand among the students but on account of the inadequate number of seats in the science colleges, the problems of

\textsuperscript{78} Minutes of the Syndicate, University of Calcutta, No.20, 11 July,1964, p.101, letter from the U.G.C. to the Vice Chancellor, Calcutta University, dt, 19 June, 1964,p.101

\textsuperscript{79} Proceedings of the West Bengal Legislative Assembly,1963, p.821

\textsuperscript{80} Proceedings of the West Bengal Legislative Assembly, 50th session, Jan-March 1970, p.193
student admission in the science colleges still persisted. In order to tackle the problem of the science stream in the mofussil colleges during the first three years of the Fourth Five-Year Plan, science subjects had to be introduced both at the Pass and Honours standards. At the same time, it was pointed out that in the absence of sufficient funds, further developmental programmes with regard to college teaching could not be undertaken. Under-utilization of funds by the education department, proposals to reduce expenditure on women’s education were some of the problems afflicting higher education in the state coupled with insufficient funds for college library, reading room, and scientific apparatus in the schools and colleges. In fact on account of the squeezing of funds between 1972 and 73, no developmental plans with regard to the seven universities in the State could be undertaken. For the same reason, during the first three years of the Fourth Five-Year Plan, no special government grants could be made to the colleges. Again due to a fund crunch, there was a curtailment in the allocation of funds to the colleges, though establishment of colleges through local initiative was encouraged.

81 Proceedings of the West Bengal Legislative Assembly, 50th session, Jan-March 1970, p.863
83 Ibid, p.921
4.4 Policies regarding Technical Education between 1961 and 1974

Technical education too received the attention of the Legislative Assembly as a demand was placed for more budget allocation in engineering and technical education. Issues for the promotion of women’s education were also raised. The drawbacks that concerned science education in West Bengal were also addressed. In fact a comparison between the grants recommended for some of the men’s colleges in Calcutta and the women’s colleges towards laboratory and library expenses would point to the fact that in 1964 many the women’s colleges in Calcutta did not receive grants for laboratory barring Gokhale Memorial Girls’ College and Loreto College. On the other hand, apart from Heramba Chandra College and Maharaja Siris Chandra College, which were evening colleges, most men’s colleges were provided with grants for laboratories.\(^{85}\)

The Government admitted that in spite of the great amount of investments towards science education in terms of buildings, laboratory, there still remained a dearth of teachers for the science courses as the salary structure failed to attract them. Many scientists were leaving the country for foreign lands in search of better pay and the prospects of a foreign degree. Those who attempted to get admission in the engineering colleges were disappointed by the number of seats available.\(^{86}\)

The government, however, defended its stand of limited number of seats for engineers on the ground that engineering courses were meant only for the

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\(^{85}\) Minutes of the Syndicate, University of Calcutta, Pt.II,No.14,1965,p.364

\(^{86}\) Proceedings of the West Bengal Assembly, 35\(^{th}\) session, 1963,p.825
deserving meritorious students and was also very expensive and hence not meant for all.\footnote{Rai Harendra Nath Chaudhuri speech in the West Bengal Legislative Assembly, 35\textsuperscript{th} session 1963, p. 864}

The government’s stand was that the universities of Burdwan, Kalyani, North Bengal, Rabindra Bharati had been established and that grants for higher education in the State increased. The education minister maintained that larger provision had been made for the development of technical and engineering education in the forthcoming Budget. The provision for development of engineering colleges and other engineering institutions for Diploma Courses and for the development of the junior technical schools had been more than doubled during the period under review.\footnote{Proceedings of the West Bengal Legislative Assembly, 31\textsuperscript{st} session, 1963, p.458} The number of engineering colleges had increased from 4 to 5 by 1963. North Calcutta Engineering College was the product of the government’s intervention to promote technical education in the State.\footnote{Proceedings of the West Bengal Legislative Assembly, 31\textsuperscript{st} session, 1963, p.458} The lack of provision of funds, it was admitted, restricted the development of technical education in West Bengal. But the actual need for technical institutions in West Bengal was much greater at that time as about 60\% of the heavy industries of India were located in and around Calcutta. Moreover there had been an unprecedented increase in population in West Bengal owing to the influx of refugees. Thus the need for industrialization in the State was more to rehabilitate the uprooted as they had migrated to this part of
Bengal and were expecting job outlets in industries. If this could be ensured, it would enable them to obtain gainful employment. In view of this, the establishment of additional polytechnics and junior technical schools became an immediate necessity. It was also noted that for the first time in 1951 the Calcutta University was given a statutory grant under the Act of 1951 and since then the Government had not been slow to provide the University with sufficient grants for its development purposes but the university had not been able to utilize all the grants allocated by the University Grants Commission.

In the subsequent period, 1964-65, on account of the emergency situation following the Indo-China war, the State government scaled down its demand for funds required for educational purposes from the centre, although the expenditure on education continued to increase in the post independence years.

According to the estimates of the government between 1947 and 1964 there was an appreciable increase in the number of colleges in the State from 50 to 166. Similarly the number of universities had risen from one to seven in the State. Besides that there were University Institutes like the Kharagpur IIT, Statistical Institute of Baranagar which granted degrees and diplomas as per the norms of the University Grants Commission. So far as technical education was concerned,

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90 Proceedings of the West Bengal Legislative Assembly, 31st session, 1963, p.459
91 Proceedings of the West Bengal Legislative Council, 33rd Budget session, 1964,p.539
92 Proceedings of the West Bengal Legislative Assembly, Fortieth session 1965, pp708-709
there was only one technical institution in 1947 but the number of engineering colleges in the State by 1964 had gone up to five. Several under-graduate courses had been created and post-graduate engineering courses had been started in several branches of engineering – namely metallurgy and telecommunication engineering. Chemical engineering, a new stream of engineering was also introduced during the period under review.

