

# How Modernization Affects the Gadaba Tribe's Cultural Ecology

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## Abstract

The Gadaba tribe has resided in the Eastern Ghats for hundreds of years. They used to live in harmony with nature and follow rituals that were beneficial for the environment, just like other tribes. These kinds of things don't happen as much anymore because of modernization. This modernization has significantly impacted people's lives, as well as culture, agriculture, and ecological intelligence. Economic changes primarily affected the Gadaba tribe, but they also faced cultural upheavals, environmental changes, and urbanization. The loss of subsistence farming in the area has taken away local crops, making the loss of biodiversity even worse. The net outcome is less food security, more trashy soil, and less fertility. Also, governments that limit shifting cultivation have made it harder for tribal tribes to do traditional farming, which has led to more deforestation and land encroachments for infrastructure, which has cut off access to plants and herbs. Change can also result in cultural erosion, which is difficult to address. Globalization has nearly eradicated the Gadaba language, yet young people continue to adopt Western-style lifestyles. Despite the dire circumstances, there remains hope for the revival of tribal traditions and the protection of ecosystems. Promoting ecotourism, sustainable farming, and the tribal craft business can help keep a balance between development and culture preservation. To help indigenous communities stay modern, resilient, and self-sufficient, it's crucial to understand Gadaba traditions in today's world.

**Keywords:** Gadaba Tribe, Modernization, Cultural Ecology, Indigenous Knowledge, Sustainable Development, Biodiversity Conservation, Eastern Ghats.

## 1. Introduction

The Gadaba tribe is one of the oldest native groups that live in the Koraput District of Odisha, India. The Gadaba people have created and cared for several ecosystems over the years, including agriculture, forest ecology, and medicinal herbs. The Gadaba people have lived in a certain way, organized their society, and believed in certain things for hundreds of years because they have closely watched and interacted with their environment. Nature has had a big impact on every part of their culture, which makes up their cultural ecology. In the last few decades, modernization and progress have made it much harder for these ancient traditions to stay the same. Changes in governmental policies, infrastructural development, market integration, and even mass education have changed the Gadaba community's natural and cultural balance. Shifting farming, which used to be a key part of their agro-ecological methods, is now illegal or not encouraged. This is making their crops less diverse, their soil less fertile, and their traditional farming

knowledge less useful. Deforestation, land grabbing for construction projects, and less access to forest resources have made their economic and cultural security even worse.

Another significant issue is that people are not paying enough attention to their education. The youth are embracing the mainstream language and culture, which is causing oral traditions and ceremonies, language use, and vernacular arts like Kerang weaving to fade away. The profound ecological knowledge associated with these traditions also disappears as they fade away. This article's goal is to explain how industrialization has changed the cultural ecology of the Gadaba tribes. It looks at the outside factors that affect their environment, livelihood, and identity, and it suggests strategies to keep indigenous knowledge while still promoting development that is inclusive and beneficial for the environment.

## **2. Review of the Literature**

De (2025) looks at how indigenous people in India connect their culture, ecology, and indigeneity. She focuses on how art and festivals are important ways for indigenous people to express their culture and politics. The study depicts a worldview that links land and culture through the indigenous land stewardship ethic. This worldview is based on religious rituals and helps conserve the environment. De criticizes the colonization of identity and stresses the importance of festivals as places for cultural interchange and dialogue and cultural resistance and empowerment, and he calls for more theoretical research into indigenous cultural politics.

Srilatha (2025) does a thorough linguistic and cultural study of some of the tribal languages of Andhra Pradesh and Telangana that are at risk of dying out, like Gadaba, Kui, Kuvi, and others. This study also demonstrates the marginalization of tribal people in society and the economy and highlights the crucial role language degradation plays in maintaining tribal identity. Using census data and expert opinions, Srilatha makes a solid argument for taking action right away to document and revitalize these languages. The work is an important step toward understanding how language endangerment affects culture among indigenous peoples.

Panigrahi and Sethi (2013) look at the ecotourism potential of Odisha's tribal areas, concentrating on protecting biodiversity and cultural heritage. They say that ecotourism can provide long-term jobs for the tribal people if it is planned well and the community is involved. Their research demonstrates the significance of ecotourism as a responsible development approach that utilizes local and indigenous knowledge, minimizes environmental harm, promotes long-term nature protection, and supports sustainable socio-economic development.

