

Review Article

Empowering Particularly Vulnerable Tribal Groups in India: Insights and Strategies.

Abstract

Particularly Vulnerable Tribal Groups (PVTGs) are special communities in India facing significant challenges due to their marginalized status and unique cultural practices. PVTGs, comprising diverse ethnic communities across the country, encountering a multitude of obstacles, among them, the barrier of inaccessibility, exploitation, illiteracy, lack of healthcare, and remoteness, which perpetuate cycles of poverty and marginalization. However, their deep connection to nature, cultural diversity, and traditional conservation practices present unique strengths and opportunities for sustainable development. This explores the gap that exists within the community, various initiatives and government interventions aimed at addressing the needs of PVTGs, including healthcare programs, educational support, and livelihood enhancement schemes. Additionally, it underscores the potential of eco-tourism as a sustainable business model for PVTGs, highlighting the importance of community involvement and responsible tourism practices. Despite progress made by government schemes, there remains a critical need for sustained efforts to address infrastructure deficiencies, promote sustainable livelihoods, and preserve cultural heritage. By advocating for inclusive growth, awareness-building, and equitable access to resources to empower PVTGs we can foster a more just and equitable society in India. This comprehensive review examines the status, challenges, and opportunities surrounding PVTGs in India, focusing on their socio-economic, health, educational, and livelihood aspects.

Keywords: PVTGs, Health care, Livelihood promotion, Education status, Ecotourism, Youth empowerment

Introduction

"Tribes" typically denotes communities residing in remote, unspoiled environments such as forests and mountains, far removed from modern civilization. These groups have distinct

lifestyles governed by established rules, morals, customs, traditions, language, and religious practices. Anthropologically, a "tribe" constitutes a social entity characterized by shared culture, language, basic economy, political structure, religious beliefs, and ancient laws. In India, these tribal communities have been known by various names such as Adivasi, forest tribes, hill tribes, backward tribes, primitive tribes, or indigenous people (often practicing animism) for centuries. In some regions, they're referred to as first people, first nations, aboriginal or native people, or autochthonous people, denoting their status as the earliest known inhabitants of the area compared to more recent settlers or colonizers (10).

Tribal Population in India

India boasts the world's second-largest tribal population, following Africa. According to the 2011 census, India's tribal populace numbers 10.43 crore, making up 8.6% of the total population and inhabiting 15% of the country's landmass. Within India, there exist 705 scheduled tribes (STs) and subtribes, with 75 ethnic groups categorized as "Particularly Vulnerable Tribal Groups" (PVTGs) and are spread over 18 states and one Union Territory (33). In Tamil Nadu, the Indian government acknowledges the presence of 36 STs across 38 districts. As per the 2011 census, Tamil Nadu housed 794,697 individuals from ST communities, comprising 401,068 males and 393,629 females. Among them, 660,280 resided in rural areas and 134,417 in urban areas, with the ST population accounting for 1.1% of Tamil Nadu's total population (10).

Particularly Vulnerable Tribal Group

In 1973, the Ministry of Tribal Affairs set up 'Dhebar Commission' that named the Primitive Tribal Groups (PTGs) as a separate category among the tribes who are less developed among all the tribal groups. The PTGs were again renamed as PVTGs in 2006. These certain tribes have been characterised on the basis of their greater 'vulnerability' (although the precise contours of their vulnerability have not been clearly defined). Food insecurity and poverty are the root causes for the record of high incidence of malnutrition, morbidity and mortality among the tribal population (including PVTGs) in different tribal pockets of India(33).

In general, the PVTG population stands at the bottom of the human development index as well as the overall national development index. Underdevelopment among the PVTG population is primarily due to lack of livelihood resources and food resources in their habitats (34). The

issue of tribal livelihood, poverty alleviation and food security cannot be addressed with sectoral approaches of land management. Link should be developed between agriculture, forest, water and other sectoral landscape level activities, the institutions and policies (22). Despite various initiatives, the Human Development Report 2011 from the Planning Commission highlights the low human development index among tribal populations, particularly in terms of health, education, and income. This disparity is even more pronounced among the PVTGs (32). Characteristics of PVTGs are represented in Figure 1.