Dearth of accommodation restricted the intake to 20 students per year at the beginning, in the Three Year Degree course in Chemical Engineering. But out of a class of 36 students about 10 students every year took up the Advanced Course in Chemical Engineering in order to pursue a M.Tech. Degree. It was therefore suggested that the total intake in the Department could be increased from 36 to 46 without causing any disruption in the teaching learning schedule. It was also proposed that if out of the 46 students, 26 were allowed to take up the existing course of studies leading to B.Tech and M.Tech. degrees then the remaining 20 could be enrolled for the Three Year Degree course in Chemical Engineering.93

It was expected that this would partly meet the demand for expansion of learning and training facilities in Chemical Engineering with the least interference of the existing course of studies in the Department. On the other hand, it was felt that as the existing courses had been formulated on similar lines with the

93 Minutes of the Syndicate, University of Calcutta, Part IV, No. 47, 21 Dec, 1962, p.814
courses of studies leading to B. Tech and M. Tech degrees in Applied Physics and Radio -Physics and Electronics, it was expected that the Ministry would be able to provide funds to meet the necessary expenditure for that increased intake.\textsuperscript{94}

The Ministry of Science, Research and Cultural Affairs, Government of India, intimated the U.G.C. that as a measure of expansion of training facilities in Chemical Engineering in order to meet the large anticipated demand of chemical engineers during the 3\textsuperscript{rd}, 4\textsuperscript{th} and 5\textsuperscript{th} Five Year Plan periods, the All-India Council for Technical Education had recommended that the M.Sc.(Tech) course in Applied Chemistry of Calcutta University might be re-organized into a Three Year Degree course in Chemical Engineering for graduates in Physics, Chemistry and Mathematics with an annual intake of 60 students. The Ministry of Science, Research and Cultural Affairs, also asked for the Commission’s views on the matter in order to ascertain the facilities that would be forthcoming for such reorganization.\textsuperscript{95} This was the State government’s justification of their contribution to the development of scientific and technical education in West Bengal during the first two decades of India’s independence.\textsuperscript{96} The Opposition criticized the absence of free accommodation for the female teachers.

That the ruling party was not giving enough grants to promote education specially science education was also among the other accusations by the

\textsuperscript{94} Minutes of the Syndicate, University of Calcutta,Part IV, No. 47, 21 Dec, 1962, p.817

\textsuperscript{95} Minutes of the Syndicate, University of Calcutta,Part IV, No.47, 21 Dec.,1962,p.815

\textsuperscript{96} Proceedings if the West Bengal Legislative Assembly, Fortieth session, 1965,p.712
members of the Opposition.\textsuperscript{97} There were also proposals to spread and promote education for women and in this regard funds were demanded from the government. There was also a demand to provide for free education for girls up to the secondary level.\textsuperscript{98} There were also proposals to begin separate classes for women post-graduate students at the University, Lady Brabourne College or Bethune College.

Morning shifts for women post-graduate students was also suggested. The argument was that most of the guardians, in spite of their reservations for co-education, had to send their daughters to the co-educational post-graduate classes as there was no alternative left at that time. Suggestions for separate arrangements for holding science classes for girl students were also made. An application was also made at this time by the Principal of Narasingha Dutt College seeking permission to open P.U. and First Year Degree Course in Science for girls in the Morning Shift from the beginning of the session 1964-65.\textsuperscript{99} Interestingly, the Calcutta University Syndicate, however, considered a communication forwarded by the DPI which asked for the permission to start a morning shift for girl students from 1962-63 in Arts subjects by College, and the University Inspector of Colleges along with Shri S.P. Mukherjee were accordingly

\textsuperscript{97} Proceedings of the West Bengal Legislative Assembly, Forty ninth session, 1969, p.323
\textsuperscript{98} Ibid, p.330
\textsuperscript{99} Minutes of the Syndicate, University of Calcutta, Part IV, No. 43, The 30 Nov., 1963, p.249
requested to inspect the college for that purpose. On the basis of an inspection report, the Syndicate granted permission to open a morning shift for girl students only from 1963-64 in the following subjects, Physics, Chemistry, Mathematics, Botany Zoology at the Pass level and Honours in Chemistry and Mathematics at the Honours level. It was around this time that the Principal of Charuchandra College forwarded a resolution of the Governing Body praying for affiliation of a morning section for girl students as an adjunct to the Day Department of the college under the same Principal for Pre-University Arts and B.A. (three-year Degree course).

This was an atavistic tendency reminiscent of the colonial, conservative mentality with regard to the education of girls in the core science subjects and in co-educational institutions. It surfaced even in the post-colonial period when already a large number of women were joining the core science courses and entering the professions. The official policy on behalf of the University, as stated by the Vice – Chancellor reflected the same reservations with regard to women’s education in the science subjects and teaching in the co-educational colleges in particular. The proposal for separate universities for girl students was turned down on the grounds that the main constraint on the part of the University was the lack of

100 Minutes of the Syndicate, University of Calcutta, Part IV, No. 43, The 30 Nov., 1963p.250

101 Ibid

102 Minutes of the Syndicate, University of Calcutta, Pt. III, No. 27, July 1963,p.148,Pt 1, No.1, 7 Jan.,1967,p.9
Starting of separate shifts for post-graduate girl students was also denied on the grounds of space constraints. There was little doubt that all this reflected a conservative attitude.

Another factor that prompted morning shifts in girls’ colleges was of course the heavy rush for admission in the colleges. The Victoria Institution had sought for the permission of the University to continue the Morning section up to 1966-67 and this permission had been granted. The Charuchandra College also requested permission to continue the morning shift of the college exclusively for girl students as an adjunct to the Day Department to the P.U. Arts and B.A. Pass standards. This indicated the increasing number of girl students and the demand for higher education, at least collegiate education on the one hand.

It was also evident that during the last two decades, women students were increasingly showing an interest for science subjects than in the Arts. This trend had been brought to light in a study undertaken by the CSIR. In the 1960s, the number of Post-graduate women scientists in the country was estimated to be about 6000. This was about one-tenth of all the Post-graduate scientists taken together.

During the 1940s the proportion of women among fresh post-graduate scientists was about one in thirty, but it had increased to one in eight. It was estimated

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103 Minutes of the Syndicate, University of Calcutta, Pt.II, No.18, 11 May, 1963 ,p.542

104 Minutes of the Syndicate, University of Calcutta, Pt.1,No.1,7 Jan., 1967,p.9
that although the proportion of women receiving Master’s degree in science was lower than in Arts, the former was rapidly increasing.\textsuperscript{105} Thus figures of girl students in the First year science classes in the University College of Science and Technology during the session 1963-64 did not compare favourably with the male students. Statistics reveal that number of female students kept on increasing proportionately, when compared to males over the same period. For example, there were 296 boys and 169 girls during 1963-64. In 1964-65, there were 311 boys and 161 girls, and by the year 1965-66 the number of girls had reached 185 as against 323 boys.\textsuperscript{106} In the First year admission to the science classes, between 1963 and 66, the number of boys varied between 67 and 74. The number of girl students, however, dropped from 39 to 26 at one of the foremost colleges in the city, the Presidency College.\textsuperscript{107} This was also the case with respect to the other institute of technical education, Jadavpur University.

