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Tribal Education in Kerala and Achieving Sustainable Development Goal (SDG)-4: Prospects and Challenges

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Abstract: Education is a key indicator of development and a fundamental right for all individuals. The state plays a crucial role in providing basic and higher education to its citizens, regardless of gender, ethnicity, or financial status. Education serves as a social capital essential for individual and community development. The Sustainable Development Goal (SDG) 4 emphasizes access to quality education, ensuring inclusive and equitable education for all. This paper examines the prospects and challenges of achieving SDG 4 among tribal communities in Kerala. Tribal communities face unique obstacles in accessing quality education, such as geographical remoteness, linguistic barriers, cultural differences, and gender discrimination. Despite Kerala's high literacy rate, tribal education lags behind that of the general population. Through a multi-dimensional approach, this study explores the prospects and challenges of tribal education using a case study method. Both primary and secondary data were utilized, with primary data gathered through interviews with students benefiting from the post-metric hostel scheme, tribal promoters, counsellors, social activists, and educationists. The paper highlights government interventions and constitutional frameworks promoting tribal education. It also provides social work interventions and other suggestions to strengthen tribal education and achieve SDG 4.

Keywords: Tribal Communities; Sustainable Development Goals; Rights and Challenges; Education Initiatives; Education and Employment; Transformative Potential; Community Engagement.

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1. Introduction

Education stands as a cornerstone of development, serving as both a fundamental right and a pivotal indicator of societal progress [20]. It plays a crucial role in the social sector welfare role of the state, acting as a litmus test for the inclusivity and effectiveness of government policies towards marginalized communities [17]. Tribal education, in particular, reflects how well a state integrates and supports its most vulnerable populations [2]. Irrespective of gender, ethnicity, or financial status, access to quality education is essential for fostering individual growth and community advancement, embodying a potent form of social capital [9].

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Aligned with this global imperative, the Sustainable Development Goals (SDGs) underscore the significance of education through SDG 4. This goal emphasizes the necessity of ensuring inclusive, equitable access to quality education and promoting lifelong learning opportunities for all. Education is not merely a process of transmitting knowledge, skills, and values from one generation to another; it is aimed at achieving individual and societal development [15]. Education is essential for achieving sustainable development goals (SDGs) and ensuring a happy and equitable society for all. SDG 4 focuses on quality education that caters to the needs of individuals and promotes a just and democratic society [8]; [6].

In the context of Kerala, renowned for its status as one of India's most literate states, attention is directed toward the prospects and challenges surrounding the fulfilment of SDG 4 within its tribal communities [19]. Despite Kerala's educational achievements, the performance of its tribal education initiatives does not parallel those of the general population, presenting a notable discrepancy [2]. Kerala's high literacy rate masks significant inequalities faced by its tribal communities in accessing quality education [18]. These discrepancies underscore the complex and multifaceted challenges that impede the achievement of SDG 4 among these communities [16].

Tribal communities worldwide face unique challenges in accessing quality education, ranging from geographical remoteness and linguistic barriers to cultural disparities and gender discrimination [4]. These impediments hinder progress toward the overarching goal of SDG 4, necessitating a nuanced understanding of the specific nuances inherent in tribal education contexts [23]. In Kerala, tribal communities are often located in remote and inaccessible regions, which complicates the delivery of educational services. Linguistic barriers also play a significant role, as many tribal languages are not included in the formal education system [22], leading to a disconnect between the language of instruction and the mother tongue of tribal students [11]. Additionally, cultural differences and gender discrimination further exacerbate the educational challenges faced by these communities [7].

This paper undertakes a comprehensive exploration of the multifaceted dynamics underpinning tribal education in Kerala and its intersection with the pursuit of SDG 4. Through the utilization of a case study method, this research illuminates the intricate interplay of prospects and challenges inherent in the pursuit of SDG 4 within Kerala's tribal communities. This study draws upon both primary and secondary data sources to inform its analysis. Primary data is garnered through interviews conducted with stakeholders such as students benefiting from the post-matric hostel scheme, tribal promoters, counsellors, social activists, and educationists deeply engaged in tribal education initiatives. By amplifying the voices of those directly impacted by these interventions, this research seeks to encapsulate the ground realities shaping the trajectory of tribal education in Kerala.