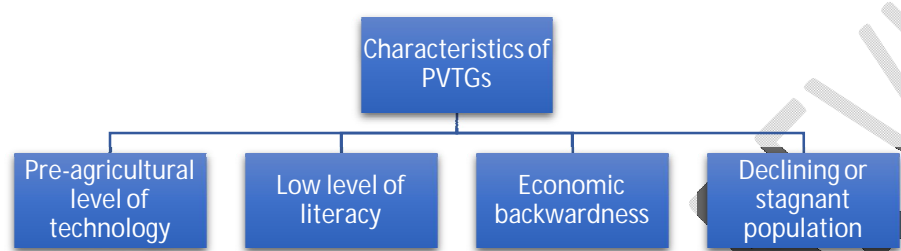


Figure 1. Characteristics of PVTGs (Source: Authors)

Particularly Vulnerable Tribal Group in India

PVTGs are dispersed across various geographical regions of the nation. According to data from the Ministry of Tribal Affairs and the 2011 Census, Odisha holds the highest population of PVTGs with 8.66 lakh individuals, followed by Madhya Pradesh with 6.09 lakh and Andhra Pradesh (including Telangana) with 5.39 lakh. In total, the PVTG population exceeds 40 lakhs, with Odisha's Saura community being the largest PVTG at 5.35 lakh members. Among them, 12 PVTGs have populations exceeding 50,000, while the remaining groups have populations of 1,000 or fewer individuals. The Sahariya (an ethnic tribal group in the state of Madhya Pradesh) PVTG boasts the largest population with 450,217 members, whereas the Sentinelets and Andamanese PVTGs have very small populations, numbering 39 and 43, respectively (17). Figure 2 represents 75 ethnic PVTG groups in India.

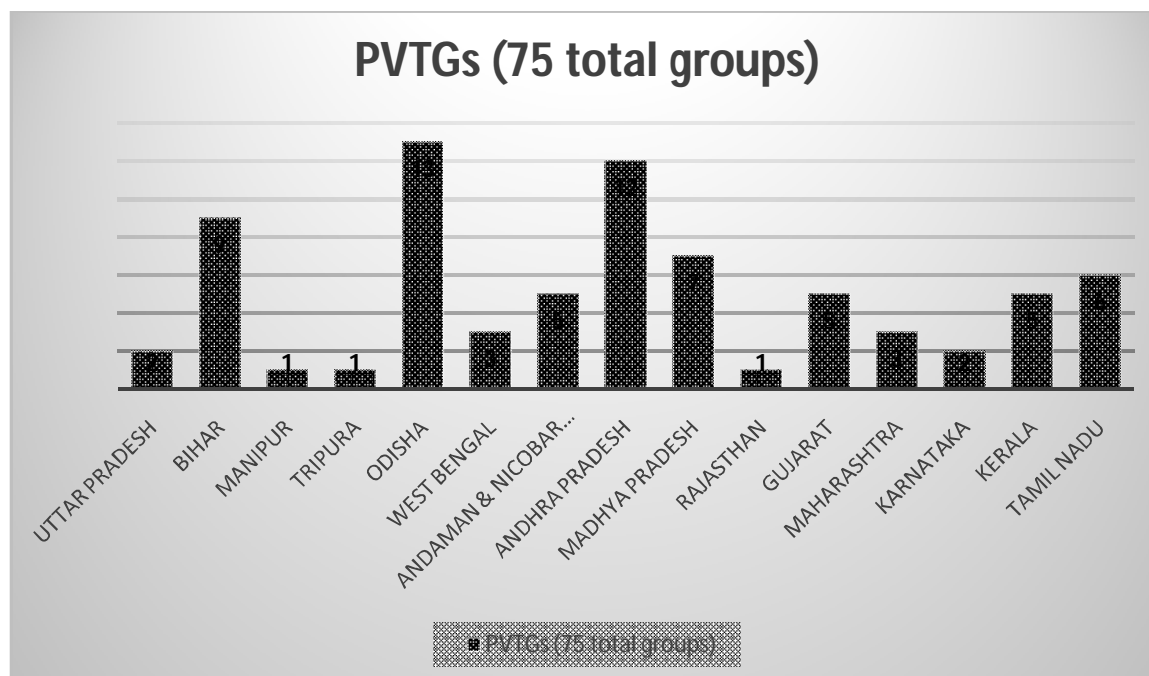


Figure 2. 75 ethnic PVTG groups in India. (Source: Authors)

There are 36 groups of STsin Tamil Nadu, with six tribal groups identified as PVTGs by the Government of India. These include the Todas, Kotas, Kurumbas, Irulas, Paniyas, and Kattunayakas, who primarily inhabit the Nilgiris district and its surrounding areas. PVTGs are designated as such when the population of certain tribal groups either decreases or remains stagnant. Other tribal communities scattered across the country are referred to as "dispersed tribes." PVTGs have distinct cultural patterns (10).Figure 3 represents the info graph of tribal classification.

