



SOCIO-ECONOMIC AND INSTITUTIONAL DETERMINANTS OF WOMEN'S PARTICIPATION IN HIGHER EDUCATION IN ARUNACHAL PRADESH

Dr. Tokmem Dai 

RESEARCH ARTICLE



Author Details:

Guest Faculty, Department of Education, Indira Gandhi Government College, Tezu, Arunachal Pradesh, India

Corresponding Author:

Dr. Tokmem Dai

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Abstract

The factors affecting the participation of women in higher education in Arunachal Pradesh includes the institutional accessibility, socio-economic factors, family support, and socio-cultural factors. The participation and continuation in education is further influenced by geographical diversity and regional disparities. The objective of the present study is to explore the participation of women in higher education, and to analyse socio-economic, institutional, family and socio-cultural determinants of participation in the three districts of Papum Pare, Tirap and Lohit. A descriptive research design was adopted. Out of three Government Degree Colleges 400 female undergraduate students were selected with the help of Quota sampling method. Structured Yes/No questionnaires and secondary enrolment records were used for data collection. Frequency and percentage analysis was used for analysis of data. the findings of the study revealed that connected institutional, economic and socio-cultural conditions are related to women's participation. Improved sustained participation may be achieved through strengthening of infrastructure, financial support and family-community support.

Keywords: *Women's participation, Higher education, Socio-economic factors, Institutional factors, Arunachal Pradesh*

Introduction

Higher education constitutes a critical component of human capital formation, social mobility, labour-market participation, and gender-responsive development. Women's participation in higher education is particularly significant because it influences educational attainment, occupational mobility, economic autonomy, decision-making capacity, and long-term social empowerment (Musa et al., 2026). Participation in higher education, however, is a multidimensional phenomenon extending beyond initial enrolment and encompassing continued engagement, persistence, progression, and successful completion. It is shaped by the interaction of household socioeconomic conditions, geographical accessibility, institutional resources, academic support systems, financial assistance, and socio-cultural expectations (Ali & Kamraju, 2023). Consequently, variations in women's participation cannot be adequately understood without examining the socioeconomic and institutional conditions that facilitate or constrain their educational trajectories.

The higher education scenario in Arunachal Pradesh is unique in view of its historical, geographical and socio-cultural context. The formal education system developed relatively late in the state, and the indigenous peoples had already their own education system, based on agriculture, weaving, hunting, domestic activities, culture, and monastic education (Tamuk, 2014). Subsequent growth of formal education was then limited due to the topography, isolation, weak infrastructure, and small-scale institutions. Jawaharlal Nehru College, Pasighat, was established in 1964 marking a pivotal moment in the institutionalization of higher education in the state, which subsequently saw a steady increase in college, university, teacher training institutions, and educational administrative bodies (Heyink, 2018).

This geographic and socio-cultural context has shaped the educational involvement of women in Arunachal Pradesh. In the past, women have been heavily involved in agriculture, household management, weaving, child care and community based productive activities (Narzari & Sarmah, 2025). However, traditional gender division of labour and patriarchy have historically limited women's educational mobility and limited the significance of formal education for women. With time, the growth of educational institutions, literacy programmes, scholarship programmes, women oriented institutions, and government interventions have led to increasing awareness and participation among women (Singh, 2024). While these changes have occurred, there are still a number of factors that impact the educational paths of women, including financial constraints, family responsibilities, early

marriage, and connectivity issues. The spatial gap in the provision of education also suggests that geographical location and access to institutional resources might further widen the gap in educational participation (Mishra et al., 2023).

Socio-economic factors are an important factor to explain women's participation in higher education as they influence material, educational and social resources available to students. Household income influences the ability to cover direct and indirect costs of education: tuition, study materials, transportation, housing or subsistence expenses (Qian & Smyth, 2011). There is potential for educational awareness, aspirations, decision making and the amount of academic and financial support for female students to be shaped by parental educational attainment and occupational background. Family support and peer support may be enabling forms of social capital, while feeling poor, having domestic responsibilities, narrow expectations and low educational resources in the household may limit the possibility of pursuing education (Danish et al., 2025). The disadvantages can be more severe in geographically isolated communities where additional transportation and housing needs can significantly impact access to higher education.

The institutional determinants interact with socioeconomic factors and can have a significant impact on women's access to and persistence in, and completion of, higher education. The quality and continuity of students' academic involvement is shaped by accessibility of transportation, adequacy and safety of hostel facilities, the availability of academic resources, teacher cooperation, faculty guidance and the wider institutional environment (Maximillian, 2017). One of the key factors that helps to mitigate because of the institution disadvantages that arise in the family or economic or geographical disadvantage is the institutional advantage that can help the female students. Scholarships and government financial aid are also significant institutional links with student's socioeconomic backgrounds. Numerous studies have found that aid that is well-designed can have a positive impact on academic achievement, as it can help students stay in school and limit out-of-school financial pressures (Qi et al., 2022).

As women's access to higher education increases, so do structural inequalities. The rise in enrolments can be accompanied by ongoing inequalities in access to institutional resources, geographical connections, housing, classroom and other learning supports, and financial stability. It is important to note that the interplay of these factors has significant implications as institutions can either help to address socioeconomic disadvantage or exacerbate inequalities. Systematic evidence on access and equity in higher education shows that access is affected by several interconnected factors at the individual, household, institutional and structural levels (Wanti et al., 2022). The connection between socioeconomic status and institutional access is thus in need of empirical attention in a geographically distributed state like Arunachal Pradesh.

Financial support is a further key factor of participation in education. While leaving out the direct cost of higher education, scholarships and government assistance can alleviate the immediate cost impact of higher education, although they may be offset by indirect spending, travel expenses, housing needs, slow payment of the award, and the absence of financial resources within the family. Financial aid can thus be ineffective if the student faces academic, infrastructural or social difficulties at the same time. Scholarship interventions suggest that educational continuity for disadvantaged learners is not merely the promise of financial help, but also the provision of additional academic, institutional and psychosocial support mechanisms (Mutevere et al., 2024). To address this, women's participation in higher education must be looked at in an integrated perspective, in which economic resources and institutional support are not seen as separate factors but as mutually interacting ones.