Furthermore, this paper shines a spotlight on governmental interventions and constitutional frameworks designed to bolster tribal education within the state. Kerala has implemented several policies and programs aimed at improving educational access and quality for tribal communities [23]. These include the establishment of residential schools, scholarships, and special coaching programs. The constitutional framework of India also provides for the protection and promotion of tribal education through various provisions [6]. However, the effectiveness of these interventions is often limited by implementation challenges and resource constraints.

Through an examination of social work interventions and the provision of actionable recommendations, this research endeavours to offer a roadmap for strengthening tribal education initiatives [3] and, by extension, advancing the attainment of SDG 4 within Kerala's tribal communities [19]. Social work interventions can play a crucial role in addressing the educational needs of tribal communities by providing targeted support and advocacy. These interventions can include community-based educational programs, awareness campaigns, and capacity-building initiatives for educators and community leaders [5]. Addressing the specific challenges faced by tribal communities can help bridge the gap in educational attainment and ensure that no one is left behind in the pursuit of SDG 4 [13].

The case study method allows for an in-depth exploration of the experiences and perspectives of various stakeholders involved in tribal education in Kerala. This includes students, educators, social workers, and government officials. By examining these cases, this research highlights the successes and challenges faced by tribal education initiatives. For instance, the post-matric hostel scheme has provided significant support to tribal students by offering financial assistance and accommodation, enabling them to pursue higher education [21]. However, challenges such as inadequate infrastructure, lack of trained teachers, and socio-cultural barriers persist. The case studies also underscore the importance of community engagement and participatory approaches in designing and implementing educational interventions.

The findings of this research have important implications for policy and practice. To achieve SDG 4, it is essential to adopt a holistic and inclusive approach to education that takes into account the unique needs and challenges of tribal communities [13]. This requires a concerted effort from all stakeholders, including government agencies, educational institutions, non-governmental organizations, and community leaders [12]. Policy recommendations include the need for targeted investments in educational infrastructure, teacher training, and curriculum development that is culturally relevant and inclusive.

Additionally, there is a need for robust monitoring and evaluation mechanisms to assess the impact of educational interventions and ensure accountability [10].

This paper embarks on a holistic exploration of tribal education in Kerala, situated within the broader discourse of achieving SDG 4. By elucidating the intricacies of both prospects and challenges, this research endeavors to contribute to a more comprehensive understanding of the educational landscape and inform targeted interventions aimed at realizing equitable, inclusive educational outcomes for all segments of society, including its tribal populations (The characteristics and education outcomes of American Indian students in grades 6-12 in North Carolina, 2023). Education for tribal communities in Kerala remains a critical area of focus in the state's efforts to achieve SDG 4 [19]. While significant progress has been made, there is still a long way to go to ensure that tribal students have equal access to quality education [1]. By addressing the unique challenges faced by these communities and implementing targeted interventions, it is possible to create a more inclusive and equitable education system that leaves no one behind.

2. Methods

2.1. Research Design

The current study adopts a qualitative narrative research design. Narrative research design is widely used to understand, describe, and examine change in situations [14].

2.2. Recruitment of the Participants

The participants of the study were divided into 3 categories. These are tribal students who have completed their formal education, tribal people who have acquired well-settled jobs, and people who are working for tribal education. The participants are from the Punchavayal, Koruthodu, and Muzhikkal locations in the Idukki and Kottayam districts of Kerala.

The four participants are the category of tribal students who have completed their formal education, the four participants are the category of tribal people who have acquired well-settled jobs, and the four participants are the category of people who are working for tribal education. Twelve participants were selected for the study using a purposive sampling technique with an inclusion criterion; the participants in the three categories have more than four years of experience in their field. This criterion was selected with the assumption that these participants would have a minimum of two - years of experience in their classified category. Thus, two participants who were satisfied with the criteria from six post-graduate departments in Marian were selected using expert analysis and contacted directly. The in-depth interviews were conducted using a structured interview guide.

2.3. Data Analysis

The collected data were analyzed using thematic analysis. The interviews were carried out in the local language, Malayalam. Therefore, the researchers translated and transcribed the recorded data and analyzed the data. The researchers coded the transcription and identified sub-themes from the codes, and sub-themes were later clubbed as major themes.

The three major themes that emerged from the analysis were:

- Change Patterns and Perceptions of the Students
- Increase the Reservation Seats for Tribal Students
- India to Abroad: Migration Patterns

2.4. Ethical Considerations

The researchers followed ethical measures throughout the study after getting ethical clearance from the participants. Voluntary consent was obtained from the participants by agreeing on the conditions that they voluntarily agreed to participate in the research, did not benefit from the research, and had the right to withdraw during the study. With participant consent, the handwritten data notes were noted in a notebook that was used exclusively for research purposes.

3. Results

The study results show that a smaller number of participants are women, and the majority of the participants are Male. There are no female participants included in the first category (Tribal students who have completed their formal education), compared to the other mentioned categories (Tribal people who have acquired well-settled jobs, People who are working for tribal education), observed equal ratio of male and male, female and female proportions (Table 1).

Table 1: Demographic characteristics of the participants

No.	Number	Category	Male	Female
1	4	Tribal students who have completed their formal education	4	-
2	4	Tribal people who have acquired well-settled job	3	1
3	4	People who are working for tribal education.	3	1

The data highlights a noticeable pattern in the distribution of males and females across different categories related to tribal education and employment. In the category of completed education, all individuals are male, with a total of four, and there are no females represented here. This suggests that males are more likely to complete formal education in this group. In the area of well-settled jobs, there are three males and one female, indicating that males constitute the majority of those who have secured stable employment. This pattern continues in the category of those working to support tribal education, where there is a closer distribution, with three males and one female.

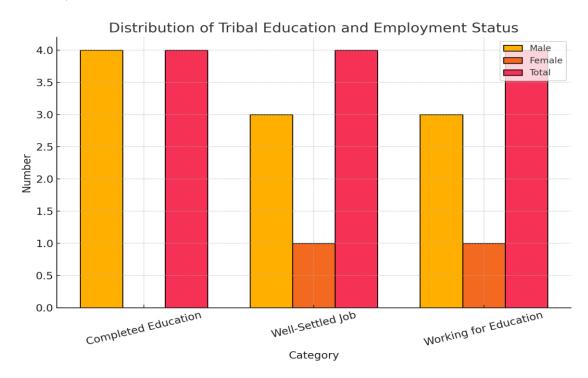


Figure 1: Distribution of Tribal Education and Employment Status

Figure 1 shows a more balanced gender representation in comparison to the other categories. Overall, males dominate across all categories, with no area showing a higher number of females than males, which points to a gender imbalance in tribal education and employment. This distribution suggests that there may be an opportunity to empower and support more females in tribal communities, encouraging them to complete their education and pursue well-established jobs.

3.1. Change Patterns and Perceptions of the Students

Most of the participants claim that the educational landscape in this community is shaped by familial influence, as younger siblings often follow the educational path of their eldest brother. However, this emulation is driven not by a genuine appreciation for education but by the pragmatic goal of securing employment. Children lack direction and purpose, viewing education solely as a means to an end rather than a transformative journey. This mindset perpetuates limited aspirations, with a resigned acceptance of a life centered on mundane labour. There's little ambition for governmental employment or higher life goals, highlighting the need for interventions to cultivate a deeper appreciation for education's transformative potential.

"The educational trajectory among these children follows a familial pattern, with younger siblings emulating the educational choices of the eldest son. The prevailing mindset lacks a clear life purpose, and the pursuit of education appears devoid of intrinsic value. The prevailing sentiment suggests a tendency to live aimlessly, highlighting a collective unawareness of the significance and transformative potential of education within the community" (Participant 6)

"Children lack a strong desire for learning, viewing education merely as a means to secure employment. Siblings typically follow the same educational path as the eldest brother without aspirations for greater achievements. The prevailing attitude suggests resignation to a life of mundane labour for daily wages, with no ambition for governmental employment. There is a notable absence of lofty life goals among these children, characterized by a resigned acceptance of their circumstances" (Participant 11)

The majority of the participants reported that the educational landscape in this community is influenced by familial influence, with younger siblings following their eldest brother's path. This lack of appreciation for education leads to limited aspirations and a resigned acceptance of mundane labour, highlighting the need for interventions to cultivate a deeper appreciation for education's transformative potential.

3.2. Increase the Reservation Seats for Tribal Students

The participants reported that expanding reserved seats for tribal students in schools is crucial for ensuring equitable access to education. Socio-economic barriers often prevent tribal communities from accessing education, exacerbating financial constraints. Increasing reservation levels would level the educational playing field, offering tribal students fair admission opportunities and addressing historical disadvantages. This proactive measure promotes social justice and empowers tribal communities' holistic development. Enhanced reservation not only tackles educational disparities but also fosters broader socio-economic progress, enabling tribal individuals to break the cycle of poverty and actively engage in society. This initiative promotes educational inclusivity and empowers tribal students to pursue their academic goals, fostering meaningful societal contributions.

"Increasing reserved seats for tribal students in schools is essential to promote equal access to education. Tribal communities often face socioeconomic barriers that hamper their educational opportunities. Many children want to study but are unable to because of their financial situation. By increasing reservation seats, we ensure that tribal students have equal opportunities for admission, thereby addressing many disadvantages and promoting inclusion in the education system. This not only promotes social justice but also contributes to the overall development and empowerment of tribal communities" (Participant 2).

"To overcome historical disadvantages and create equitable opportunity, tribal pupils must be given more reserved seats in schools. It guarantees that Indigenous communities, which are frequently disenfranchised and underrepresented, have improved access to quality education, promoting social fairness. This effort not only addresses educational inequities but also contributes to broader socio-economic development by empowering tribal people to participate meaningfully in society and break the cycle of poverty. Students who desire to study at their preferred educational institutions can also study" (Participant 5)

The participants ascertain that expanding reserved seats for tribal students in schools is crucial for ensuring equitable access to education addressing socio-economic barriers and historical disadvantages. This proactive measure promotes social justice, empowers tribal communities, and fosters socio-economic progress, enabling them to break poverty cycles and contribute meaningfully to society.

3.3. Kerala to Abroad: Migration Patterns

The statements provided by participants highlight educated tribal individuals from Kerala are increasingly migrating abroad in pursuit of better job prospects, higher pay, and professional advancement. This decision is often fuelled by the belief that foreign countries offer a broader job market and superior living standards. Seeking international exposure motivates them to broaden their horizons and access opportunities unavailable locally. While migration is seen as a strategic move for personal growth, concerns arise about its impact on the local society. Participants propose that encouraging educated tribals to remain in Kerala could foster community growth. Government intervention, particularly initiatives to repatriate migrants, is seen as key to reducing the overall migration rate and benefiting both individuals and the local society.

"Educated tribal individuals from Kerala often migrate abroad for better job opportunities, better remuneration, and desire for professional growth. This decision is often driven by the perception that foreign countries offer a more expansive job market and a better standard of living. Also, seeking international exposure and experience becomes a motivating factor for those who aim to broaden their horizons and access opportunities not easily available within Kerala. Migration is seen as a strategic move for personal and professional advancement. But if the educated tribals stayed here, the growing society would have a sense of purpose. Therefore, if the government is able to bring those who are not here, it will be possible to reduce the migration ratio" (Participant 1)

"Educated tribals from Kerala frequently go abroad in quest of better employment prospects and a higher level of living. Factors driving this movement include restricted employment possibilities in Kerala, particularly in locations where their talents and qualifications fit, as well as marginal suffering. Furthermore, the desire for job progression and higher living standards is prompting educated tribals to seek employment abroad. Some people regard international employment as a way to escape socio-economic issues while still advancing their personal and professional lives. It would be helpful to reduce migration by giving the remuneration for a job well done" (Participant 10)

The participants stated that the Kerala-educated tribal are migrating abroad for better job prospects, higher pay, and professional advancement. They seek international exposure but concerns about its impact on local society arise. Encouraging them to stay in Kerala could foster community growth, and government intervention could reduce migration rates.

4. Discussion

The research findings shed light on several critical aspects of the educational landscape and migration patterns among educated tribal individuals from Kerala.

Firstly, Replicating the extended family structure within the college culture enhances the students' sense of belonging and leads to higher retention rates for Indian students. Familial influence emerges as a significant factor shaping the educational trajectory of younger siblings, who often emulate the educational choices of their eldest brother. However, this emulation is driven more by pragmatic goals such as securing employment rather than a genuine intrinsic value for education, leading to limited aspirations and a resigned acceptance of mundane labour. This highlights the urgent need for interventions to instill a deeper appreciation for education's transformative potential within the community.

Secondly, the reservation policy in India aims to address the historical social and economic disadvantages faced by Scheduled Tribes (STs) by providing a fixed percentage of seats in employment, education, and politics. The expansion of reserved seats for tribal students in schools emerges as a crucial measure to ensure equitable access to education, addressing socio-economic barriers and historical disadvantages. This proactive step not only promotes social justice but also empowers tribal communities, fostering broader socio-economic progress and enabling them to break the cycle of poverty.

Lastly, Tribals in India have experienced migration due to various factors such as severe poverty, unemployment, displacement from forests and hills, and distress-driven migration to urban centers in search of jobs. The migration patterns of educated tribal individuals to foreign countries reflect a pursuit of better job prospects, higher pay, and professional advancement. While migration is seen as a strategic move for personal and professional growth, concerns about its impact on the local society highlight the importance of encouraging educated tribals to stay in Kerala. Government intervention, particularly initiatives to repatriate migrants, is seen as vital to reducing migration rates and benefiting both individuals and the local society.

These underscore the complex interplay between familial influence, educational access, migration decisions, and the need for targeted interventions to promote educational inclusivity and community development among tribal populations in Kerala.

5. Findings of the study

5.1. Geographical Remoteness as a Barrier

Geographical remoteness refers to the physical distance of tribal communities from educational facilities such as schools and colleges. In Kerala, where many tribal communities reside in remote or isolated areas, the lack of accessible educational infrastructure poses a significant challenge. Limited transportation options and infrastructure in these remote areas make it difficult for tribal students to attend schools regularly, hindering their access to quality education.

5.2. Linguistic Barriers

Tribal communities often have their distinct languages or dialects, which may differ from the language of instruction used in mainstream educational institutions. This linguistic disparity creates a barrier for tribal students, as they may struggle to understand and engage with educational materials presented in a language that is not their native tongue. As a result, these students may face difficulties in comprehending lessons, leading to lower academic performance and limited educational attainment.

5.3. Cultural Differences

Tribal communities have unique cultural norms, values, and practices that influence their educational experiences and outcomes. Traditional cultural practices may prioritize activities other than formal education, leading to differing perceptions of the value of schooling within tribal communities. Culturally sensitive educational approaches that acknowledge and respect tribal cultural traditions are essential for effectively engaging with and supporting the educational needs of tribal students.

5.4. Gender Discrimination

Gender discrimination persists within tribal communities and can significantly impact access to quality education. In some cases, cultural norms and traditional gender roles may limit educational opportunities for girls, resulting in lower enrolment rates and higher dropout rates compared to boys. Targeted interventions aimed at promoting gender equality in educational opportunities are crucial for addressing this disparity and ensuring that all tribal students have equal access to education.

5.5. Disparity in Performance

Despite Kerala's overall reputation as a highly literate state, there exists a significant performance gap between tribal education outcomes and those of the general population. Factors contributing to this disparity may include inadequate educational infrastructure in tribal areas, limited access to quality teaching resources, and socio-economic challenges faced by tribal communities. Addressing these disparities requires targeted interventions and investments in improving educational access and quality for tribal students.

5.6. Family Patterns and Perceptions

The study highlights familial patterns and perceptions that influence educational outcomes within tribal communities. For example, younger siblings often follow the educational patterns established by older siblings, which may perpetuate cycles of limited educational attainment within families. Additionally, perceptions within tribal communities regarding the value of education may vary, with some families placing less emphasis on formal schooling due to socio-cultural factors or economic constraints.

5.7. Educated Students Migration

Educated tribal students migrating from Kerala to foreign countries in search of better job opportunities is another significant trend identified in the study.

This migration of educated individuals from tribal communities can further exacerbate educational disparities within Kerala, as it may lead to a brain drain effect where the region loses skilled human capital essential for socio-economic development. Addressing the factors driving this migration, such as limited job opportunities or socio-economic challenges within Kerala, is essential for retaining educated tribal individuals and promoting local development.