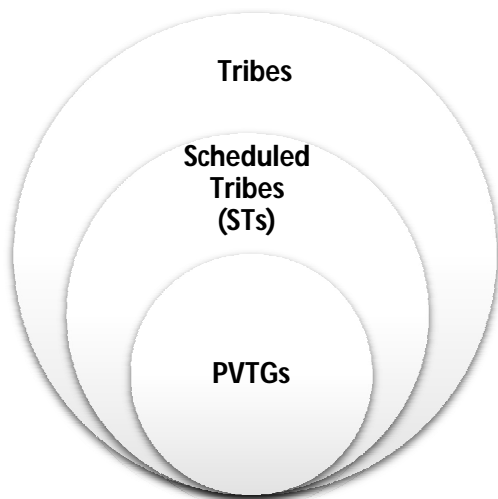


Figure 3. Info graph of Tribal Classification (Source: Authors)

Health and Nutritional Status of PVTGs in India

Alarming prevalence of undernourishment among children, especially in rural and tribal areas of India, highlighting high rates of underdevelopment and undernutrition among PVTGs, such as the Bharia tribe in Madhya Pradesh (19). Challenges faced by Indian adolescents, particularly those from PVTGs and marginalized communities, including prevalent out-of-school adolescents, especially in West Bengal, hindering their education and well-being (7).

Influence of traditional beliefs on health, impacting the health and well-being of PVTGs, leading to prevalent issues like malnutrition and various diseases, emphasizing the need to integrate modern healthcare initiatives with traditional practices and raise awareness among PVTGs about the benefits of biomedical healthcare (30). Increased vulnerability among tribal communities, including PVTGs, due to the neoliberal developmental approach, depleting their natural resources and jeopardizing their livelihoods, advocating for granting PVTGs ownership and access rights to natural resources to address their vulnerability effectively (26).

Health challenges faced by indigenous groups, especially PVTGs, in urbanizing in Odisha, emphasizing the need for tailored healthcare solutions, community involvement, and long-term strategies to address health issues exacerbated by urbanization (13). Healthcare-seeking behaviours of tribal communities, highlighting factors such as cultural influences and geographic isolation that deter them from utilizing government healthcare services, calling for a holistic approach involving stakeholders to address these complexities effectively (8).

Maternal health challenges faced by women due to poverty, illiteracy, lack of infrastructure, and traditional beliefs, emphasizing the need for government intervention to encourage proper prenatal care and shift from traditional home deliveries to hospital births (14). Challenges faced by PVTGs in Andhra Pradesh, including poverty, malnutrition, and social exclusion, calling for tailored food policies and strengthened developmental programs to uplift these marginalized communities (34).

Food insecurity among the Sahariya community, attributing it to factors like landlessness, lack of resources, and corruption, highlighting the need for government initiatives to address nutritional challenges and ensure food affordability, availability, quality, and safety for the vulnerable population (20).

Addressing Nutritional Challenges in Tribal Communities: Recommendations for Action

The Global Nutrition Report underscores the critical need to address poor diets and malnutrition for the well-being of both individuals and the planet. PVTGs, facing unique challenges in accessing nutritious diets due to their heavy labor involvement, require targeted interventions. Recommendations include effective monitoring and implementation of programs like anganwadi and mid-day meals tailored to tribal needs, resolving land rights issues, facilitating access to identification and ration cards, enhancing entitlements in the Public Distribution System (PDS), prioritizing implementation over policy formation, fostering community-led initiatives, and ensuring adequate financing for nutrition improvement programs in tribal populations. These measures aim to address the specific nutritional challenges faced by tribal communities and promote their overall well-being (20).

Educational Status of PVTGs In India

Education is fundamental for the progress of individuals, communities, and states. Despite efforts for tribal development in India since independence, there has been a failure to comprehend the tribal economy and livelihood system, which is rooted in a "need-based" natural economy. This, coupled with ecological variations and marginalization, poses challenges to their survival and impacts their education and livelihoods. Historically, tribal communities did not prioritize sending their children to educational institutions, but there has been a shift towards education in recent times. However, factors influencing their educational status may hinder their

progress, as illustrated in a theoretical diagramas figure 4,highlighting the comparatively poor educational status of the Birhor tribe in West Bengal compared to other tribal communities and the overall educational status of the state(4).

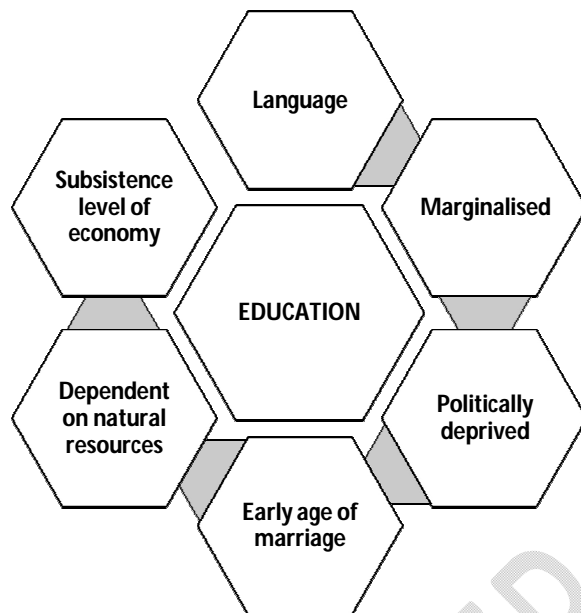


Figure 4. Factors influencing educational status (Source: Authors)

The Youth of Particularly Vulnerable Tribal Groups (PVTGs) in India

Background of PVTGs Youth

Tribal youth, especially those belonging to PVTGs, have distinct characteristics and circumstances that set them apart from both urban and rural youth in India. These youths typically marry early and engage in livelihood activities to support their families, relying heavily on forest resources for sustenance. However, PVTGs face numerous challenges such as inadequate healthcare, limited transportation, poor connectivity. Although government initiatives, channelled through the Integrated Tribal Development Agency (ITDA), aim to improve their situation by providing support for income generation, education, healthcare, agricultural assistance, and raising awareness about human rights and health issues, these programs often fall short in terms of both quantity and quality. Consequently, PVTG youths continue to lag behind in society, experiencing a low quality of life. Livelihood

opportunities are crucial for meeting their basic needs, and the lack thereof may force migration, exacerbate poverty, and lead to health problems for themselves and their families. Migration rates are notably high in tribal areas due to insufficient livelihood options, including income generation programs. While this examined the livelihood challenges faced by PVTG youths, there remains a need for further research in this area to better understand and address their needs (18).

Steps to empower the PVTGs Youth

The Figure 5 given below outlines the strategies for empowering PVTGs youth in India, drawn from insights gained in the current research. It emphasizes the need for sustainable livelihoods available year-round in their villages. Introducing new livelihoods through skill development can boost income for PVTGs youth, while fostering agency-friendly entrepreneurship and encouraging the cultivation of commercial crops. Enhancing their education, business acumen, and access to modern marketing techniques can further strengthen PVTGs youth and promote their products. These measures aim to curb migration and enhance the overall well-being of PVTGs communities (18).

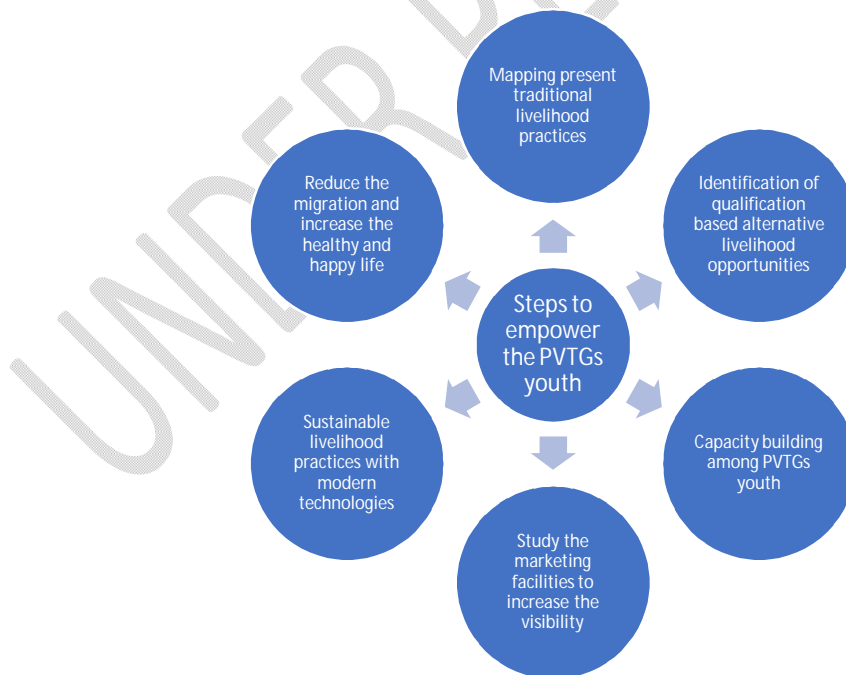


Figure 5. Steps to Empower the PVTGs Youth (Source: Authors)

This focuses on the livelihood practices of youth within PVTGs, who traditionally rely on forest and natural resources. However, the tribal economy has evolved over time, and the development of PVTGs remains poor, resulting in a low quality of life. Despite limited influence from globalization, urbanization, and privatization, PVTGs youth require increased financial support from government and NGOs to pursue entrepreneurship. The study also advocates for separate entities to access government schemes and urge media coverage of their conditions. Academics should conduct research on the economic challenges faced by PVTGs youth, who need greater assistance to enhance their quality of life (18).

Livelihood and Socioeconomic Status of PVTGs

The plan for helping PVTGs says it's important to include everyone and not just focus on one state. It suggests making a single agency to organize efforts and make plans that fit each group's needs. It also says we should listen to the communities themselves and give them power to make decisions, which is really important for making these plans work well. This underscores the importance of bottom-up methodologies and empowering communities (25). Socio-ecological approach for sustainable livelihoods underscores the significance of a socio-ecological approach for sustainable livelihood development among tribal communities, particularly for PVTGs. It emphasizes community engagement, participatory governance, and the adoption of new technologies for natural resource conservation and management within forest landscapes (23). Socio-economic assistance for vulnerable tribal groups focus is on the need for special assistance initiatives to improve the socio-economic status and overall living standards of PVTGs. Thorough implementation of existing policies and programs, along with innovative and participatory approaches, is advocated to empower tribal communities and reduce poverty (28).

Challenges and Livelihood Strategies of PVTGs examines the socio-economic conditions, challenges, and livelihood strategies of specific PVTGs in Karnataka. It highlights issues such as low literacy rates, limited social participation, and reliance on traditional livelihood practices. Targeted interventions are recommended to enhance their quality of life while preserving their cultural heritage (29). Livelihood strategies of the Dongria Kondh tribe, this section explores their livelihood centered around the forest and agricultural practices. Challenges such as limited

government support and crop failure are discussed, along with the need for diversification of livelihood strategies to ensure sustainability (3).

Classification and development schemes for PVTGs explored into, emphasizing key characteristics and government interventions aimed at their upliftment. It highlights the importance of proactive roles from both state and non-state actors in addressing the socio-economic challenges faced by PVTGs(16). Policy recommendations for tribal development, revolves around policy recommendations for tribal development, focusing on reducing dependency on forest resources, promoting modern agriculture, and ensuring equitable access to resources. Suggestions for education, awareness campaigns, and vocational training are also provided to empower tribal communities(1). Challenges in livelihood enhancement policies, including allocation reductions and minimal growth in various initiatives post-COVID-19. It underscores the need for urgent and special focus to revitalize India's livelihoods landscape and uplift marginalized communities(31).

Population Growth and Socio-economic Indicators of PVTGs analysis of census data reveals insights into the population growth and socio-economic indicators of PVTGs in Madhya Pradesh. Discrepancies between growth rates and socio-economic status among different PVTGs are discussed, highlighting the need for targeted development programs(27). Empowerment Through Targeted Program emphasizes the importance of targeted programs to uplift PVTGs and integrate them into mainstream society. It underscores the role of effective management and implementation in ensuring the success of such programs and empowering tribal communities(5).

Focused on technological integration, this part highlights how modern agricultural techniques can enhance the lives of tribal communities. It emphasizes the importance of holistic development and self-reliance promoted through technological advancements(21).The significance of literacy and government support in tribal development. It advocates for prioritizing tribal development, preserving cultural heritage, and combating corruption to promote lasting development and empowerment(35).

MGNREGA and Livelihoods of the Vulnerable Groups

The MGNREGA scheme aims to support vulnerable groups by providing more wage employment opportunities and prioritizing them for individual assets. Special interventions included designating officers to address the needs of vulnerable groups and issuing special job cards. However, there's limited literature assessing the implementation of these interventions, with studies highlighting issues like gender inequality and low participation among vulnerable groups. The scheme also supports the development of individual assets for marginalized households, but there's a lack of research on its impact on specific vulnerable groups like PVTGs and women-headed households. Additionally, it's crucial for MGNREGA assets to be climate resilient and tailored to local ecological conditions, which programs like ICRG aim to address (12).

The study focused on assessing the impact of assets created under MGNREGA on vulnerable groups like PVTGs, women-headed households, and landless families. It revealed limited benefits for these groups due to factors like lack of awareness, unsuitable asset types, and decision-making issues. Recommendations include targeted research, dedicated outreach teams, inclusion of skill development, and ensuring women's ownership rights over assets. There's also a call for better integration of vulnerable groups in asset distribution and expenditure allocation in MGNREGA planning. Additionally, systemic links between infrastructure works and other departmental programs are suggested to enhance benefits for vulnerable households(12).

The MGNREGA is often hailed as a "silver bullet" in the fight against rural poverty and unemployment. By generating demand for productive labour in villages, it provides an alternative source of livelihood, with the potential to reduce migration, curb child labour, alleviate poverty, and foster self-sustainability in villages through the creation of productive assets like road construction, water tank cleaning, and soil and water conservation work. As the largest anti-poverty program globally, MGNREGA is expected to have a significant impact on tribal livelihoods in the future(11).

Developing Eco-Tourism as a Sustainable Business for PVTGs in India

To ensure economic and social prosperity for India's tribal communities, a meticulously planned, sensitively executed, and comprehensively monitored policy intervention is imperative. Tribal populations, often referred to as indigenous, aboriginal, moolnivasi, adivasi, janajati, or hunter-gatherers, constitute a significant portion of India's demographic landscape. World Tribal

Day celebrated on August 9th annually, National Tribal Pride Day on November 15th underscore the significance of tribal heritage and culture (14).

The intangible heritage possessed by tribal communities, including traditional knowledge systems, embodies invaluable elements beneficial to humanity at large. Tourism presents a platform through which the rich cultural heritage of tribes can be showcased, encompassing folklore, attire, adornments, lifestyle, sustainable practices, indigenous healing methods, and medicinal flora. By leveraging tourism, tribal communities can derive economic benefits while safeguarding and promoting their cultural legacy, thereby averting the erosion of their heritage (14).

Tribal tourism epitomizes an immersive travel experience wherein visitors are afforded the opportunity to immerse themselves in authentic indigenous life, encompassing habitat, heritage, history, handicrafts, culture, values, and traditions. Although still in its infancy in India, this concept finds resonance in countries like Ethiopia, Kenya, Ecuador, Peru, and Brazil. Ethnic tourism, tribal tourism, indigenous tourism, rural tourism, eco-tourism, nature-based tourism, agri-tourism, and community-based tourism represent closely aligned terminologies encapsulated within the broader framework of alternative tourism, emphasizing sustainable and community-centric tourism models (14).

Recognizing the multifaceted benefits of ethnic tourism, such as cultural revival, socio-economic empowerment, and even political advocacy for local minority populations, the Ministry of Tourism inaugurated the 'Development of Tribal Circuit in Chhattisgarh' project in 2018 under the Swadesh Darshan Scheme. This initiative marked the inception of tribal circuit development, with Jashpur emerging as a focal point for ethnic tourism. Various destinations within Chhattisgarh, including Sarodha Dadar, Gangrel, Nathianwagaon, Kondagaon, Jagdalpur, Chitrakoot, and Tirathgarh, have been transformed into ethnic tourism hubs, contributing to the overall enhancement of the tribal tourism landscape (14).

In 2021, the Ministry of Tourism released a document titled 'National Strategy and Road Map for Development of Rural Tourism in India - An Initiative towards Aatmanirbhar Bharat,' outlining a SWOT analysis of rural tourism. Emphasizing the diverse tourism potential across mainland and tribal regions, the document advocates for the identification of tourism clusters within tribal areas to harness their unique cultural heritage for sustainable development and

economic empowerment, aligning with the vision of Aatmanirbhar Bharat (Self-reliant India) (14).

Strength, Weakness, Opportunities and Challenges of PVTGs

SWOC analysis is a strategic planning tool used to assess the internal strengths and weaknesses, as well as external opportunities and challenges, facing an organization, project, or community. It helps to identify factors that are favourable or advantageous (Strengths and Opportunities), as well as those that are unfavourable or hindering (Weaknesses and Challenges). SWOC analysis aims to inform decision-making by providing a comprehensive understanding of the current situation and the factors that may impact future outcomes (2).

Table 1: Represents the SWOC analysis of PVTGs(Source: Authors)

Strengths	Weaknesses
<ul style="list-style-type: none"><li data-bbox="240 1003 792 1255">• Close to Nature: PVTGs often have a deep connection to nature and natural resources, which can be leveraged for sustainable livelihoods and cultural preservation.<li data-bbox="240 1388 792 1640">• Diversity: PVTGs represent diverse cultural traditions, languages, and lifestyles, offering unique insights and perspectives that contribute to cultural richness and diversity.	<ul style="list-style-type: none"><li data-bbox="855 1003 1411 1255">• Inaccessibility: Many PVTG communities reside in remote and inaccessible areas, limiting their access to basic services, markets, and opportunities for development.<li data-bbox="855 1339 1411 1640">• Exploitation: PVTGs are vulnerable to exploitation due to their marginalized status, leading to issues such as land grabbing, labour exploitation, and loss of traditional rights.<li data-bbox="855 1675 1411 1879">• Illiteracy: High levels of illiteracy within PVTG communities hinder their ability to access information, education, and employment