Despite the existing studies on women education status, empowerment, access, gender related barriers and gender disparities in women's education, considerably less empirical studies have focused on the holistic socioeconomic and institutional factors that influence women's enrollment in higher education in the state of Arunachal Pradesh. Studies in other socioeconomically deprived environments have shown that there are multiple and mutually reinforcing financial, social, cultural and structural barriers to enrolment and retention (Hussein et al., 2026). But the unique geographical position, tribal social organization, scattered settlement pattern and level of institutional development of Arunachal Pradesh need contextual analysis. It is important to consider these determinants especially since access alone is not necessarily a guarantee of continued academic engagement and success when economic and institutional issues are not addressed.

In the present study, the socioeconomic and institutional causes of women participation in higher education in Arunachal Pradesh are discussed with selected government colleges of degree level in Papum Pare, Tirap and Lohit districts. The analysis takes into account the socioeconomic indicators, such as family income, parents' educational background, financial support, residential background, and the encouragement of the family, while also considering institutional indicators, such as transportation, the availability of hostel facilities, teacher support, academic guidance, and the availability of educational resources. Through its explorative analysis of these dimensions, the study intends to suggest the major enabling and inhibiting factors for women's enrollment in higher education system and provide empirical evidence for gender responsive institutional planning, student support initiative and inclusive higher education policy for Arunachal Pradesh.

Objectives of the Study

1. To examine women's participation in higher education across selected districts of Arunachal Pradesh.
2. To assess the institutional factors associated with women's participation in higher education.
3. To analyse the socioeconomic and socio-familial factors influencing women's participation in higher education.
4. To identify major barriers affecting women's participation and continuation in higher education.

Review of Literature

Socio-economic factors and financial accessibility: Economic conditions are often cited as a key determinant of women's access to and retention in higher education (HE). Ghosh and Kundu (2021) correlated women's participation with other economic indicators like per capita income of the state and institutional support, while Putcha et al. (2023) mentioned that tuition fees, books, transportation, and educational expenses have a direct impact on low-income women. Richo (2024) also found financial constraints, along with family responsibilities, to be significant barriers to enrolment and retention in Arunachal Pradesh. Combined, these studies suggest that women's participation is not only dependent on the presence of higher education institutions, but also on the ability of the families to cover the direct and indirect costs of education. Financial support, scholarship and family economic support are then brought to the fore as enabling mechanisms, especially for students coming from economically underprivileged and geographically remote families.

Institutional Infrastructure and Educational Accessibility: A few issues Tsega (2022) found to be persistent challenges for women in Arunachal Pradesh include remoteness, lack of infrastructure facilities, limited resources and non-equal access to educational facilities. From this perspective, Das (2026) demonstrated that infrastructural limitations, physical distance and communication challenges are linked to inequities in higher education access for women in the Northeast region of India. Similarly, Singh and Chatterjee (2025) found that the girls of West Siang district were deprived of educational and career opportunities due to poor educational infrastructure and tough landscape. Together, these findings indicate that it is not enough for there to be a college – the provision of transport, accommodation, connectivity, academic provision and supportive institutional arrangements are also crucial to maintaining women's participation. It is therefore evident from the literature that the higher education planning ought to be focused on the geographical and infrastructural conditions of the remote areas like Arunachal Pradesh.

Family Support and Socio-Cultural Constraints: Domestic responsibilities, early marriage, societal expectations, and less encouragement for girls' education were found to be potential factors limiting participation and retention by Putcha et al. (2023). The situation is similar also in the North East region where women can have greater mobility and social engagement but can also be impacted by patriarchal traditions and structural inequalities, as observed by Choudhury and Kumar (2022). Similarly, within the context of Arunachal Pradesh, Richo (2024) demonstrated that gender roles in addition to economic and institutional constraints also influence women's enrollment in higher education. Overall, these studies indicate that the family and community could have two effects: positive encouragement, emotional support, and attitudes towards education could encourage continuation, while limiting expectations about marriage, domestic responsibilities, and norms could hinder education. Therefore, it is essential to view the socio-familial conditions as a significant factor in women's participation and not only as a cultural problem.

Regional Evidence from Arunachal Pradesh and Northeast India: Studies conducted across the region prove that the higher education of women in Arunachal Pradesh is due to the interplay of economic, institutional, geographical and socio-cultural conditions. The study highlighted that in spite of policy interventions, women in remote areas still have unequal access to resources and the educational infrastructure, as highlighted by Tsega (2022). In West Siang, Richo (2024) also found that none of these factors is acting in isolation but in conjunction with each other. Likewise, Singh and Chatterjee (2025) revealed economic factors and socio-cultural factors influenced educational decisions and geographical factors and poor institutional infrastructure restricted further education and career opportunities. The literature in the region then indicates that it is not possible to explain women's entry into higher education with a single factor. Rather, the conditions for participation and continuation are produced by the interaction of institutional support; economic resources; family environment; cultural expectations; and geographical accessibility; and hence a comparative district-level analysis is relevant in the context of Arunachal Pradesh.

Research Methodology

- a. **Research Design:** The research design was descriptive in nature, which aims to examine and explore the socio-economic, institutional and socio-cultural factors that influence the participation of women in higher education in Arunachal Pradesh. Descriptive method was found to be appropriate as it enables the systematic assessment of the existing condition, experience and the factors affecting participation and continuation of female students in higher education.
- b. **Study Area:** The study was carried out in three selected districts of Arunachal Pradesh (Papum Pare, Tirap and Lohit). Two government degree colleges were chosen from each district; Binni Yanga Government Women's College, Lekhi, Papum Pare; Wangcha Rajkumar Government College, Deomali, Tirap; and Indira Gandhi Government College, Tezu, Lohit. The districts have been chosen to represent different levels of female literacy and socio-educational conditions of the state.
- c. **Population and Sample:** The respondents of the present research were Female undergraduate students in the selected government degree colleges. In the academic session 2023-24, there were 687 females enrolled in the three institutions. The required sample size was calculated by Yamane's formula, and it was set to obtain the precision level of 0.03. The sample calculated was about 425 students, but due to the feasibility of the field, and the availability of the students, the final sample was set to 400 female undergraduate students.
- d. **Sampling Technique:** Quota sampling technique was used for sample of female students. This technique was adopted for representation of students of major academic streams (Humanities, Science, Commerce) and to avoid overrepresentation of a single academic stream.