6. Suggestions

- Infrastructure Improvement: Invest in improving educational infrastructure in remote tribal areas of Kerala to mitigate the geographical remoteness barrier. This includes building schools, providing transportation facilities, and ensuring access to basic amenities like electricity and clean water.
- Language Access Programs: Implement language access programs that cater to the linguistic diversity of tribal communities in Kerala. This could involve incorporating local languages or dialects into the curriculum and providing language support services to enhance comprehension and engagement among tribal students.
- Culturally Sensitive Curriculum: Develop and implement culturally sensitive educational curricula that reflect the values, traditions, and perspectives of tribal communities in Kerala. This approach ensures that educational materials resonate with tribal students and promote a sense of cultural pride and identity.
- Gender Equality Initiatives: Implement targeted interventions to address gender discrimination within tribal communities, particularly in relation to access to quality education. This may include initiatives to increase enrolment and retention rates among girls, as well as efforts to challenge traditional gender roles and stereotypes within educational settings.
- **Resource Allocation:** Allocate resources and funding towards improving educational outcomes for tribal students in Kerala. This includes increasing the availability of qualified teachers, providing access to quality teaching materials and resources, and investing in innovative teaching methodologies tailored to the needs of tribal learners.

- **Community Engagement:** Promote community engagement and involvement in educational initiatives targeting tribal communities. This could involve partnering with local tribal leaders, community organizations, and parents to co-design and implement educational programs that are culturally relevant and responsive to community needs.
- Awareness Campaigns: Launch awareness campaigns to highlight the importance of education within tribal communities in Kerala, addressing misconceptions and perceptions that may hinder educational participation. These campaigns can emphasize the long-term benefits of education for individuals, families, and communities, fostering a culture of education and lifelong learning.
- **Retention Strategies:** Develop strategies to retain educated tribal individuals within Kerala, thereby preventing brain drain and promoting local development. This may involve creating employment opportunities aligned with the skills and qualifications of educated tribal youth, as well as implementing policies to support entrepreneurship and economic empowerment within tribal communities.

7. Conclusion

The study explores the prospects and challenges of achieving Sustainable Development Goal 4 (SDG 4) with a focus on tribal education in Kerala. Despite Kerala's high literacy rates, tribal communities face unique obstacles like geographical remoteness, linguistic barriers, cultural differences, gender discrimination, and educational disparities, which hinder their access to quality education. The findings highlight the urgent need for targeted interventions to address these challenges and ensure inclusive and equitable quality education for all tribal students. Recommendations include improving infrastructure, implementing language access programs, developing culturally sensitive curricula, promoting gender equality, allocating resources effectively, engaging communities, raising awareness, and adopting retention strategies.

The study emphasizes the critical role of government interventions, constitutional frameworks, and social work in promoting tribal education and achieving SDG 4. Key stakeholders, including tribal students, well-settled tribal individuals, and those working for tribal education, play a vital role in driving positive change and overcoming educational barriers. By implementing these suggested interventions, policymakers, educators, and stakeholders can create a more inclusive and equitable educational system in Kerala, addressing the unique needs and challenges of tribal communities. Ultimately, this will contribute to the overall development and empowerment of tribal individuals and communities, aligning with the global development agenda of SDG 4. The study underscores education as a fundamental right and key development indicator, particularly for marginalized communities. Through concerted efforts and targeted interventions, Kerala can achieve SDG 4, ensuring access to quality education and lifelong learning opportunities for all.

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References

- 1. A. Alex, K. Vidyasagaran, A. Prema, and A. V. S. Kumar, "Analyzing the livelihood opportunities among the tribes of the western ghats in Kerala," Stud. Tribes Tribals, vol. 14, no. 1, pp. 11–17, 2016.
- 2. A. Mukherjee, W. R. Goe, and G. Middendorf, "The efficacy of public education as a means of social mobility for the indigenous tribal populations of rural India," J. Land Rural Stud., vol. 4, no. 2, pp. 225–241, 2016.
- 3. C. Aschenbrener, S. Johnson, and M. Schulz, "A new mentorship model: The perceptions of educational futures for native American youth at a rural tribal school," J. Child Adolesc. Behav., vol. 05, no. 04, p. 1000348, 2017.
- 4. C. Ihuoma, "Achieving Sustainable Development Goal (SDG) 4 among female nomadic children in Nigeria using open and distance learning strategies," in Tenth Pan-Commonwealth Forum on Open Learning, Edinburgh, Scotland, 2022.