	opportunities, perpetuating cycles of poverty and marginalization
--	---

UNDER PEER REVIEW

<ul style="list-style-type: none"> • Conservation: PVTG communities often practice traditional conservation methods and have indigenous knowledge about preserving natural ecosystems, contributing to biodiversity conservation efforts 	<ul style="list-style-type: none"> • Lack of Healthcare: PVTGs often lack access to adequate healthcare facilities and services, leading to poor health outcomes and increased vulnerability to diseases. • Remoteness: The remote locations of PVTG settlements pose logistical challenges for implementing development programs, infrastructure projects, and service delivery.
<p>Opportunities</p> <ul style="list-style-type: none"> • Value Addition: PVTG communities can add value to their traditional products and crafts through market linkages, branding, and value chain interventions, creating income-generating opportunities. • Availability of Natural Nutritive Food: PVTG areas are rich in natural resources and biodiversity, providing access to nutritious food sources that can improve dietary diversity and nutritional outcomes. • Ecotourism: The unique cultural and ecological heritage of PVTG areas can be leveraged for eco-tourism initiatives, generating 	<p>Challenges</p> <ul style="list-style-type: none"> • Limited Development: PVTG communities often face neglect and marginalization in development planning and resource allocation, resulting in limited access to basic services, infrastructure, and opportunities for socio-economic advancement. • Climate Change: PVTG communities are particularly vulnerable to the impacts of climate change, including extreme weather events, shifting agricultural patterns, and loss of traditional livelihoods, exacerbating existing vulnerabilities and threatening their

income, promoting cultural exchange, and supporting conservation efforts.	way of life.
---	--------------

Conclusion

In India, PVTGs emphasizing the imperative for tailored interventions to uplift their socio-economic status and improve their overall well-being. Ranging from health disparities and educational limitations to livelihood struggles deeply rooted in historical marginalization and ecological dependencies. While government schemes have shown positive impacts, sustained efforts are needed to address infrastructure deficiencies, promote sustainable livelihoods, and preserve cultural heritage. Initiatives such as eco-tourism development and entrepreneurship programs hold promise in empowering PVTGs, but their success depends on effective implementation and community involvement. Fostering awareness, combating discrimination, and ensuring equitable access to resources are essential steps toward fostering inclusive growth and enhancing the lives of tribal communities, ultimately contributing to a more just and equitable society in India. This review has helped address the gap that exists within the community, hence with the strategies gap can be fulfilled.

Reference

1. Agarwal, H. (2018). Socio Economic Development of PVTGs in India: Problems and Solutions. *Developmental Issues of Tribes (1 ed., pp. 92-105)*. New Delhi: Shandilya Publications.
2. Aithal, P. S., & Kumar, P. M. (2015). Applying SWOC analysis to an institution of higher education. *International Journal of Management, IT and Engineering*, 5(7), 231-247.
3. Bocha, K., & Srinivas, B. K. Livelihood Practices and sustenance among Dongria Kondhs of Odisha. 2021

4. Chakraborty, P. (2021). Educational status of PVTGs in West Bengal: A case study on birhor. *Asian Man (The)-An International Journal*, 15(2), 211-216.
5. Chellasamy, P., & Kannamudaiyar, S. Factor influencing the particularly vulnerable tribal groups livelihood towards tribal co-operative marketing development federation: A study with reference to Nilgiris District. *International Journal of Health Sciences*,(II), 10886-10892.
6. Cole, S. (2007). Beyond authenticity and commodification. *Annals of tourism research*, 34(4), 943-960.
7. Dey, A. (2019). Health Situation of Out of School Adolescent Girls A Study of Particularly Vulnerable Tribal Groups PVTGs in Purulia West Bengal.
8. Gandhi, S., Verma, V. R., & Dash, U. (2017). Health seeking behaviour among particularly vulnerable tribal groups: A case study of Nilgiris. *Journal of Public Health and Epidemiology*, 9(4), 74-83.
9. Gandhimathi, S. (2016). Social policies and programmes for tribal development in Theni district. *Int J Adv Res*, 4, 1680-5.
10. Ganesh, B., Rajakumar, T., Acharya, S. K., Vasumathy, S., Sowmya, S., & Kaur, H. (2021). Particularly vulnerable tribal groups of Tamil Nadu, India: A sociocultural anthropological review. *Indian Journal of Public Health*, 65(4), 403-409.
11. Hembrom, S. (2017). Changing Tribal Livelihood Pattern through MGNREGA: A Study of Mayurbhanj District of Odisha. *The Researchers' International Research Journal*, 3(2), 1-5.
12. House, I. G. (2019). Impact of MGNREGA assets on Livelihoods of Vulnerable Groups in ICRG Districts of Chhattisgarh.
13. Kanrar, P., Goswami, M., & Roy, S. (2023). Health issues of the indigenous communities with special reference to the Particularly Vulnerable Tribal Groups (PVTGs) of Odisha: a review. *Papers on Anthropology*, 32(1), 45-80.
14. [Kurukshetra September 2022 \(English\) - Google Books](#)
15. Lakshmi, M. R., & Eswarappa, K. (2022). Quotidian beliefs and practices in maternal and child health care: an empirical study among the Irula tribe of Tamil Nadu. *Contemporary Voice of Dalit*, 2455328X211066193.