- e. **Research Instruments:** The structured questionnaires developed for female undergraduate students were used to gather the primary data. One questionnaire focused on the dimensions of academic/institutional conditions, economic factors, family and peer support, as they relate to continuation and completion of higher education. The final instrument was comprised of 22 dichotomous (Yes/No) items. The questionnaire was pre-tested with 40 female students through test-retest method, and checked by subject and language experts. The reliability coefficient was 0.78. Four structured questionnaires were used to investigate the academic, socio-cultural and economic challenges of female students. There were also 22 yes/no questions about domestic responsibilities, cultural restrictions, early marriage, transportation, financial problems, affordability of educational materials, and scholarship-related questions. It also had a test-retest reliability coefficient of 0.78.
- f. **Sources and Procedure of Data Collection:** The study was both primary and secondary data. The primary data was collected directly from the female undergraduate students by administering questionnaires after obtaining permission from the concerned institutional authorities. The respondents were told the purpose of the study and given sufficient time and guidelines to complete the questionnaires. Secondary data on enrolment of females was collected from the academic cells of selected colleges and the Directorate of Higher and Technical Education, Government of Arunachal Pradesh as well as institutional and official records.
- g. **Data Analysis:** Data once collected were checked, classified, coded and tabulated in line with the objectives of the study. The quantitative data was analyzed using frequency and percentage. However, descriptive comparisons have been done among the three districts—Papum Pare, Tirap, and Lohit—to get an insight into the difference in institutional, economic, family, socio-cultural, and barrier-related factors. Wherever feasible the data were presented graphically or in tabular form for easy understanding.
- h. **Ethical Considerations:** Prior permission was obtained from the concerned authorities before data collection. Participation was voluntary, and respondents were informed about the academic purpose of the study. Confidentiality of responses was maintained, and the collected information was used exclusively for research purposes.

Results

The data shows a distribution of the 400 female respondents across academic stream in Table 1. Humanities (n = 200) and Science (n = 100) students accounted for 50.0% and 25.0% respectively and Commerce students were 25.0% (n = 100) of the sample. So, the Humanities subjects students' population were more represented in the sample while the Science and Commerce subjects students were equally represented.

Table 1 Distribution of Female Student Sample by Academic Stream

Academic Stream	Frequency (n)	Percentage (%)
Humanities	200	50.00
Science	100	25.00
Commerce	100	25.00
Total	400	100.00

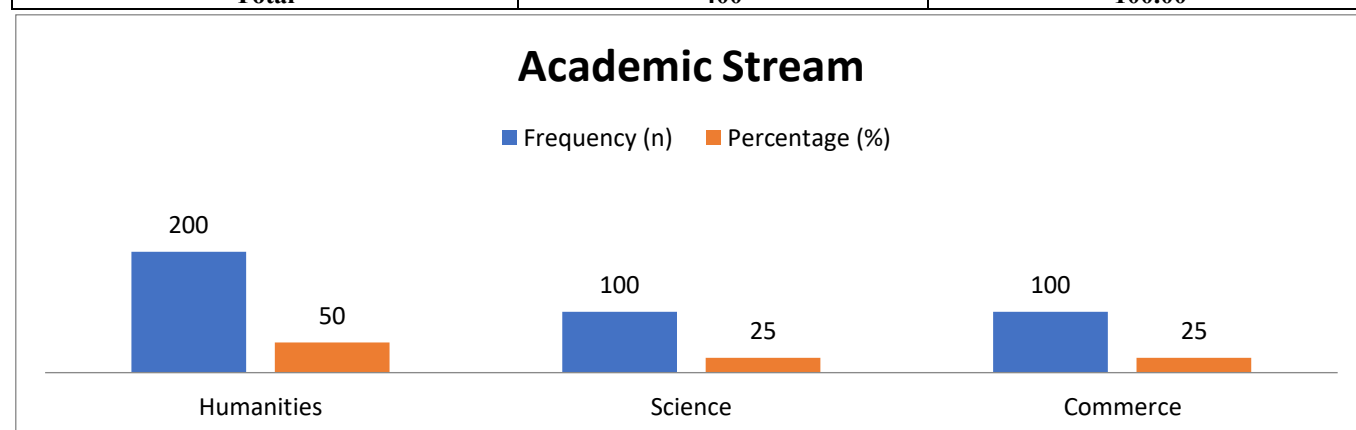


Figure 1 Distribution of Female Respondents by Academic Stream

Table 2 presents the differences between female enrolment from year 2021-22 to 2023-24 in Papum Pare, Tirap and Lohit. The consistent trend in Papum Pare from 86 students in 2021-22 to 171 students in 2023-24. Tirap showed a decline from 68 to 48 students in 2022-23, followed by an increase to 88 in 2023-24. Lohit had the highest enrolment during the period, which decreased from 415 to 388 and then rose to 428. At the state level, female enrolment decreased from 19,486 in 2021-22 to 18,410 in 2022-23 and subsequently increased to 19,706 in 2023-24. The results show that there has been an overall improvement in the participation of women, but with varying trends from district to district.

Table 2 Female Enrolment in Selected Districts of Arunachal Pradesh, 2021-22 to 2023-24

Academic Year	Papum Pare (n)	Tirap (n)	Lohit (n)	Total Female Enrolment in Arunachal Pradesh
2021-22	86	68	415	19,486

