

# Connecting Traditional Belief Systems, Natural Resource Conservation and Sustainability in West Gonja Traditional Area of Ghana

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## Abstract

The role of culture and traditional belief systems in natural resource conservation and sustainability is a critical component of the West Gonja Traditional Area's natural resources and environmental sustainability. This study, therefore, examines how culture and traditional belief systems are used in natural resource conservation and sustainability in Ghana using the Gonja traditional area as a case study. Oral traditions, observation, visitation, and other written materials were mostly used to gather literature. Open-ended and closed-ended interview guide was sent out to the traditional chiefs, guardians (custodians) and sub-chiefs. Interviews were also conducted with sacred groves owners, shrine owners, rivers, forests owners, landowners and the overlord of the traditional area (Yagbonwurah). Taboos and belief systems, according to the study, can be a required and complementary instrument in creating a sustainable social order and moral rectitude in modern times. The study identified taboos, myths, beliefs, proverbs, exile or banishment, death threats, barrenness, traditional communication and songs as belief systems that are mostly used for the conservation and sustainability of natural resources. To effectively conserve and sustain natural resources, policymakers must incorporate internationally driven, geographically targeted, multidisciplinary, and inclusive policies that emphasize the empowerment of cultural and traditional belief systems.

## Keywords

Sustainable development; Culture; Traditional; Environment; Protection; Shrine; Social; Beliefs; Taboos; Natural Resources; Myths; Traditional communication

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## 1. Introduction

Belief systems are the stories we tell ourselves to define our personal sense of reality. Every human being globally has a belief system that they utilize, and it is through this mechanism that we individually, "make sense" of the world around us. Culture helps in economic development in a variety of sectors, including tourism, creative industries, agriculture, food and medicine, natural resource protection, fisheries and their sustainability (Cairney 2019). Although a growing number of scholars and organizations, such as the United Nations Educational, Scientific and Cultural Organization (UNESCO), have realized the importance of culture and belief systems in sustainable development and made substantial efforts to integrate them, the debates against conventional sustainability discourses remain challenging. Culture contributes to the development of environmentally sustainable and safe communities. Efforts to preserve both tangible and intangible cultural goods promote environmental, eco-

nomic, and social sustainability. (Hawkes, 2001, Cairney 2019). According to NZMCH (2006) and Duxbury (2012), cultural sustainability entails efforts to preserve all forms of art and culture.

Ghanaian culture contributes to the protection of the environment, according to a UNESCO (2012b) report. The elements of a society's culture and belief systems enhance economic sustainability. Culture plays an important role in urban regeneration and regeneration programs, sustainable architecture, and community identity. The key questions driving this paper are what are the cultural and traditional belief systems used to maintain and sustain natural resources in the Damongo Traditional Area of Ghana, and to what extent can cultural and traditional belief systems influence or contribute to natural resource protection and sustainability? The paper further explores the strategies being used in the West Gonja Traditional Area to integrate these activities and improve awareness of cultural and traditional belief systems in order to conserve and sustain natural resources. The culture of Africa is incredibly interesting because it varies, depending on which country you visit (Nash et al., 2020). Culture and nature interact in a variety of ways, ranging from values, beliefs, and conventions to activities, livelihoods, knowledge, and languages (Kurmo, 2017). Chunhabunyatip et al. (2018) observed that practically all 17 Sustainable Development Goals (SDGs) have underlined the crucial need of managing natural resources for poverty reduction. Culture shapes the way we work and play, and it makes a difference in how we view ourselves and others. UCLG (2017) agrees that as plants or animals become extinct, the words used to describe them typically become extinct as well, altering the way the natural environment/resources are changed by human behaviours.