The West Bengal government had conferred the status of University to the College of Engineering and Technology (CET) and the Jadavpur University, set up in 1955 had opened its doors to women in certain fields of engineering.\textsuperscript{108} The following table demonstrates the fact how certain fields of engineering were preferred by the girl students and how other fields were generally avoided. None


\textsuperscript{106} Minutes of the Syndicate, University of Calcutta, No.10, 23 March, No.10, 1966, p.1050

\textsuperscript{107} Ibid, p.1085

\textsuperscript{108} Proceedings of the West Bengal Legislative Assembly, 3\textsuperscript{rd} Feb. ,1956, 14\textsuperscript{th} session, p.379
took to post-graduation in the technical field, whereas in the pure sciences although the number did not compare favourably with the boys, few did take to post-graduation and research with a view to taking up academics later on.

**FACULTY–WISE ENROLMENT OF THE SCIENCE AND ENGINEERING STUDENTS OF THE JADAVPUR UNIVERSITY----1962-63**

**TABLE 1—SOURCE: JADAVPUR UNIVERSITY ANNUAL REPORT, 1ST APRIL 1962 TO 31ST MARCH, 1963, Table 1 & 1(a)**

<table>
<thead>
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<th>SUBJECT</th>
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<td>GIRLS</td>
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</tr>
<tr>
<td>d) Mechanical</td>
<td>604</td>
<td>-----</td>
</tr>
<tr>
<td>e) Telecommunication</td>
<td>180</td>
<td>09</td>
</tr>
</tbody>
</table>

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109 Annual Report of the Jadavpur University, 1962-63, pp.50-51
Even during the mid-1960s, 70% of the women scientists were below thirty years of age. An analysis of the qualifications, employment, activity and salary of about 1900 post-graduate women scientists enrolled in the national register showed that more than half of the women scientists were in biological sciences, a fifth in Chemistry, and a tenth each in Mathematics and Physics. In contrast to this, 16% of men scientists were in the biological sciences, 27% in Chemistry, 17% in Mathematics and 20% in Physics. One in 12 of the women and one in 8 of the men scientists possessed doctorate degrees. Two percent of the Master's degree obtained by women scientists was from abroad.\textsuperscript{110} Although this was the all-India picture, in Bengal the realities were not much different. That there was an unstated preference and suitability of women in the biological sciences as it had been in the colonial era was time and again reiterated in the post independence period as well.

This trend continued even into the 70’s and figures of the Jadavpur University suggest that during the session 1973-74, the number of women pursuing doctoral studies was the maximum in Chemistry, followed by Mathematics and Physics. This was true of the doctoral studies pursued in the University of Calcutta as well during the same time frame.\textsuperscript{111}


\textsuperscript{111} Annual Report of the Jadavpur University,1973-74,p.25
Department wise detailed Statement of enrolment for Doctorate (Ph.D) Degree during the session 1973-74

### TABLE- 2

<table>
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<th>DEPARTMENT</th>
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<td>01</td>
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<tr>
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<td>c. Electrical Engineering</td>
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<td>-</td>
</tr>
<tr>
<td>d. Electronics and Telecommunication Engineering</td>
<td>03</td>
<td>-</td>
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<tr>
<td>e. Mechanical Engineering</td>
<td>03</td>
<td>-</td>
</tr>
<tr>
<td>f. Metallurgical Engineering</td>
<td>01</td>
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</table>

Source: Jadavpur University, Annual Report, 1973-74, p.25 showing department wise detailed statement of enrolment for Doctorate (Ph. D) Degree during the session 1973-74 of the Science and Engineering faculties.

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112 Annual Report of the Jadavpur University, 1973-74, p.25
In so far as the pursuance of the highest degrees in the sciences and engineering were concerned, the core sciences and the more conventional branches of engineering were marked by the absence of women. Certain other branches of engineering however, which suited the girl students, became more and more popular gradually. Thus Pharmacy engineering was one such field in which during the years under review there was at least one woman candidate who pursued doctoral studies in the subject.\textsuperscript{113} Besides this, food technology and bio-chemical technology were the other branches that were gradually becoming popular among the girl students.

4.5 Scholarships and D. Phil degrees awarded to women recipients in core science subjects

During the period 1961 to 1974 several female students topped the list of successful candidates in the B.Sc. examinations. Among the noteworthy candidates were Mira Datta, Ashoka Bhattacharya and Kanika Biswas who earned the Mecan Silver Medal, the Basanti Das Gold rimmed silver medal and the Peblar Memorial Silver Medals respectively in the B.Sc. examinations of 1962.\textsuperscript{114} Chinmayi Datta was admitted to the D.Phil Science Degree in Pure Physics.\textsuperscript{115} Bani Chaudhuri was admitted to the D.Phil degree in Pure Chemistry of the

\textsuperscript{113} Annual Report of the Jadavpur University, 1973-74,p.25

\textsuperscript{114} Minutes of the Syndicate, University of Calcutta No.43, Part IV, 1962, pp. 196, 210

\textsuperscript{115} Ibid No.47, 1962, p. 776
University along with Bina Chaudhuri. Ashoka Mukherjee submitted her thesis for the D.Phil Science Degree in Pure Chemistry in 1963. Malabika Bhattacharya, Swati Bandypadhyaya, Jaysila Gupta earned several medals and prizes at the B.Sc. examinations of the University of Calcutta in the same year for topping the merit list. At the Intermediate Science level also girls from the Bethune College like Kabita Mitra and Latika Kunu were very successful and some of them went on to receive prestigious awards like the Pratibha Chaudhuri Scholarship and Nawab Abdul Latif and Father Lafont Science scholarships. This trend vindicated the fact that intellectually girls were not inferior to boys as far as higher studies in the core science subjects was concerned but as far as pursuing a profession was concerned, as in elsewhere in India and other countries of the world, the number of women was not as encouraging as it should have been. Thus in the post-graduate examination of the University of Calcutta, Manjuri De earned the Hemchandra Gossain Gold Medal and Prize, the Jogmaya Devi Gold Medal and Matilal Mallik Gold Medal in 1962. Kshama Mukherjee was admitted to the D.Phil Science degree in Pure Mathematics in 1964 and was already serving as a Lecturer in Howrah Girls’ College at that