2022–23	120	48	388	18,410
2023–24	171	88	428	19,706

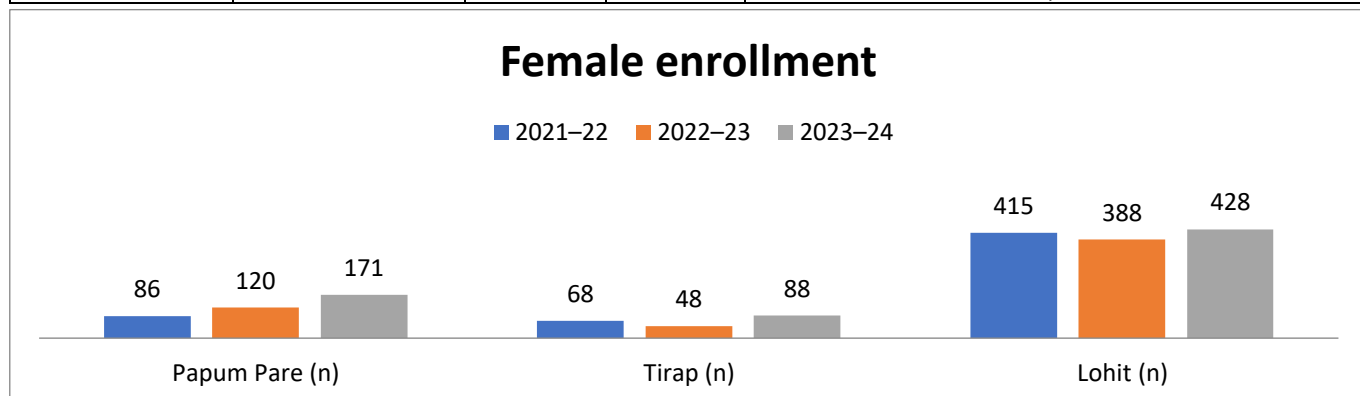
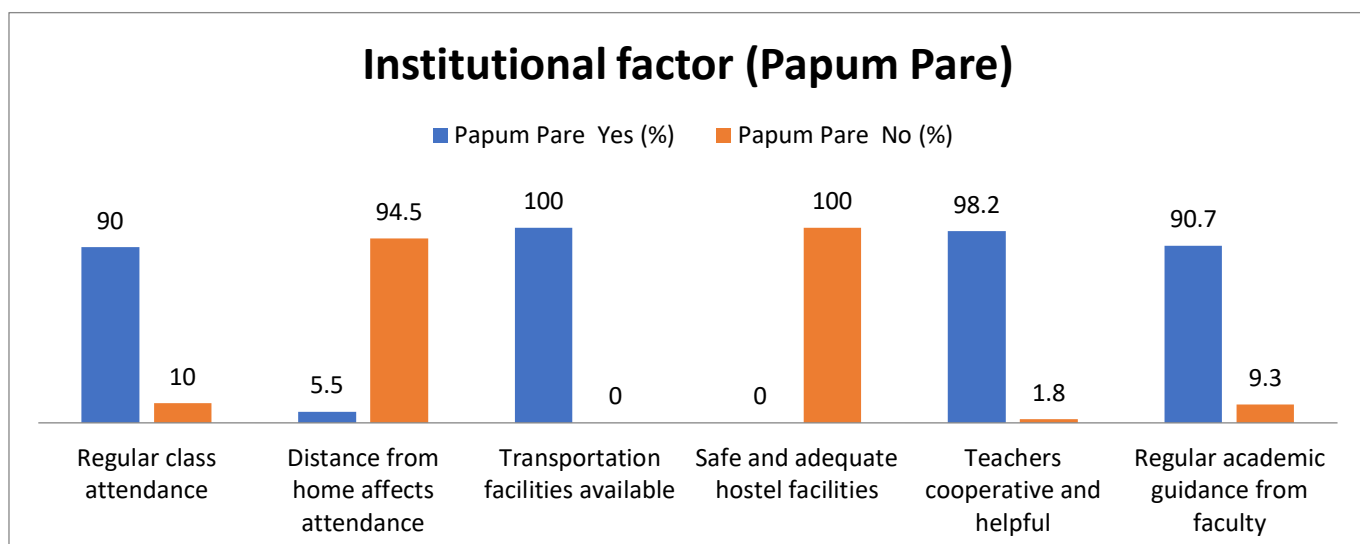


Figure 2 Female Enrolment Trends in Selected Districts of Arunachal Pradesh (2021–22 to 2023–24)

Table 3 shows that the institutional setting is mostly conducive to women's participation in higher education. There was good attendance in all the classes of Papum Pare (90.0%), Tirap (90.6%) and Lohit (97.0%) and 100% said transportation facility was available. There was also high teacher cooperation and academic guidance in the three districts consistently. Institutional differences, however, reflected in the hostel facilities, were noted where none of the respondents in Papum Pare found hostel facilities safe and adequate as against 82.0% and 90.0% in Tirap and Lohit respectively. The impact of distance was more on attendance in Tirap (30.0%) and Lohit (20.0%) compared to Papum Pare (5.5%). In general, the level of institutional support was good, with variations at the district level in terms of hostel facilities and geographical accessibility.

Table 3 Institutional Factors Associated with Women's Participation in Higher Education

Institutional Factor	Papum Pare		Tirap		Lohit	
	Yes (%)	No (%)	Yes (%)	No (%)	Yes (%)	No (%)
Regular class attendance	90.0	10.0	90.6	9.4	97.0	3.0
Distance from home affects attendance	5.5	94.5	30.0	70.0	20.0	80.0
Transportation facilities available	100.0	0.0	100.0	0.0	100.0	0.0
Safe and adequate hostel facilities	0.0	100.0	82.0	18.0	90.0	10.0
Teachers cooperative and helpful	98.2	1.8	85.0	15.0	90.0	10.0
Regular academic guidance from faculty	90.7	9.3	90.0	10.0	92.0	8.0



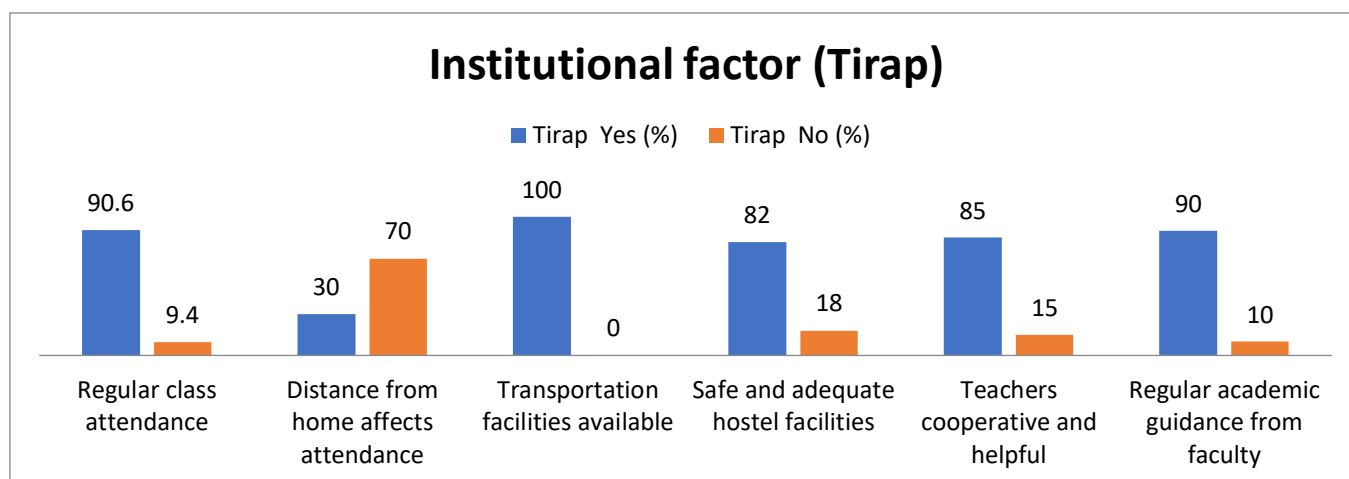


Figure 3 Institutional Factors Affecting Women's Participation in Higher Education in Papum Pare District