16. Mathew, G. S., & Kasi, E. (2021). Livelihoods of vulnerable people: An ethnographic study among the Birhor of Chhattisgarh. *Asia-Pacific Journal of Rural Development*, 31(1), 127-142.
17. Ministry of tribal affairs [Ministry of Tribal Affairs - Government of India](#)
18. Mutluri, A. (2020). The Youth of Particularly Vulnerable Tribal Groups (PVTGs) and their Livelihood Practices in India. *Antrocom: Online Journal of Anthropology*, 16(2).
19. Nutritional status among school going boys and girls (5-17 years) of Bharia Tribe (PVTG) of Patakot – District Chhindwara (M. P.) India A. K. Ahirwar¹ and R. K. Gautam²
20. Patel, P. K., & Mitra, R. P. (2023). Prevalence of Chronic Food Insecurity, Policies, and Redressal Patterns among the PVTGs: A Case Study of Sahariya Tribe from India.
21. Rajeevan, T. V., Rajendrakumar, S., Senthilkumar, T., Udhaya Kumar, S., & Subramaniam, P. (2019, November). Community development through sustainable technology—a proposed study with Irula tribe of Masinagudi and Ebbanad villages of Nilgiri District. In *First International Conference on Sustainable Technologies for Computational Intelligence: Proceedings of ICTSCI 2019* (pp. 257-267). Singapore: Springer Singapore.
22. Reed, James., Deakin, Liz., Sunderland, Terry., 2015. What are 'Integrated Landscape Approaches' and how effectively have they been implemented in the tropics: a systematic map protocol. *Environmental*, volume 4, Article number: 2
23. Roy, S. B., & Mukhopadhyay, R. (2020). Socio-Ecological Approaches to Integrated Landscape Management for Conservation Based Sustainable Livelihood For Vulnerable Tribes: Participatory Action Research For Developing Replicable Models. *International Journal of Economic Research*, 17(1), 59-70.
24. S.Kannamudaiyar, S., & Chellasamy, P. DEVELOPING ECO-TOURISM AS A SUSTAINABLE BUSINESS FOR PVTG TRIBALS: OPPORTUNITIES AND CHALLENGES-WITH SPECIAL REFERENCE TO TAMILNADU. *Inspiring 7G's in Business Growth and Sustainability*, 81.2023
25. Sahani, R., & Nandy, S. K. (2013). Particularly vulnerable tribal groups in India: An overview. *Journal of the Anthropological Survey of India*, 62(2), 851-865.

26. Sahoo, U. K. INCREASING MALNUTRITION-LED MORTALITY AMONG JUANG TRIBAL COMMUNITY: A SITUATIONAL ANALYSIS IN NAGADA VILLAGE, ODISHA.2017
27. Sharma, R. K., & Roy, J. (2016). Socio-economic and demographic characteristics of three most backward tribes of Madhya Pradesh. *Tribal Health Bull*, 23(1), 77-87.
28. Singh, A. K. (2017). Status of Particularly Vulnerable Tribal Groups (PVTGs) in India: Special Reference to the State of Chhattisgarh. *Geo Analyst*.
29. Singh, J. E., Deepak, R., Babshetti, V., & Madhu, B. K. (2023). Socio-Economic Status Of Particularly Vulnerable Tribal Groups (Pvtgs) In Karnataka: A Comprehensive Study. *Journal of Namibian Studies: History Politics Culture*, 36, 156-165.
30. Sonowal, C. J., & Konch, P. (2021). Disease Burden, Health-belief and Treatment-seeking Behaviour among the Particularly Vulnerable Tribal Groups of India.
31. State of India's Livelihoods Report 2022([SOIL-Report-final_web-version.pdf \(livelihoods-india.org\)](#))
32. Statistical Profile of Scheduled Tribes in India, Ministry of Tribal Affairs, Government of India 2013. <https://tribal.nic.in/ST/StatisticalProfileofSTs2013.pdf>
33. Subramanyam, V. (1997). The ecology of malnutrition in the agency area of Visakhapatnam: food resources, habits and deficiencies. UGC Minor Research Project Report, Department of Anthropology, Andhra University, Visakhapatnam
34. Subramanyam, V., & Narayana Rao, S. (2023). Food Insecurity, Poverty and Malnutrition among Particularly Vulnerable Tribal Groups in Andhra Pradesh: Role of the Government to Mitigate Problems. *Indian J Anthropol Res*, 2(1), 77-94.
35. Yoganandham, G. Socio-Economic Conditions of Primitive Tribal Groups in Nilgiris District Considering Environment, Societal Issues, And Education-An Assessment.2023