Belief systems, worldviews, livelihoods and cultural practices are at the heart of how we understand and interact with the natural world (Throsby, 2010). Ejegi, (2019), traditional knowledge and legacy can help with environmental assessments and sustainable ecosystem management. Natural resource development that is both sustainable and conservational takes place within cultural contexts (Schoffeleers, 2019). Culture is a driver of sustainable and conservational development of natural resources (Schoffeleers, 2019). A study conducted by Mmola (2010) on students' and lecturers' Perceptions towards the culture and belief system at the North-West University showed that more than 80% of the respondent students preferred lecturers who incorporated indigenous African cultural elements in their teaching practices. Culture means "the systems through which people perceive the world around them" (Braungart and McDonough, 2008). Culture can also be seen as: a pattern of basic assumptions invented and discovered and to think and feel in relation to those problems.' Nick et al. (2020), these meanings and interpretations have a wide range of

connections to the natural environment, with the most obvious connections occurring most frequently in traditional resource-dependent communities. Hawkes (2011), cultural and traditional legacy is an important aspect of a community's life and has a role in social, economic, and environmental processes. Culturally, people have kept socio-cultural, economic, and political qualities that are distinct from those of the dominant societies in which they live (Lebbie and Guries, 2019). When culture and tradition are expressed, it reveals a society's identity and beliefs. In many Ashanti communities in Ghana, access to sacred forests is restricted by rigorous regulations which include the performance of sacrifices before being granted permission to harvest specific tree species (Sutikno et al., 2018). Duxbury et al. (2012) observe that preserving cultural and traditional legacy allows for building of memories. Cultural and customary practices connect the past, present, and future while also posing a risk of conflict. Understanding the heritage values held by various groups within a community is a crucial step in heritage management (Tacey, 2005). Humankind's physical existence allows for the development of man-made surroundings. Cultural legacy becomes a source of identity, serving as a springboard for cultural exchange and comparison (Mueller et al., 2017). Humankind's social being, in conjunction with his physical being, allows him to engage with all natural and man-made settings (Adeboye, 2013).

Legal wrangling has emerged in some parts of the world over who has the right to manage such resources. Aggarwal and Elbow (2016) highlighted the cultural struggle for people to get their rights respected. Carroll (2006) listed obstacles facing women in Africa in the fields of education, health and cultural fields, as well as administrative constraints. The Supreme Being – the almighty God – and his holy agents, such as angels, are among these entities, and the spiritual environment is an open environment open to all people, regardless of their attitude toward religion or religious beliefs. Adeboye (2013) points out that all humans possess a spiritual being as a fundamental component of their three-fold existence. Customary laws are not uniform across ethnic groups in Nigeria but observance of all traditional norms is secured through sanctions that may vary according to the degree of kinship (Tiwari et al., 2018). Many endangered plant species, including uncommon herbs and medicinal plants, may be found in these woods, which are rich in biological variety. Tiwari et al. (2018) discovered 79 holy groves, which are home to at least 514 species in a floristic study. The sacred grove has a better species diversity index than the damaged woodland. Udgaonkar (2019) indicated that religion has played a significant role in the loss of old cultural and traditional belief systems. Traditional beliefs are now seen as a bad thing to believe in, without regard for their conservation value (Udgaonkar, 2019).

Over-exploitation of natural resources has a negative impact on ecosystem health and human well-being (Surya et al., 2020). Action must be taken in the face of environmental crises and rising inequality, such as developing extended producer responsibility and supply chain legislation. Natural elements, therefore, serve a purpose (Chacon, 2012). Mueller et al (2017) define environment as "the surroundings of an organism at a place where it dwells." Albrecht et al. (2018) highlight the complex interconnections between related biophysical systems, economic sectors, and policy domains as they affect human well-being and public welfare. Natural amenities are unevenly distributed across the country as rare and non-transferable resources, and they have a strong influence on social behaviour (Young, 2017; Mullins, 2016). This study, therefore, examines how culture and traditional belief systems are used in natural resource conservation and sustainability in Ghana using the Gonja traditional area as a case study.

### 1.1 The significance of cultural indicators in conservation

Most nations' forests are now maintained using formal scientific techniques, such as the application of silvicultural principles codified in laws and international agreements (Marie-Therese, 2019). The expressions and needs of people are shaped by both culture and identity and are important instruments for environmental protection and resource management (Chunhabunyatip et al., 2018). Even though many indigenous and cultural belief systems are based on complex beliefs and appear to have no scientific basis, many of them have been proven to be effective. