



# A Comparative Study On Participation Of SC, ST And Other Female Students In Arts And Science Disciplines In Post-Graduate Programme Of Dibrugarh University

Dr. Padma Dutta

Associate Professor, Department of Education, Khowang College, Dibrugarh Assam

## Abstract:

The NEP-2020 suggests transformation of higher educational institutes into a multidisciplinary university, College or a Knowledge Hubs, which can produce vibrant all-round scholars and where the students can perform inter-disciplinary or cross disciplinary research. The higher education means a blend of STEM and non-STEM disciplines according to NEP-2020. The NEP encourages in young women in India to participate in Science, Technology, Engineering and Mathematics to make a gender equality in higher education. The present study in the post-graduate departments of Dibrugarh University of the Science and Arts streams was made in comparison shows higher enrolments of females in science streams as well as in arts streams than the males.

Keywords: SC, ST, Female Students, Arts, Science, Post-graduate, Dibrugarh University

## 1.0 Introduction:

The development of any nation is directly related to the development of its human resources. Quality education is the best legacy that a nation provides to the young citizens. India is in its seventy seventh year of independence and developing in all the spheres. It needs more to develop to reach in the top of the positions of developed nations.

The National Education Policy 2020 (NEP-2020)<sup>1</sup> primarily has given the importance of producing creative individual of good thought, fit for the 21<sup>st</sup> century. The NEP-2020 stressed on introducing holistic approach at all level of education. The very idea of learning the calculation by mathematics with logic the science, applying in the profession of the engineering and the medicine and all other application of hand-works with well versed communication, moulding with arts was the original theme of Indian education. The NEP-2020 suggests transformation of higher educational institutes into a multidisciplinary university, College or a Knowledge Hubs, which can produce vibrant all-round scholars and where the students can perform inter-disciplinary or cross disciplinary research. It has suggested integrating under-graduate courses of arts and humanities with science, technology, engineering and mathematics (STEM) to develop individual of all capacities. The higher education means a blend of STEM and non-STEM disciplines according to NEP-2020. The NEP encourages in young women in India to participate in Science, Technology, Engineering and Mathematics to make a gender equality in higher education. The sustainable development goals agenda of 2015 of United Nations campaigns for quality education and gender equality. The Global gender gap report-

2023 of World Economic forums records the Gender parity rank for the countries of Southern Asia with 64.3% gender parity, which includes India. The present study in the post-graduate departments of Dibrugarh University of the Science and Arts streams was made in comparison shows higher enrolments of females in science streams as well as in arts streams than the males.

2.0 Background of the study: The present study was especially conducted in the post-graduate studies of Dibrugarh University and it analyses the enrolment of male and female students of different categories especially Scheduled Castes and Scheduled Tribes in science and Arts sections of the teaching departments of the University. The study was aimed to find out the students' participation in both science and arts streams by the females.

### 3.0 Literature review:

The National Education Policy-2020 has recommended establishing or converting the present higher educational institutions to a multidisciplinary University of Higher educational institutes or a Knowledge Hubs, which can enable researchers to perform cross disciplinary research and to develop research communities within the disciplines.

The Global economic forum-2023<sup>2</sup> reported 68.4 as the global gender parity index for the year and also mentioned that the women participation in Science, Technology, Engineering and Mathematics subjects is lower than the male participation in most of the countries across the world. The European countries maintain higher parity indices than the rest of the nations.

Matete, R. E. (2022)<sup>3</sup> reported that socio-cultural myths and local peoples' beliefs that the science subjects are hard for females affects in females' interest in joining in science related disciplines. The patriarchal or male dominance system in the family also has psychological impact on the females for low participation in STEM subjects.

Bloodhart, B., Balgopal, M. M., Casper, A.M.A. McMeeking, L.B., Fischer, E.V. (2020)<sup>4</sup> mentioned about the common belief of less intellect and lacking ability in performance is one of the reasons of distracting women from their study of STEM disciplines. During the interactions amongst the peers gender bias prevails, which may even distract the students in their studies.