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116 Minutes of the Syndicate, University of Calcutta No.44, p.283
117 Minutes of the Syndicate, University of Calcutta, No. 20, 1963, p.799
118 Minutes of the Syndicate, University of Calcutta, No.43, 1963, p.276
119 Minutes of the Syndicate, University of Calcutta, No.47, 1963, No.47, p.601
120 Minutes of the Syndicate, University of Calcutta No. 14, 1963, p.168
121 Minutes of the Syndicate, University of Calcutta No. 14, p.178
time.\textsuperscript{122} Bandana Gupta submitted thesis for the D. Phil Science degree in Mathematics.\textsuperscript{123} Ila Mukherjee, Gita Pyne, Parul Chakraborti, Sila Chaudhuri were among the others who were admitted to the D.Phil Science degrees in Pure Chemistry at this time. \textsuperscript{124} Sabita Sengupta and Dipali Bhattacharya were among the others who submitted their thesis in Pure Chemistry at this time. \textsuperscript{125} Anjali Devi was appointed Palit Research Scholar in Chemistry at this time and her progress was said to be satisfactory.\textsuperscript{126} Usha Sarkar was appointed a Research Scholar under the Ghosh Professor of Pure Chemistry at this time.\textsuperscript{127} Sila Niyogi from Jogomaya Devi College was awarded the Gold Medal at the University College of Science for topping the M.Sc. examination held in 1963.\textsuperscript{128} Jubilee Post-Graduate Scholarship was awarded to Swati Bandopadhayay in Pure Mathematics on the results of the B.Sc. examination of 1963.\textsuperscript{129} She along with Malabika Bhattacharya of Pure Chemistry and Papia Sengupta of Pure Physics were exempted from payment of tuition fees for the period June 1964-May 1965 for obtaining First class Honours at the B.Sc. examination of the University of

\textsuperscript{122} Minutes of the Syndicate, University of Calcutta, Pt IV No.4, Feb 22\textsuperscript{nd}, 1964, p.275

\textsuperscript{123} Minutes of the Syndicate, University of Calcutta ,Part IV, No.35,.Nov.21\textsuperscript{st},1964,p.332

\textsuperscript{124} Ibid,p.301

\textsuperscript{125} Minutes of the Syndicate, University of Calcutta , Part II, April 18\textsuperscript{th}, No. 10, 1964, p.287

\textsuperscript{126} Minutes of the Syndicate, University of Calcutta, Part IV,No.34,Oct.1\textsuperscript{st}, 1964, p.781

\textsuperscript{127} Minutes of the Syndicate, University of Calcutta Part IV, No.34,Oct. 1\textsuperscript{st}, 1964, p.103

\textsuperscript{128} Minutes of the Syndicate, University of Calcutta Part IV, No. 30, Aug. 29\textsuperscript{th}, 1964, p.697

\textsuperscript{129} Ibid, p.694
Among others who were admitted to the D.Phil degree in Chemistry were Sunanda Bardhan, Swadesh Bala, Sujata Ray and Gauri Sengupta. Amala Dhar was admitted to the D.Phil degree in Pure Physics. Asoka Sen, Kumkum Bhattacharya, Maya Chakraborti, Arundhati Nandi were among the others who topped the list in the B.Sc. examination of the University of Calcutta in their respective colleges. The number of female college teachers joining the core science subjects such as Chemistry was quite impressive; and this was well accepted by the society at large. Mrs. R. Basu was found suitable for appointment as a Lecturer in Chemistry. Roma Neogi was appointed Lecturer in Physics in the Viharilal College of Home Science. Besides, Mrs. D. Ghosh in Chemistry, Mrs. P. Datta Ray in Botany and Mrs. Ira Ghosh in Zoology were already serving as Pool Officers under the University of Calcutta for over a year since 1964. Besides meritorious girl students also availed of free studentship in the post-graduate level. Thus, Lila De in Pure Chemistry, Sumita Sarkar, Krishna Bhowmick, Ranjita Ray in Pure Mathematics and Ajanta Ghosh, Gopa Mukherjee in Pure Physics were granted concession in their tuition fees for the period June

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130 Minutes of the Syndicate, University of Calcutta No. 30, 1964, p. 878
132 Minutes of the Syndicate, University of Calcutta, Part 1, No. 9, 1965, p. 965
133 Minutes of the Syndicate, University of Calcutta, Pt. III, No. 40, 1965, p. 325
134 Minutes of the Syndicate, University of Calcutta, Pt. I, No. 11, 1966, p. 1031
135 Minutes of the Syndicate, University of Calcutta, Pt. I, No. 5, 1966, p. 412
136 Ibid p. 1085
1966-May 1967.\textsuperscript{137} Rekha Chatterjee was admitted to the D.Phil Science degree in Pure Mathematics and Jayanti Lahiri submitted her thesis for the D.Phil degree in Pure Chemistry.\textsuperscript{138} Others who were admitted to the D.Phil Committee in Pure Chemistry were Sandhyarani Sur, Aruna Bhattacharya, Chhabi Datta, Rama Chattopadhyaya, Ranu Mitra, Shelly Chandra.\textsuperscript{139} Female candidates were also chosen for the prestigious Premchand Roychand Scholarship in Science.\textsuperscript{140} Amongst them was Bani Talapatra who had already completed her D.Sc. in Pure Chemistry and had joined the University Science College by 1966.\textsuperscript{141} Another prestigious scholarship, the Sir Rashbehari Ghosh Travelling Fellowship in Mathematics was awarded to Bandana Ray and Annapurna Sarkar of Pure Mathematics who was working in England at that time under Professor W.B. Griffiths.\textsuperscript{142}

\textsuperscript{137} Minutes of Syndicate, University of Calcutta, Part I, No.1, 1967, p.61

\textsuperscript{138} Minutes of Syndicate, University of Calcutta Part I, No.7, 1967, p. 473

\textsuperscript{139} Minutes of Syndicate, University of Calcutta Part II, No.8, 1967, p.191

\textsuperscript{140} Minutes of Syndicate, University of Calcutta Part II No.9, 1967, p.98

\textsuperscript{141} Interview of Dr.Bani Talapatra, by the researcher dated 05.03.2016, Calcutta

\textsuperscript{142} Minutes of the Syndicate, University of Calcutta, Pt II, No.14 1967, p.558
4.6 Government policies and women in medical education and profession