Figure 4 Institutional Factors Affecting Women's Participation in Higher Education in Tirap District

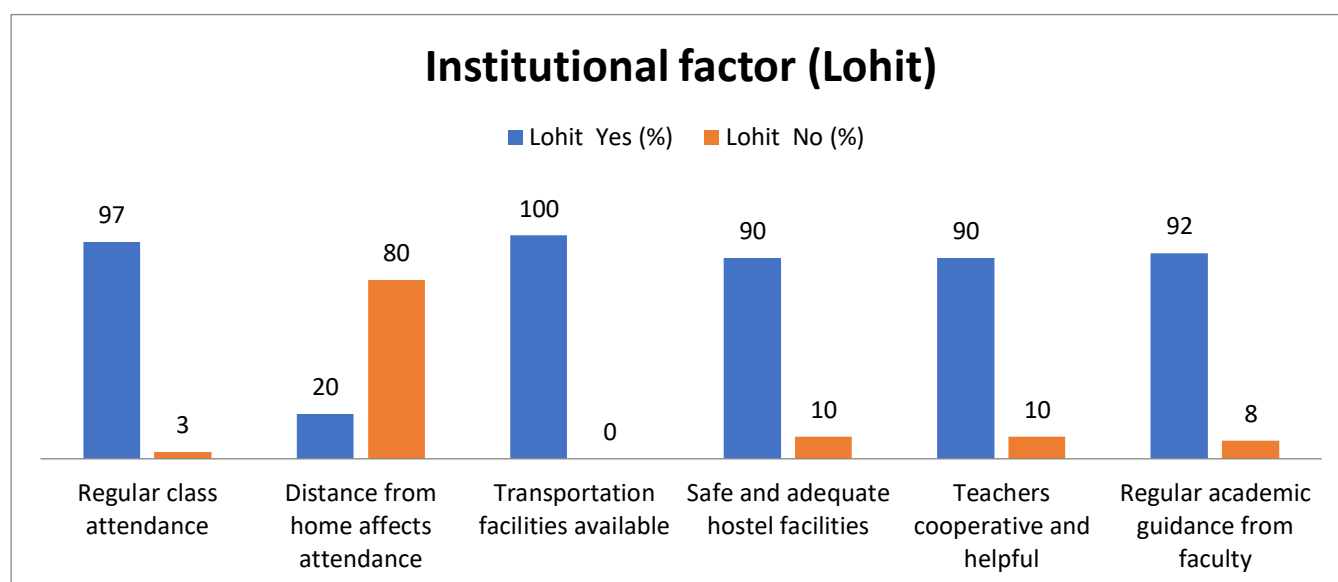


Figure 5 Institutional Factors Affecting Women's Participation in Higher Education in Lohit District

Table 4 shows that financial support is crucial in women continuing in higher education. The proportion of women who successfully complete higher education due to the award of scholarships was highest in the three districts, ranging from 98.0% to 100.0%. The government scholarships were received by a higher number of students in Papum Pare (90.8%) followed by Lohit (87.0%) and Tirap (68.0%). Out of them 72.6% reported getting adequate family financial support, 63.0% in Tirap and 75% in Lohit. Even with these supports, however, 30.5%, 42.0%, and 40.0% of the people, respectively, indicated that the economy was an issue. The results indicate that financial support is a facilitator for participation but that financial constraints are still rather visible in Tirap and Lohit.

Table 4 Economic Factors Associated with Women's Participation in Higher Education

Economic Factor	Papum Pare		Tirap		Lohit	
	Yes (%)	No (%)	Yes (%)	No (%)	Yes (%)	No (%)
Scholarships help girls complete higher education	100.0	0.0	98.0	2.0	100.0	0.0
Received government scholarship	90.8	9.2	68.0	32.0	87.0	13.0
Adequate financial support from family	72.6	27.4	63.0	37.0	75.0	25.0
Economic issues affect education	30.5	69.5	42.0	58.0	40.0	60.0

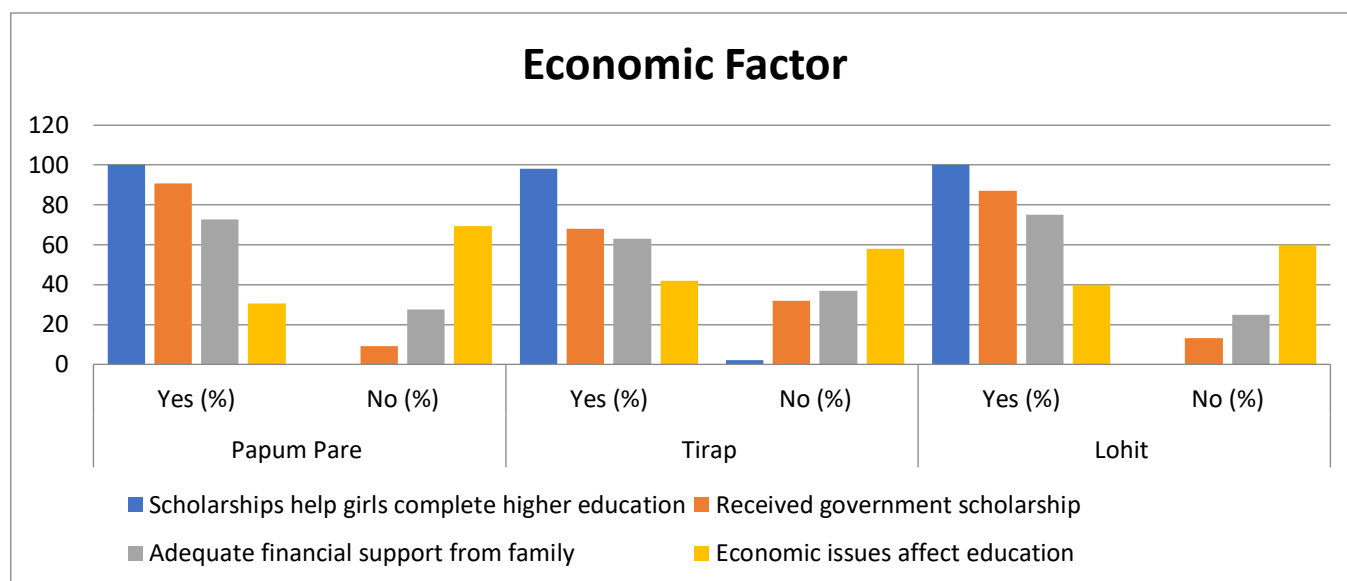


Figure 6 Economic Factors Associated with Women's Participation in Higher Education across Papum Pare, Tirap, and Lohit Districts