### 4.0 Objectives:

4.1 Objective-1: To study the comparative participation of the females of Scheduled Castes and Scheduled Tribes and other groups in Science and Arts at Higher education in the teaching departments of Dibrugarh University.

4.2 Objective-2: To study the gender parity in studies of Science and Arts by the Scheduled Castes and Scheduled Tribes and other groups in Higher education in the teaching departments of Dibrugarh University.

5.0 Population, Sample and Methodology: All students in 1st semester of the academic year 2017-18 in the Science and Arts departments of Post Graduate studies of Dibrugarh University were included. The study comprised of fifty percent of the PG departments, which were selected by simple random sampling method. A Questionnaire for collecting the information of the students and an information schedule was used for obtaining data from the authority of Dibrugarh University. Several secondary records were also consulted for data collection.

6.0 Collection, Analysis and Interpretation of Data: All data were expressed in percentage and the analysis were processed in Microsoft Office Excel. The interpretation was made with the help of tables and figures.

7.0 Findings: There were 238 and 132 students in all the four selected Arts and four Science Departments of Dibrugarh University respectively. The total numbers of enrolment of male and female students of different categories and their percentage have been shown in the Table-1 and represented in Figure-1 for both Arts and Science streams. The figure-2 illustrates the Adjusted gender parity indices (AGPI)<sup>5</sup> on the enrolments of different categories of students. Findings on enrolment in Arts stream showed that there was 74.79 percent female enrolment against 25.21 percent of male enrolment in total. The Scheduled castes female enrolment was 7.14 percent in contrast to 1.68 percent of their male enrolment. In the same way the Scheduled Tribes

category's the female and male enrolments were 7.56 and 7.98; which were almost equal. The females are just trailing by a narrow margin. The remaining other groups showed a big difference in enrolment by females leading by a total of 60.08 percent against 15.55 percent by their male counterparts. So, it can be said that the females are in advantage position in comparison to the males in the discipline of Arts, except the females of Scheduled Tribes were trailing to the males by a narrow margin of 0.42% only.

In the Science subjects the females of all categories remained in advance to the males by their enrolments. The Scheduled Tribes community females and males were equally enrolled in the Science subjects with 8.33percent. The female enrolment in the Scheduled Castes category was found to be just doubled to their males' enrolment.

The enrolment of females in others group and in total students remained higher than the males' enrolment by quite a bigger margin of enrolment of 12.88 percent lead by females of Others and 15.15 percent lead by the females in overall total students. were higher than the males which is also found in the total enrolments, females leading the male enrolments.

Table-1: Percent enrolled patterns in Arts & Science of different categories of students in Dibrugarh University.

	SC		ST		Others		Total		
Arts	M	F	M	F	M	F	M	F	Total
Enrolment	4	17	19	18	37	143	60	178	238
% Enrolment	1.68	7.14	7.98	7.56	15.55	60.08	25.21	74.79	
AGPI		1.76	0.94			1.74		1.66	
Science									
Enrolment	3	6	11	11	42	59	56	76	132
% Enrolment	2.27	4.55	8.33	8.33	31.82	44.7	42.42	57.58	
AGPI		1.50	1.00			1.29		1.26	