In view of the national emergency that followed the Indo-China war of 1961 the need for a large number of doctors, was keenly felt. Accordingly, the Central government was eager to increase the number of doctors without adversely affecting the standard of education. The Union Health Minister, Dr. Sushila Nayar, pointed out that the standard of medical graduates might have deteriorated because of wrong selection of students for admission to medical institutions and the rapid expansion of medical education, necessitating employment of teachers with inadequate experience and skill. Medical education in India she urged had to be self-sufficient.143

All state governments were, therefore, advised to step up the admission intake to a maximum of 200 from the session 1963-64 in medical colleges wherever necessary without lowering the standard of medical education. It was felt, that this measure would ensure an overall increase of 3,000 admissions every year. The Centre would provide financial assistance to the states in order to increase the admission capacity in the medical colleges.144

Space requirements in medical colleges and hospitals, for teaching were surveyed by the West Bengal’s Health Department. The preliminary conclusion

143 The Statesman Calcutta, January 18, 1962,p.8
144 The Statesman, Calcutta, March 22nd, 1963,p.8
was that all these colleges and hospitals needed extension.\textsuperscript{145} There was a plan to set up a Medical College at Siliguri during the Fourth Five Year Plan. \textsuperscript{146} During the Fourth Five Year Plan, it was proposed to start 30 more medical colleges with 100 admissions each. It was estimated that students admitted during the Fourth Five Year Plan would be available for service during the plan period. The expected admission capacity at the end of the Third Plan was 11,000 and the expected increase in admission by the end of the Fourth Plan was 20,000; but this figure could only be reached if all the medical colleges, the old and the new, admitted 200 students every year.\textsuperscript{147}

In view of this, the Health Survey and Planning Committee recommended that there should be at least one medical college for 5 million people, in order to reach a target of one doctor to 3,000 populations by 1976. The state government also vouched to address the disparity in the distribution of doctors in the medical colleges.\textsuperscript{148} The Prime Minister Pandit Nehru appealed to the people to contribute to the Bidhan Chandra Roy Memorial Fund that was instituted by the Medical Council of India to reward medical students for their outstanding merit in medical science and other fields.\textsuperscript{149}

\textsuperscript{145} The Statesman, Calcutta, August.28,1963,p.1
\textsuperscript{146} Proceedings of the West Bengal Legislative Assembly,39\textsuperscript{th} session, No.1,1964,p.408
\textsuperscript{147} Minutes of the Syndicate, University of Calcutta, No. IV, Pt.I, 1964 p.294
\textsuperscript{148} Ibid
\textsuperscript{149} The Statesman, Calcutta, May 10\textsuperscript{th}, 1964,p.9
The controversy regarding the practicing and non-practicing doctors in the medical colleges of the state became a hotly debated issue during this time. It was decided that the hospital staff would be divided into two units— one for treatment and the other for teaching. The academic unit was to be staffed by non-practicing doctors who were to be given better grades and scales of pay. Doctors under the other category were allowed to undertake private practice but would continue in the old West Bengal Medical service pay scales. Doctors were to be allowed to opt for inclusion in either of the two units.\textsuperscript{150} This measure was meant to increase the ratio of the number of doctors to the population of West Bengal, according to the Estimates Committee’s Report on the State Government’s Health Department.\textsuperscript{151}

The Assembly debates of the 1960s continued to pay emphasis on the imparting of medical education in the three Government and the one non-government medical college at Bankura. A Conference of Deans and Principals of Medical Colleges recommended that a separate set up under the Directorate of Health Services in the states should have to be set up to deal with the problems of medical education and research. With a view to promoting research, the conference urged that the institution of additional funds to medical colleges for research programmes and the awarding of additional research fellowships could be devised as viable solutions. It also recommended measures for increasing the

\textsuperscript{150} The Statesman, Calcutta, 21 June, 1964,p.1

\textsuperscript{151} The Statesman, Calcutta, 30\textsuperscript{th}, September, 1964,p.7
number of teachers in the existing medical colleges and also the ones to be set up in the future years. It suggested that the age of retirement of medical teachers should be fixed at 60 years instead of 55 years as was the existing norm. A drive to economize medical education was also attempted by reducing the high cost of books through printing cheaper editions in India.\(^\text{152}\)

The outgoing Vice Chancellor of Calcutta University Dr. N.K. Sidhanta briefing on the issue of the University College of Medicine in 1960 pointed out in the Syndicate meeting that the university would have to create an atmosphere of medical research in the institutions. He said, 'We must see that these do not become merely government-sponsored institutions.'\(^\text{153}\)

With a view to developing the preventive side of medicine and creating a public health awareness among the medical graduates, the three state medical colleges were provided with a department of Preventive and Social Medicine. Moreover, with a view to giving special training to medical and non-medical auxiliary personnel in the treatment of tuberculosis cases, a Tuberculosis Demonstration Centre was also sanctioned in the Calcutta Medical College. Post-graduate medical education and research was conducted as before in the Institute of Medical Education and Research and also in the School of Tropical Medicine, Calcutta. Three new departments that of Biophysics, Department of Virology and Department of Mycology were

\(^{152}\) The Statesman, Calcutta, 17th Sept., 1960, p.7

\(^{153}\) The Statesman, Calcutta, 18th Sept., 1960, p.8
sanctioned in 1960 in the School of Tropical Medicine and measures were also
taken towards the improvement of the Dental College.\textsuperscript{154}

During the 25\textsuperscript{th} session of the West Bengal Legislative Assembly in 1960 a
persistent problem of providing accommodation to women doctors in the districts
cropped up once again when a member of the Assembly Shri Satyendra Narayan
Majumdar pointed out that in spite of the appointment of female doctors in the
district hospital of Siliguri, none joined the post.\textsuperscript{155} A possible solution to the
problem also featured in the discussions but no immediate solution could be
found, although by 1961 the number of girl students was increasing and stood at
thirty out of a total of 120 students in the Calcutta Medical College and Hospital
alone.\textsuperscript{156} At the pre-medical course in the Calcutta Medical College, Nil Ratan
Sarkar Medical College and R.G. Kar Medical Colleges respectively, 80 seats were
reserved from the districts on the basis of merit.