Table 5 shows that there is good family and peer support for women's higher education in the selected districts. Peer encouragement has been high across all three districts and parental encouragement was as high as 86.0% in Tirap and 98.0% in Lohit. In Papum Pare, 95.0% of the respondents reported positive attitudes towards higher education among the family members, while 80.0% reported this in Tirap and 94.0% reported this in Lohit. Another large group of respondents felt family background was important in their education. There was a significant difference between districts on the question of the restrictions in the traditional and cultural aspect of the respondents where 60.0% of the respondents were found in Tirap district while 25.0% in Papum Pare and 20.0% in Lohit district. Therefore, the overall level of family and social support was favourable whereas the level of socio-cultural constraints was more significant in Tirap.

Table 5 Family and Socio-Cultural Factors Associated with Women's Participation in Higher Education

Factor	Papum Pare		Tirap		Lohit	
	Yes (%)	No (%)	Yes (%)	No (%)	Yes (%)	No (%)
Parents encourage continuation of studies	90	10	86	14	98	2
Peers encourage continuation of studies	100	0	100	0	92	8
Positive family attitude towards girls' higher education	95	5	80	20	94	6
Family educational background influences academic success	89	11	78	22	79	21
Traditional/cultural norms restrict educational progress	25	75	60	40	20	80
Emotional support from community	72	28	65	35	76	24

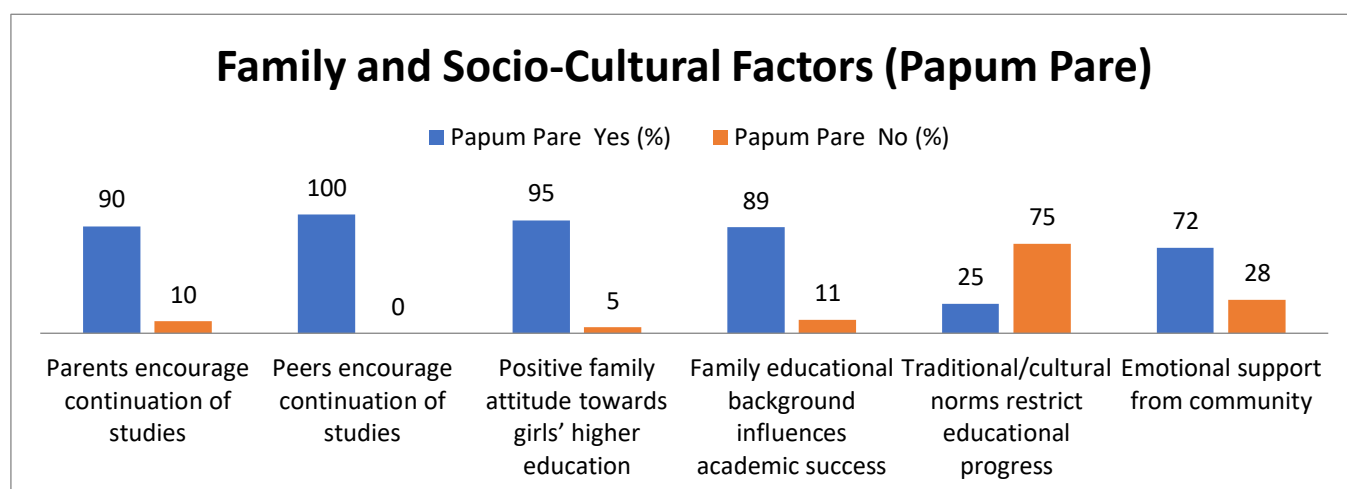


Figure 7 Family and Socio-Cultural Factors Associated with Women's Participation in Higher Education in Papum Pare District

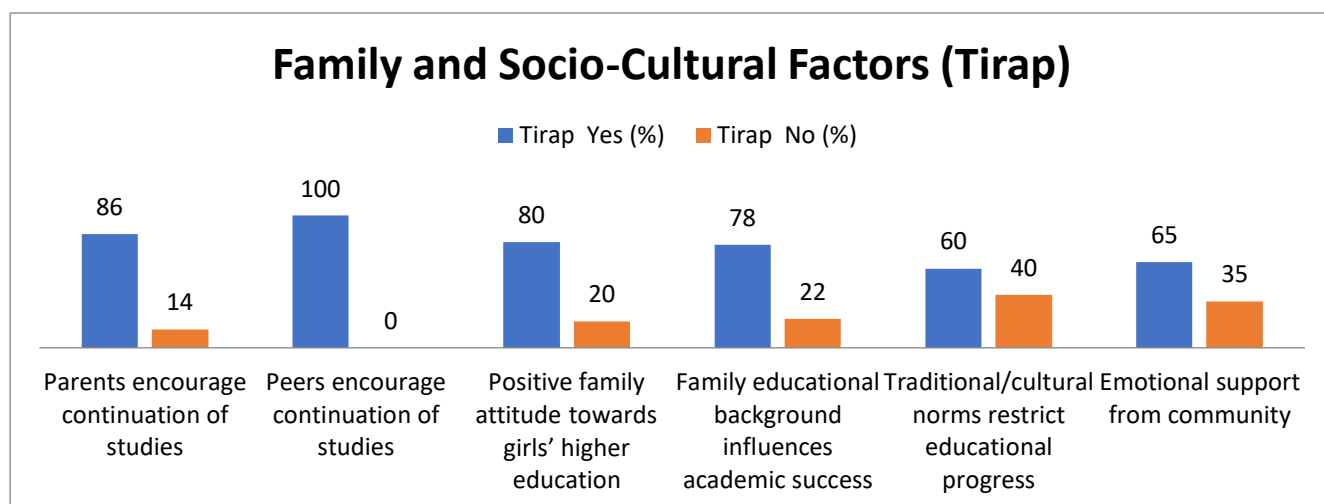


Figure8 Family and Socio-Cultural Factors Associated with Women's Participation in Higher Education in Tirap District