Selvin Raj Gnana (2019) does ethnographic research on Savara tribal women and looks at their roles as women, their relationships with family, and the social and economic problems they face. The Savara women are poor and don't have access to excellent schools. They also confront a lot of complicated social and cultural restrictions. The paper discusses Gutthi Pani, Santha, and other practices, along with the various ways converting to another religion can affect people. It advocates for specific and culturally suitable programs that will encourage indigenous women to take part in development activities.

Chaudhary (2010) looks at the tribal economy of India and how globalization and other institutional changes have made it stronger and weaker. The book talks about how big and small elements affect the social welfare and growth of tribal societies. It affords tribal people a model for sustainable development that researchers, policymakers, NGOs, local governments, and tribal welfare, economic development, and grassroots empowerment can all use.

Meena (2015) looks at India's poor human rights policies in light of tribal human rights issues such as land alienation, relocation, and exploitation. The book shows how the government's neglect to safeguard Scheduled Tribes has led to their social marginalization. This work advocates for ideas such as legal empowerment and participatory governance. The book also talks about how the community can help with health, work, and land as a way to promote tribal justice, protect culture, and ensure fair development.

Abhay Krishna (2020) looks at the cultural ecology of the Munda tribe in Jharkhand and how state interventions and market integration have affected their traditional ways of life and identities. The study also shows how the community is starting to divide into classes and how people are adapting to these changes. The study draws attention to the value of indigenous ecological knowledge by illustrating the interconnectedness of culture, policy, and environment. It also helps us understand how tribes adapt, how to be sustainable, and the problems they face today.

Sutton and Anderson (2020) supply a basic review of cultural ecology, focusing on how traditional societies adapted to their environs through hunting, farming, and religious traditions. They use examples from throughout the world to show how indigenous ecological knowledge can help with long-term resource management. Their work makes the case for the necessity of these traditions in light of modern problems like climate change and conservation. This work provides us an important look at the relationship between tribes and the environment today.

Gudia (2024) looks at the Didayi tribe's traditional way of getting married. It reveals how things in the environment affect cultural traditions. The study also shows how the Gadaba tribe in Koraput has gone through comparable transformations. Gudia emphasizes the significance of development that respects and preserves cultural traditions. He talks about how modernization has changed things and how policies that go along with it haven't worked very well. His qualitative technique provides ethnographic studies on tribal institutions and how they react to changes in the environment and culture a favorable framework.

### **3. Materials and Methods**

This study used qualitative methodologies, such as ethnographic observation in some Gadaba communities in Koraput. It included in-depth interviews with farmers, elders, and artists. Focus group talks helped us learn about how things have changed throughout time. Case studies looked at homes that used both old-fashioned and new-fashioned farming methods. The study also looked at secondary data from government reports and scholarly papers.

### **4. Results and a Discussion**

#### **4.1 Changes in Traditional Ways of Making a Living**

The modernizing process has had a big effect on the Gadaba tribe's traditional ways of making a living, especially in farming and crafts. One of the major changes has been the decline of podu farming, a method of shifting cultivation. This strategy, which was used in cycles on forested hills, let the land recover on its own and grew a wide range of native crops that did well in the local climate and soil. But because of worries over harm to forests, government laws now oppose shifting cultivation and encourage permanent agriculture and commercial farming instead. These rules have harmed an environmentally beneficial farming method, reduced food security for tribal households, decreased crop diversity, and diminished soil fertility.

At the same time, the commercialization of farming has led to farming methods that use many chemicals, hybrid seeds, and monoculture cropping. These new farming methods have replaced the traditional

practices that emphasized mixed farming, organic fertilization, and seasonal rotations. As a result, the Gadaba people's soil health is deteriorating, they are increasingly dependent on the market for seeds and fertilizers, and they are becoming less capable of adapting to changes in the weather.

Another big change that modernization has brought about is the disappearance of traditional crafts, especially the weaving of Kerang by Gadaba women. The demand for handwoven clothes has gone down because of the rise of cheap, mass-produced fabric. This disappearance makes it challenging for younger people to keep the weaving skill alive. This condition threatens a vital way for people to express themselves and their culture, and it makes it harder for individuals to be economically independent, especially women who have played a big role in keeping these traditions alive. Overall, these developments indicate a significant shift away from self-sufficient means of livelihood and raise serious concerns about the stability of cultures and economies during modernization.