The establishment of a medical college in North Bengal to cater to the medical
needs of the people was also proposed at the 36\textsuperscript{th} session of the West Bengal
Legislative Assembly in 1963. So in the early sixties governmental efforts to cater
to the needs and the medical aspirations of the youth did not go unnoticed;

\textsuperscript{154} Proceedings of the West Bengal Legislative Assembly, Vol.XXV, Part V, 11\textsuperscript{TH} March ,1960, pp.2-3

\textsuperscript{155} The Statesman, Calcutta, 17\textsuperscript{th} September, 1960,p.7

\textsuperscript{156} Dr.Debashis Bose, eds.et al 175 Years of Medical College Bengal, Commemorative Volume, ( Kolkata:Medical College Ex-Student’s Association, 2009), p.120
although whether such effects percolated to those who were marginalized on the grounds of caste, class, gender or the effects of partition was another issue.

Shri Anath Bandhu Ray, a minister in the state Legislative Assembly deliberated on the comprehensive development schemes and the provisions that had been charted out for medical education and the medical profession in the Medical Budget for the year 1963. He pointed out that the largest expenditure in the Budget so far had been provided in the Medical Budget. The Health Budget for that session furnished a comprehensive outline of the development schemes that were to be undertaken as well as the ones that already existed. Provisions had already been made so that the existing as well as the new schemes could continue undisturbed. The minister assured that in the health sector, provision had been made to step up activities in all possible ways. He admitted that as society was fast changing so also was medical knowledge and its application, hence the horizon of medical activities was widening and the government was trying to keep pace with that. He admitted that West Bengal needed more medical men and so he suggested that admission to the medical colleges be done twice a year as had been introduced in the past instead of lowering the standards or minimizing the period of education.\textsuperscript{157} The minister-in-charge of the Department of Health Sm. Purabi Mukhopadhyay came up with the suggestion

\textsuperscript{157} Proceedings of the West Bengal Legislative Assembly, 25\textsuperscript{th} session, Vol.35, No.1, 1963, p.443
that during the course of the Fourth Five year Plan, it had been decided to set up a medical college in Siliguri.\footnote{Proceedings of the West Bengal Legislative Assembly, 39th session, Vol.39, No.1, 1964, p.1276}

At a later session of the Assembly the thrust on expanding the facilities for post-graduate medical education and research based on the recommendations of the Bhore Committee became more pronounced when the minister announced the up-gradation of the departments of Neurology, Maternity and Gynaecology, Surgery and Medicine on the one hand and the setting up of a separate Research unit on the other hand in the Institute of Post-Graduate Medical Education and Research Institute. This endeavour was meant to enable the students of medical college to get admitted to the post-graduate course. Interestingly, although efforts were being to bridge the deficit of qualified doctors in the state, the West Bengal government was actually towing the Central policy in accordance with the regulations of the Bhore Committee and not paying any special heed to the equally serious problem of low representation of women doctors in the state. To further the cause of higher medical education, the facilities for medical education were increased at the post-graduate level. But as Purabi Mukhopadhyay, minister-in-charge of the Department of Health declared that out of a total number of 575 seats available for both boys and girls in the medical colleges, the government had not earmarked the seats meant for women. The government granted land to set up the University Post-Graduate Institute of Basic Medical Service and funded it with Rs. 90,0000 to enable it to buy equipments. The
government also proposed to provide stipend to those who were not employed in the government service but were pursuing higher education in medicine so that they could concentrate on their studies instead of toying with the idea of sustaining themselves by private practice. In this respect the minister claimed that West Bengal was a pioneer and that other states had till then not thought of such a policy to promote medical education among the aspirants.¹⁵⁹

That criticisms of the state policies, were equally active became evident from the motion led by Shri Dwijendralal Sengupta, a member of the opposition of the West Bengal Legislative Assembly. Shri Dwijendralal Sengupta candidly stated that many aspiring candidates for medical education were being disappointed every year. He expressed his apprehensions before the House remarking that their position would particularly be serious that year because of the limited number of seats in the medical colleges. The government, however, defended its position and one of the members of the ruling party the Honourable Prabodh Kr. Guha answered the queries. He said that in West Bengal there were already four State managed medical colleges, viz., Medical College Calcutta, N.R.S. Medical College, Calcutta, Bankura Sammilani Medical College, Bankura and one privately managed medical college, viz., Calcutta National Medical Institute where the number of seats had been increased by 25 in the year 1963-64. Previously, the availability of seats in the above-mentioned colleges had been 100, 100, 100, 50 and 143 respectively in 1962-63. But for that year i.e. 1963-64, the number of

seats in each of the four Medical Colleges at Calcutta had been increased by 25.  

Besides this, he further informed the house that some of the seats in each of the four medical colleges had to be kept on reserve every year for the nominees of the government of India, other States and the Union Territories. The real problems were of space management and prevention of overcrowding in teaching and treatment facilities, which, continued to remain a nagging problem for the Medical College, Sir N.R. Sircar and R.G. Kar hospitals. This was a solemn reminder of the fact that all these colleges and hospitals needed extension. The Estimates Committee Report also pointed out that in the State Government’s Health Department figures clearly indicated that, the ratio of doctors to West Bengal’s population was decreasing year by year. At the same time about 400 posts were lying vacant as doctors were not attracted by government hospitals. In 1963 it was claimed that the department gave appointment letters to over 300 young physicians of whom only about 50% joined their posts.

161 The Statesman, Calcutta, 23 April,1962,p.9
162 The Statesman, Calcutta, 23 August 1963,p.1
163 The Statesman, Calcutta, 30 September,1964, p.7
164 The Statesman, Calcutta, 26 November,1964, p.9
Moreover at an all-India level the Government of India alarmed by the large-scale exodus of Indian doctors to foreign countries at a time when the country needed them most in the expanding health services, was considering a number of steps to check the rising trend of exodus.\textsuperscript{165} Although the growth rate of doctors was relatively small when compared to nurses and other workers employed in the medical and public health services, the target envisaged was 5,600 people in 1976 and one person in 2000 in 1986. This compared with one per 6,300 in 1961. The total number of doctors was estimated at 360,000 in 1980 against 70,000 in 1961.\textsuperscript{166} The government’s stand was that they had provided the largest expenditure in the Medical Budget and that they were aware of the fact that with a society fast changing, medical knowledge and its application had to be updated as fast as possible. Hence, the horizon of medical activities was widening and the government assured that it was trying to keep pace with that.\textsuperscript{167}

Governmental policies with regard to medical education and the profession revealed an inherent failure to bridge the gap between the number of medical personnel who qualified as professionals and the lack of availability of employment facilities for them. The result was that though the state of West Bengal abounded in medical men, still in the employment sector a dearth of

\textsuperscript{165} The Statesman, Calcutta, February 26\textsuperscript{th}, 1965, p.1

\textsuperscript{166} The Statesman, Calcutta, Jan. 18\textsuperscript{th}, 1966, p.9

\textsuperscript{167} Proceedings of the West Bengal Legislative Assembly,, Thirty-fifth session, Vol.35, No. 1, 1963,p.443
medical men remained. As greater production was necessary and unavoidable, the suggestion was to hold admissions to the medical colleges twice a year.  