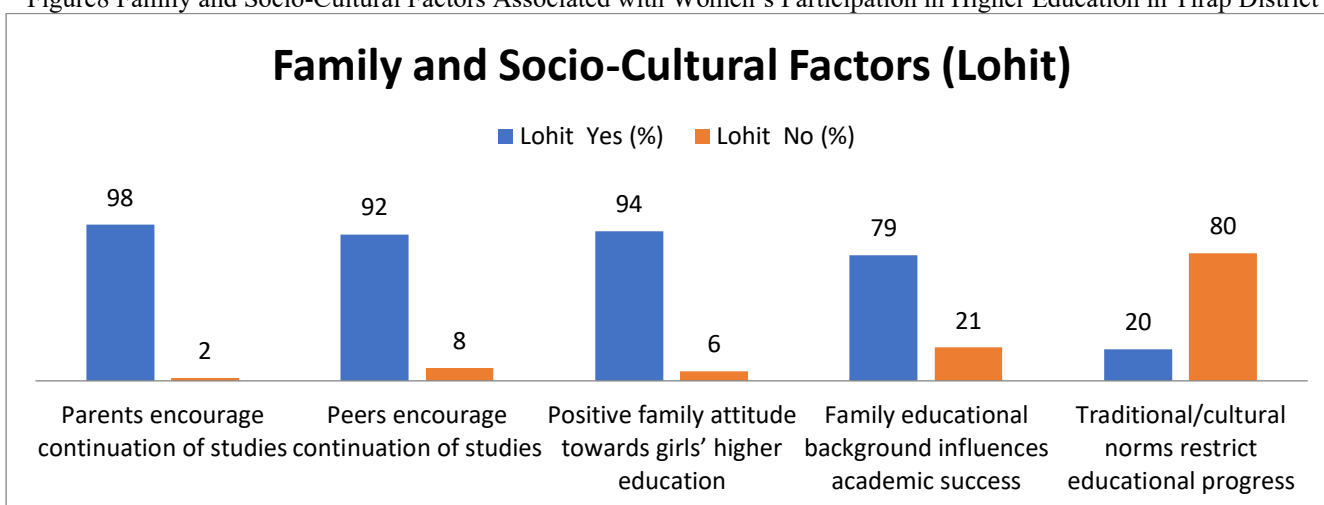


Figure9 Family and Socio-Cultural Factors Associated with Women's Participation in Higher Education in Lohit District

Table 6 shows the salient socio-economic and socio-cultural challenges faced by girl students. 35.0%, 42.0% and 36.0% of respondents faced hassles in balancing studies with domestic chores in Papum Pare, Tirap and Lohit respectively. Tirap also showed higher level of cultural restrictions, pressure for early marriage, restriction on extra-curricular participation, financial difficulties, transportation difficulties and lack of availability of academic materials. The proportion of family poverty contributing to discontinuation were 20.0% in Papum Pare, 37.0% in Tirap and 34.0% in Lohit. Nearly one-third of respondents in all three districts were impacted by delayed scholarship disbursements. The overall result shows that economic vulnerability, domestic responsibilities and socio-cultural expectations are important barriers for women participation and continuation in higher education which are comparatively more marked in Tirap.

Table 6 Economic and Socio-Cultural Barriers Affecting Women's Participation in Higher Education

Barrier	Papum Pare		Tirap		Lohit	
	Yes (%)	No (%)	Yes (%)	No (%)	Yes (%)	No (%)
Difficulty managing studies with domestic chores	35	65	42	58	36	64
Cultural restrictions on academic participation	30	70	35	65	28	72
Family pressure for early marriage	20	80	33	67	26	74
Restrictions on extracurricular/leadership participation	38	62	40	60	25	75
Societal expectations limiting higher studies	38	62	35	65	28	72
Financial problems in continuing higher education	30	70	40	60	32	68
Transportation/connectivity problems	10	90	30	70	20	80
Family poverty contributing to discontinuation	20	80	37	63	34	66
Difficulty affording academic materials/college fees	30.5	69.5	42	58	30	70
Delayed scholarship disbursement affects studies	34	66	32	68	32	68

Discussion

The results of this study reveal that the support and accessibility of institutions are crucial in maintaining women's participation in Higher education in Arunachal Pradesh. Some important facilitators were identified as supportive teachers, regular academic guidance, transportation facilities and enabling academic environment – despite having some variation in hostel facilities and geographical accessibility in the selected districts. Van den Berg and Hofman (2005) showed that students' development during their study at university is affected by student-related factors as well as institutional factors, indicating that the educational environment plays an important role in academic development. Likewise, Shulruf, Hattie and Tumen (2008) identified that school and individual level factors both impact individual participation and success in higher education. The present results corroborate these observations, as it is found that institutional circumstances can enhance women's continued involvement in higher education. Meanwhile, the lack of uniformity in the physical infrastructure and accessibility implies that educational opportunities are not uniformly experienced across locations. Hence, in geographically remote areas like Arunachal, it is especially crucial to enhance the institutional facilities, along with academic support.

Economic condition in present research shows a significant factor that affects women's participation and continued studies in Higher Education. The findings of the present study indicate that scholarships and family financial support are some of the enabling mechanisms for the education of some girls, but some are still facing economic challenges that impact their educational journey. Financial difficulties can encompass tuition costs and academic expenses as well as transportation, housing and any other expenses that may come with advancing with college. Mehmood, Chong, and Hussain (2018) noted that socioeconomic factors are important factors that hinder the access of women to higher education and financial constraints are often tied with family and cultural factors. Similarly, Malik and Courtney (2011) demonstrated that higher education positively affects women's empowerment in a related way, specifically with regards to economic empowerment, self-confidence and women's status in the family and society. The current findings corroborate these studies in suggesting that economic assistance is strongly associated with women's ability to stay enrolled in higher education. Therefore, adequate, accessible and timely financial support must be made available to enable effective support of educational continuity for women from disadvantaged backgrounds.