#### **4.2 Damage to the Environment**

The Gadaba tribe has seen a lot of environmental damage as a result of urbanization. It has had a big impact on their culture and the way they live. The loss of sacred trees and deforestation are two obvious effects. These groves used to be crucial to the tribe's traditional rituals and environmental principles. Infrastructure projects such as roads, dams, mining, and commercial plantations have led to the clearance of large sections of forest land. These woods were important sources of food, firewood, and medicine. Local practices and beliefs also preserved these places, which were very significant to the people who lived there. People used to protect the sacred groves, which were thought to be homes for ancestor spirits and gods, by making rules against hunting and cutting down trees. However, outside development pressures have made it harder to follow these traditional conservation methods, which has led to habitat degradation, fewer animals, and the destruction of cultural landscapes.

Water pollution and a lack of water, along with deforestation, have made it very difficult for the Gadaba to manage their water in the customary way. In the past, the people in the area cared for and cherished rivers, springs, and ponds. Rituals, farming, and everyday life all depended on these water sources. But the growth of modern industry, mining, and commercial farming near tribal villages has fouled bodies of water with chemicals, industrial waste, and too much groundwater extraction. Because of this, traditional supplies of clean water are becoming less reliable; thus, the community has to rely on outside sources or dirty water for drinking and agriculture. Losing access to clean water puts health and hygiene at risk and goes against cultural practices that involve respecting and using natural sources of water in rituals.

These changes to the environment make it much harder for the Gadaba tribe to maintain their ecological balance and cultural sustainability. These changes make it more difficult for the Gadaba tribe to adhere to their customary rules for using and protecting resources.

#### **4.3 Changes in culture and loss of knowledge**

Modernization has changed the Gadaba tribe's lives in both physical and economic ways. It has also significantly altered their culture, leading to a loss of traditional knowledge that once helped them maintain their identity, build friendships, and sustain environmental balance. One significant difference is the reduced transmission of conventional knowledge, particularly among younger generations. Because of mainstream education, media, and city life, Gadaba youth are losing touch with traditional traditions, like herbal medicine, managing forest resources, traditional farming, and ritual healing. In the past, people learned by watching, participating, and telling stories in their communities. Now, official schooling typically takes the place of these things, and it rarely values indigenous points of view. Because of this,

essential information about plant medicine, seasonal variations, and sustainable harvesting is being lost or ignored, which puts both cultural resilience and ecological care in danger.

Along with this loss of practical expertise, there is also a visible change in language and customs. The Gadaba language, which has oral traditions, folklore, and knowledge of the environment, is increasingly being supplanted by more popular regional languages like Odia and Telugu, especially among school-aged children and teens. This change in language makes it harder for people of different generations to pass on the meanings and words contained in songs, tales, and rites. Additionally, people no longer participate in traditional celebrations that once honored the cycles of farming, communal unity, and respect for nature. These festivals included harvest rites, forest offerings, and sacred dances. Instead, the public consumes watered-down versions of these traditional celebrations.

If these cultural losses aren't fixed, they could create a divide between generations, cutting off links between what we know and how we can survive in the future. To protect the Gadaba's intangible heritage, we will need to make a conscious effort to record, renew, and include indigenous knowledge in both education and community development.

## 5. Conclusion

The Gadaba tribe's cultural ecology has changed a lot and faced many difficult problems as it has modernized. On the one hand, things like formal education, healthcare, and greater infrastructure have made life better. On the other side, these changes have also caused traditional knowledge, cultural identity, and sustainable practices to fade. Commercialization, tight rules, and cultural mixing are threatening the Gadaba's traditional methods of life, which include shifting farming, herbal medicine, and crafts like Kerang weaving. This complicated scenario shows that tribal territories need a new way to flourish. Instead of considering industrialization and tradition as rivals, we should try to identify a way to combine the two that respects and includes local knowledge. The Gadaba's knowledge of the environment, their community-led forest management practices, and their cultural traditions are not merely historical; they continue to be relevant today. They continue to thrive today, contributing to sustainability, biodiversity, and climate resilience. We can help the community's economy grow while retaining its cultural identity by promoting ecotourism, supporting tribal businesses, and making education that is relevant to the culture. It's important for both government and non-government groups to understand how language, rituals, and oral traditions help keep a community's identity and understanding of the environment alive. In the end, the Gadaba tribe's future depends on respecting their past and adapting to new problems in a sensible way. To safeguard that success doesn't come at the cost of losing culture and harming the environment, development strategies need to be inclusive, participative, and thoroughly entrenched in the cultural context of the community.

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