True, the facilities for medical education were increased even at the postgraduate level, but the contradiction lay in the fact that the ratio of the number of doctors to the population of West Bengal kept on decreasing every year according to the Estimates Committee’s Report on the State Government’s Health Department. The fast changing society together with its medical knowledge and application demanded a farsighted policy to keep abreast with this pace,

Even then certain anomalies still plagued the situation as around 400 posts lay vacant as doctors were not attracted by Government hospitals. Over 300 young physicians for whom appointment letters had been issued failed to join, leaving a margin of only 50% who could join their respective posts.

The primary health centres too presented a dismal picture with around 600 to 700 primary health centres functioning without doctors. About 30% to 35% of the junior posts in the public health services and about 255 of the general medical cadre of the State services were reported to be vacant.  

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169 The Statesman, Calcutta, 12 August, 1966, p.8
170 The Statesman, Calcutta, 30 September, 1964, p.7
171 Ibid
growth rate of doctors was relatively small, a much higher increase was estimated for nurses and other workers employed in the medicine and public health services.  

These problems notwithstanding, on the affirmative side, some silver linings could be discerned – as in view of the paramount importance attached to the development of the health services of the country some facilities had been provided for Post-Graduate Medical Education and Research. Departments were upgraded for the purpose. Neurology, Maternity and Gynaecology, Surgery and Medicine were some of these, although majority of the girls still opted for Gynaecology, Medicine or Paediatrics----patients being used to being attended to by a lady doctor in the Gynaecology and Paediatric wards. But in surgery, one met with occasional doubt about the competence of the lady doctors.

Separate research units were also established. The SSKM Hospital was provided with a plot of land for the establishment of the University Post-Graduate Institute of Basic Medical Service. For those not in government service but following post-graduate degree in medicine, stipends were to be provided in order to enable them to concentrate on their studies rather than move about in search of sustenance. This was a measure taken to promote higher education in medicine

173 The Statesman, Calcutta Jan 18th., 1966, p.9

174 Minutes of the Syndicate, University of Calcutta, Part I, Jan.22nd., No.4,1966,p.4

175 Debashis Bose eds.et al 175 Years of Medical College Bengal, Commemorative Volume, (Kolkata:2009, Medical College Ex-Student’s Association),pp.120-121
in consonance with the all-India thrust on higher education and research in medicine as was envisaged just a year before independence, in 1946 by the Bhore Committee on medical education.  

The problem of inadequate doctors continued to affect research work at the West Bengal Government’s Institute of Post-Graduate Medical Education and Research, Calcutta where for lack of qualified personnel accounted for many posts lying vacant for many months.

The Medical Council of India, answering a question that was raised at the floors of the Legislative Assembly regarding the starting of post-graduate courses and examinations in a medical college pointed out that this issue was not necessarily connected with the full fledged functioning of a medical college. Its function was to outline the rules and regulations and the necessary pre-conditions to start under-graduate and post-graduate courses. Explaining the problems further, the Medical Council of India argued that a college may have started off as a full-fledged institution, yet it may still lack in adequate facilities necessary for post-graduate training; because a medical college where post-graduate training is scheduled to be introduced should have sufficient accommodation, necessary equipment and suitable and adequate staff. In the case of clinical subjects, the need for a good hospital with good laboratory and diagnostic facilities was necessary to start post-graduate training. Over-crowding in under-staffed

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176 Proceedings of the West Bengal Legislative Council, 31st session, 1963, p. 769

177 The Statesman, Calcutta, 12 Aug. 1966, p. 8
departments was to be avoided. Adequate number of well-qualified staff had also to be provided.\textsuperscript{178}

In addition special stress was required to be laid on the facilities for research that the Institute could offer to the post-graduate students. Only those departments where adequate facilities by way of equipment, animals, and grants existed were to be considered for recognition of post-graduate training.\textsuperscript{179} As regards post-graduate medical education and training, the sole authority to ensure proper standardization supervision and academic control over such institutions had to be reposed in the University as was the case with the post-graduate training and teaching in Arts and Science subjects.\textsuperscript{180}

The Union Minister of State for Health and Family Planning Professor D.P. Chattopadhyay believed that it was necessary to take a second look at the medical education as it was leading to the creation of an ‘elite, professional exclusiveness and brain drain’. He further said that the exclusive professional elite who were the products of premier post-graduate institutions were alien to their own land, alienated from the problems, difficulties, requirements and expectations of the people in general and the villagers in particular.\textsuperscript{181} To rectify the situation his advice was to change the method of imparting medical

\textsuperscript{178}Minutes of the Syndicate, University of Calcutta, Pt.II,,No.11,1964,p.317

\textsuperscript{179}Ibid,p.318

\textsuperscript{180}Minutes of the Syndicate, University of Calcutta, Pt.II,,No.11,1964,p.317

\textsuperscript{181}The Statesman, Calcutta 17 January, 1973, p.5
education in such a way so as to make the medical practitioners serve the people. He believed that the professionals in medical education should develop the spirit of public service. The existing basis, methods and tools utilized for post-graduate training would have to be remodelled to suit the country's conditions.\textsuperscript{182}

The Union Health Minister also revealed the information that despite the fact that the number of medical colleges had gone up to 99 in 1973 from 30 in 1951, medical care had not been satisfactorily upgraded in the rural and semi-urban areas where 80\% of India’s population lived.\textsuperscript{183} The need to establish more medical colleges in the state was felt owing the fact that 79.6 \% of the population of West Bengal lived in urban areas. It was argued that the available number of doctors, if properly assigned, could not only meet the requirement of the state but could also be provided to the other states where there were no doctors. While there was paucity of funds plaguing the growth of medical education in the State, in a particular year 1967-68, on the other hand, 11\% of the total budget grant still remained unutilized.\textsuperscript{184}

In such circumstances, the opposition strongly demanded creation of autonomous medical colleges in West Bengal in consonance with the medical