Family and socio-cultural conditions also came up as significant factors that influenced women's experience related to their higher education. While family and peer support is significant, some women still experience constraints to academic engagement due to traditional gender norms, household duties, early marriage pressures, and other factors. It was shown by Gautam (2015) that women's decisions regarding Higher Education are not just individual decisions since they are determined by gender relations, family situations, the locations of institutions and socially constructed expectations. Similarly, Shaukat and Pell (2017) pointed out that women's experiences in higher education are still influenced by socio-cultural factors and that social conditions are important even in settings where opportunities for women's education have grown. The findings of the present study mirror the same context in which positive attitudes towards women's education exist together with continued gender responsibilities and cultural norms. This pairing points towards the notion that greater access to colleges may not necessarily reduce the inequalities in educational participation. Therefore, awareness-raising at the family/community level should be complemented by institutional action to foster a more supportive culture for women's ongoing engagement in higher education.

Conclusion

The study finds that the enrolment and retention of women in higher education in Arunachal Pradesh is a positive development, though it is influenced by institutional, economic, family and socio-cultural factors. The selected colleges offer supportive education in general in terms of transport facilities, teacher cooperation, regular academic guidance, and positive attendance. However, differences in hostel facilities/accessibility to hostels (due to distance) and other infrastructural conditions suggest that institutional opportunities are not equitably distributed throughout Papum Pare, Tirap and Lohit. In Arunachal Pradesh, where the geographical factors may affect access to higher education, these variations are important to note.

Access to an institution alone is not sufficient to ensure continued participation, as economic and socio-cultural factors also illustrate. Financial issues are a significant barrier, along with educational costs, family poverty, transportation costs, and the time it takes for a scholarship to disburse, but scholarships and family financial support are significant. Concurrently, high levels of parental and peer support suggest an increasing acceptance of women's higher education, with some students still facing challenges from domestic duties, cultural norms, societal expectations, and early marriage. A few barriers are also concentrated in the Tirap district, which adds to the significance of the district-wise planning of the education sector. In general, building institutional capacity, providing timely support and financial aid, making institutions accessible and providing supportive family and community environments are critical to improve the participation and retention of women in higher education in Arunachal Pradesh.

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References

1. Ali, M. A., & Kamraju, M. (2023). The role of women in rural development programs. *ASEAN Journal of Community Service and Education*, 2(1), 67-84.
2. Berg, M. V. D., & Hofman, W. H. A. (2005). Student success in university education: A multi-measurement study of the impact of student and faculty factors on study progress. *Higher education*, 50(3), 413-446.
3. Choudhury, S., & Kumar, S. (2022). Gender discrimination and marginalization of women in North-East India. *Journal of Public Affairs*, 22(4), e2625.
4. Danish, S., Mahmood, T., Rehman, A., Usman, A., & Sadaf, F. (2025). Networks of opportunity': Unpacking the role of family, peers, and community in shaping economic mobility in Low-income urban settings. *The Critical Review of Social Sciences Studies*, 3(1), 313-324.
5. Das, P., & Mukherjee, S. (2017). Improvement in higher education quality of the North-East University of India. *Total Quality Management & Business Excellence*, 28(7 8), 765-781.
6. Gautam, M. (2015). Gender, subject choice and higher education in India: Exploring 'choices' and 'constraints' of women students. *Contemporary Education Dialogue*, 12(1), 31-58.
7. Ghosh, S., & Kundu, A. (2021). Women's participation in higher education in India: an analysis across major states. *Indian Journal of Human Development*, 15(2), 275-294.
8. Heyink, M. E. (2018). Where is Jawaharlal Nehru University?: Tracking Changes in India's Higher Education Development.
9. Hussein, A. I., Okyere, M., & Sulemana, M. A. (2026). Investigating the barriers to basic school enrolment among Muslim girls in a Zongo community in the Nkwanta North District of Ghana. *Discover Education*.
10. Lomi, A. N. K., Aleksius, M., & Sahan, M. Y. (2024). Folklore storytelling: A study into the effectiveness of traditional short story for enhancing vocabulary development in EFL learners. *Register Journal*, 17(2), 279-300.
11. Malik, S., & Courtney, K. (2011). Higher education and women's empowerment in Pakistan. *Gender and education*, 23(1), 29-45.
12. Maximilian, M. (2017). AN EXPLORATION ON THE CONTRIBUTION OF ACCOMMODATION FACILITY IN PROMOTING GIRLS' EDUCATION IN NJOMBE WARD SECONDARY SCHOOLS, TANZANIA.
13. Mehmood, S., Chong, L., & Hussain, M. (2018). Females higher education in Pakistan: An analysis of socio-economic and cultural challenges. *Advances in Social Sciences Research Journal*, 5(6).
14. Mishra, A., Mishra, A., & Pandey, G. (2023). Spatial inequality and education: unraveling the geographical dimensions of educational disparities. *TechnoLearn: An International Journal of Educational Technology*, 13(1), 29-43.
15. Musa, M., Magaji, S., & Ismail, Y. (2026). Beyond Poverty: Gender Norms, Capability Constraints, and Tertiary Education Exclusion in Nigeria's Pre-Urban Communities.
16. Mutevere, M., Dzinamarira, T. R., Muzenda, L., Nyoka, S., Chokudinga, V., Mugoniwa, T., ... & Dzinamarira, T. (2024). Empowering underprivileged students beyond financial aid: Insights from a scholarship program's monitoring and evaluation. *Evaluation and Program Planning*, 105, 102448.
17. Narzari, J., & Sarmah, S. (2025). Women at the Margins: Exploring Economic Challenges Faced by Karbi Women in Arunachal Pradesh. *Issue 3 Int'l J.L Mgmt. & Human.*, 8, 4051.
18. Putcha, C., Elamadurthi, R. K., Matsaniya, V., & Koyye, J. B. (2023). Challenges Of Women In Accessing Higher Education In India. *Journal of Namibian Studies*, 33, 2251.
19. Qi, S., Ma, Q., & Ji, X. (2022). The influence of financial aid systems on student academic development in higher education in China. *Sustainability*, 14(21), 14068.
20. Qian, J. X., & Smyth, R. (2011). Educational expenditure in urban China: Income effects, family characteristics and the demand for domestic and overseas education. *Applied Economics*, 43(24), 3379-3394.
21. Shaikat, S., & Pell, A. W. (2017). The Impact of Socio-cultural factors on females passing through Higher Education in Pakistan. *Eurasian Journal of Educational Research*, 17(71), 193-214.
22. Shulruf, B., Hattie, J., & Tumen, S. (2008). Individual and school factors affecting students' participation and success in higher education. *Higher education*, 56(5), 613-632.

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