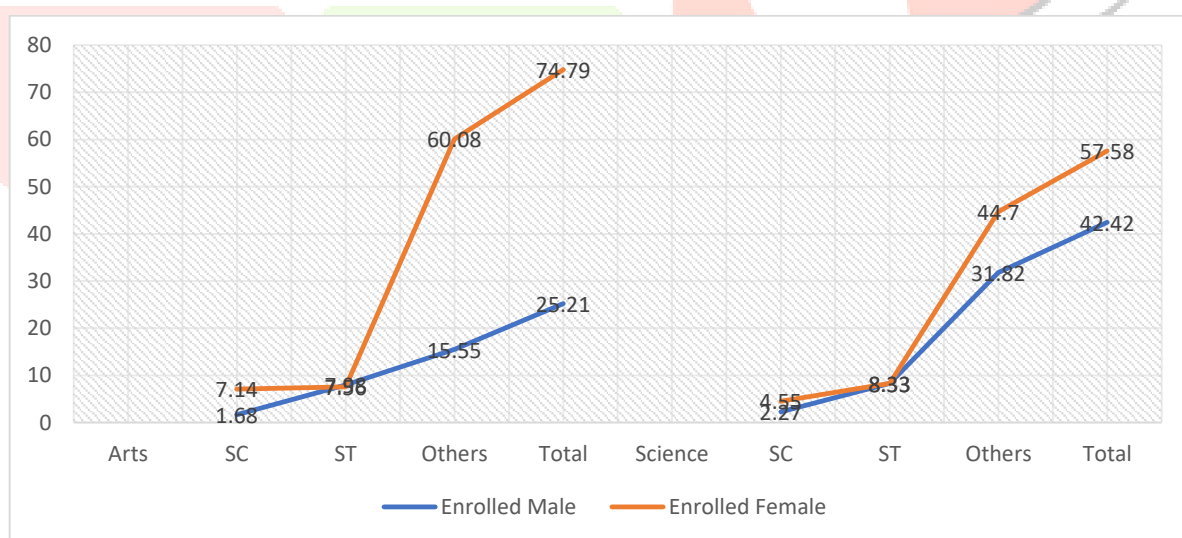


Fig. 1: Percent enrolled patterns in Arts & Science of different categories of students in Dibrugarh University

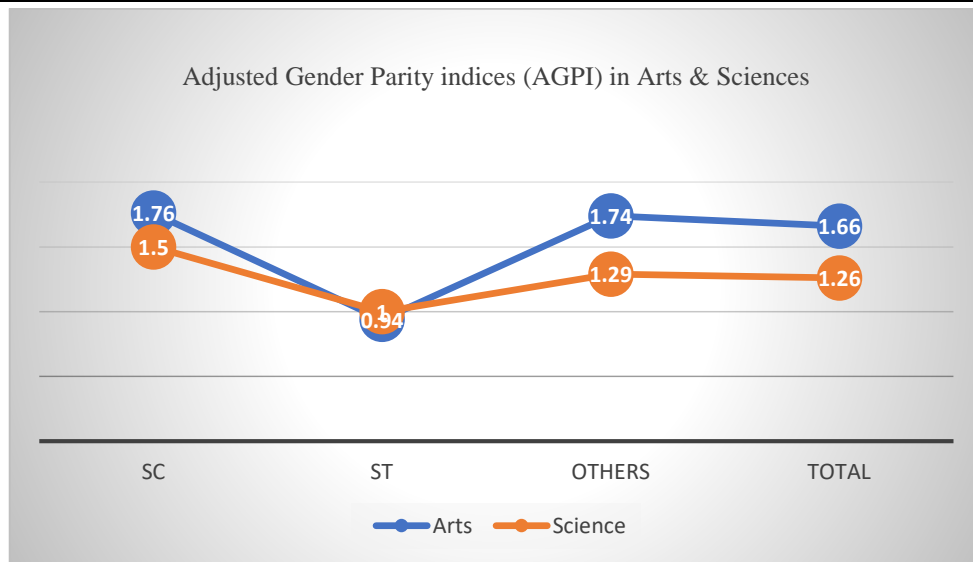


Fig. 2: Adjusted Gender Parity Indices in Arts & Science of different categories of students in Dibrugarh University

### 8.0 Conclusion:

The result indicates that the participation of females of Scheduled Castes was more than the males not only in the Arts but also in the Science disciplines. The Scheduled Tribes were very marginally lower than the male's participation in the Arts streams but were equal with the males' participation in the Science disciplines. The result indicates that the local peoples in the neighbouring areas are aware of the Science disciplines and their importances, and they might have encouraged their children for these disciplines.

### References:

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