\textsuperscript{182} The Statesman, Calcutta, 17 January, 1973, p.5

\textsuperscript{183} Ibid

\textsuperscript{184} Proceedings of the West Bengal Legislative Assembly, 50\textsuperscript{th} session, No.1, Jan-Feb.1970, p.1964
colleges established in the other cities of India. The four medical colleges in the State at that time were under the control of the State Government. It was felt, that these could have been established under the control of the University with the State government providing its share of financial assistance.\textsuperscript{185} Dissent was also voiced by the Director of the Institute of Post-Graduate Medical Education and Research (IPGMER) against the absence of representatives for the Post-Graduate Council of Medicine in the Board of Studies of the University.\textsuperscript{186} The argument was that the IPGMER, Calcutta could smoothly function independent of the University College of Medicine by following the curriculum and other conditions prescribed by the University.\textsuperscript{187} The other flaws in the structure of medical education in the State were that the medical colleges as teaching institutions were not independent of the State Health Service and if the two were kept separate from each other, then the level of medical education in the State could improve.\textsuperscript{188}

The Minister-in Charge of the Department of Health Shri Ajit Kr. Panja maintained on behalf of the government that at the under-graduate and post-

\textsuperscript{185} Proceedings of the West Bengal Legis. Assembly, 45\textsuperscript{th} session, No.2,1965-66, p.409, See also Dr Sashi Bhushan Chaudhury’s answer to the Assembly members

\textsuperscript{186} Proceedings of the West Bengal Legislative Assembly., 50\textsuperscript{th} session, No.1,1970,p.92, letter dt. 26/-6.1967 from the Director of the Institute of Post-Graduate Medical Education and Research Dr.A.K.Basu to the University Vice-Chancellor

\textsuperscript{187} Proceedings of the West Bengal Legislative Assembly., 50\textsuperscript{th} session, No.1,1970,p.92, letter dt. 26/-6.1967 from the Director of the Institute of Post-Graduate Medical Education and Research Dr.A.K.Basu to the University Vice-Chancellor

\textsuperscript{188} Proceedings of the West Bengal Legislative Assembly., 50\textsuperscript{th} session, No.1,1970 p.1361
graduate levels of medical education, facilities to promote higher education were being expanded. In the five medical colleges of the state there were 655 sanctioned posts for M.B.B.S course. There were two medical colleges under North Bengal and Burdwan each of which had 50 seats for the medical students. The Government continued to provide recurring and non-recurring grants to both the universities as part of its financial assistance.\textsuperscript{189} To promote higher education and research in the medical sector, there were attempts by the government to expand the Bangur Institute of Neurology and Ophthalmology.\textsuperscript{190} This was also the time when the need for a separate Medical University, as in the other states, was keenly felt to improve upon the problems associated with both Health and Medical Education in the state.\textsuperscript{191} There was also a proposal during the Fifth Five Year Plan period to set up a Medical College in the Midnapore district of West Bengal by the government. The Minister-in-Charge of Health Ajit Panja observed that as per the recommendations of the Mudaliar Commission, there was supposed to be one medical college for every 5 crores of population. Going by that provision, the State needed two more medical colleges apart from the seven that already existed.\textsuperscript{192} Besides, there was also the need to man the new postgraduate institutions with teachers and the district hospitals with more specialists.

\textsuperscript{189} Proceedings of the West Bengal Legislative Assembly, 53\textsuperscript{rd} session, No2 1972, p.766

\textsuperscript{190} Ibid

\textsuperscript{191} Proceedings of the West Bengal Legislative Assembly, 53\textsuperscript{rd} session, No2 1972, p.780

\textsuperscript{192} Proceedings of the West Bengal Legislative Assembly, 54\textsuperscript{th} session, Feb.-May 1973, p.934
to serve as referral centres for the primary health centres in the districts.\textsuperscript{193} In the changing scenario, the number of girl students rose but they were far less in numbers than the boys at that time. Thus between 1961 and 1974, there was on average around thirty girl students in each session compared to over hundred boys in the under-graduate class at the Medical College, Kolkata.\textsuperscript{194}

To conclude, the first three decades after independence witnessed a conscious and planned effort on the part of the government to broaden the scope of medical education not only at the under-graduate level but also at the post-graduate level in order to provide quality health-care to the people at large. The policies, however, represented to a large measure grandiose attempts to spread the ambit of medical education.

In spite of the best intentions of the government, it was not grounded in reality as infrastructural problems of accommodation and problems of low pay for medical professionals continued to plague the profession particularly in the government sector. These problems having remained unaddressed deterred women from joining the medical service even after getting employment. Dr. Swapna Chakraborty, who retired as Professor and Head of the Department of Paediatrics, Medical College, Kolkata in 2014 while referring to her experiences during the 1980s, recounted that when she was in the initial years of her rural

\textsuperscript{193} Minutes of the Syndicate, University of Calcutta., Pt.I, No.4, 1966, p.294

\textsuperscript{194} Dr. Debasis ed. et al 175 Years of Medical College Bengal, Commemorative Volume, (Kolkata: Medical College Ex-Student’s Association), pp.120-121
posting in Bagnan, West Bengal, she had to face the problem of accommodation and was scared to stay alone at night as well. A secured accommodation for doctors, particularly lady doctors was thus advocated by her. Lack of pro-women legislation to help change the status of women within their families and in the public sphere meant that women actually had to overcome male domination and competition not only at the domestic sphere but from now on in the public domain as well, although the ‘glass ceiling’ with respect to certain specializations in the medical profession had already been broken. It was during this time that women like Dr. Susheela Viswanathan had made forays into the field of cardiac surgery but that they were few and far between.

The reasons behind the wide disparity in the number of boys and girls seeking higher education and the status of women, both urban and rural, in the backdrop of the changing social pattern since independence, was addressed by the Committee on the Status of Women in India in 1974. In its Report, it suggested remedial and other measures in the fields of law, education, employment, population policy etc. which would enable women to play their full and proper role in building up the nation. During the first three decades since independence, although enormous strides had been taken to promote scientific, technical and medical education, grants, scholarships, creation of the posts of

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195 Interview of Dr. Swapna Chakraborty by the researcher, dated. 23.10.2016, Calcutta

196 Minutes of the Syndicate, University of Calcutta, Part III, July, No. 16,1974, p.25

197 Report of the Committee on the Status of Women in India, Department of Social Welfare, New Delhi, 1974, pp..1, 368
scientific pool officers to retain the best scientists in the country had been created and emphasis on the upgradation of the post-graduate departments of the medical colleges and universities were harped on, the neglect of women’s education, particularly higher education continued in the period under review despite the increase in the demand for it.