- 5. C. J. Strickland, R. G. Logsdon, B. Hoffman, T. G. Hill, "Developing an academic and American Indian tribal partnership in education: A model of community health nursing clinical education" Nurse Educator, vol.39, no.4, pp.149-153, 2014.
- 6. G. C. Pal, "Poverty among tribals in India: Variations and vulnerabilities," J. Soc. Incl. Stud., vol. 1, no. 2, pp. 91–107, 2015.
- 7. J. K. Pattanaik, "Tribal Children in Odisha and their Right to Education in the Home Language," South Asia Res., vol. 40, no. 2, pp. 163–180, 2020.
- 8. K. Singh, "2030 global Education Agenda and challenges before India," Soc. Change, vol. 49, no. 2, pp. 329–343,
- 9. M. Iyoboyi and O. Muftau, "An assessment of human capital development in Nigeria through the lens of education," Int. Lett. Soc. Humanist. Sci., vol. 35, no.24, pp. 1–14, 2014.
- 10. N. Angrist, D. K. Evans, D. Filmer, R. Glennerster, F. H. Rogers, and S. Sabarwal, how to improve education outcomes most efficiently? A comparison of 150 interventions using the new learning-adjusted years of schooling metric. World Bank, Washington, DC, pp.1-62, 2020.
- 11. P. J. MacKenzie, "Mother tongue first multilingual education among the tribal communities in India," Int. J. Biling. Educ. Biling., vol. 12, no. 4, pp. 369–385, 2009.
- 12. P. Veerbhadranaika, R. Sampath Kumaran, S. Tukdeo, and A. R. Vasavi, "The education question' from the perspective of Adivasis: Conditions, policies, and structures (NIAS Report No. R7-2012)," Bangalore, p. 63, 2012.
- 13. R. Jones et al., "Educating for Indigenous health equity: An international consensus statement," Acad. Med., vol. 94, no. 4, pp. 512–519, 2019.
- 14. R. Rupavath, "Tribal education: A perspective from below," South Asia Res., vol. 36, no. 2, pp. 206–228, 2016.
- 15. S. Ahmad, S. Umirzakova, G. Mujtaba, M. S. Amin, and T. Whangbo, "Education 5.0: Requirements, enabling technologies, and future directions," DOI: 10.48550/arXiv.2307.15846, Press.
- 16. S. Chugh, "Progress in literacy and elementary education: The study of Himachal Pradesh, Kerala and Mizoram," Soc. Change, vol. 39, no. 2, pp. 216–238, 2009.
- 17. S. L. Reinman, "Open knowledge repository," Ref. Rev., vol. 29, no. 5, pp. 21–22, 2015.
- 18. S. Scaria, "Do caste and class define inequality? Revisiting education in a Kerala village," Contemp. Educ. Dialogue, vol. 11, no. 2, pp. 153–177, 2014.
- 19. S. T. Thomas, E. T. Thomas, M. McLean, T. T. Titus, "Paving the way to achieving the United Nations Sustainable Development Goals for women from Indigenous communities: lessons from Attappady, India," Discov. Sustain., vol. 2, no. 1, pp.1-16, 2021.
- 20. S. Uvalić-Trumbić, J. Daniel, "Sustainable development begins with education," J. Learn. Dev., vol. 3, no. 3, pp. 3-8, 2016.
- 21. T. R. Satyakeerthy et al., "Reorienting tribal education: Role of ignou in Andaman and Nicobar islands," Int. J. Adv. Res. (Indore), vol. 8, no. 7, pp. 115–120, 2020.
- 22. V. Muneer and T. Mohamed Saleem, "Language associated problems in tribal residential schools of Kerala," vol. 8, no. 4, pp. 145-149, 2020.
- 23. V. R. Velusamy, "A contemporary overview about status and challenging issues of tribal education in India," International Journal of Asian Education, vol. 2, no. 2, pp. 277–284, 2021.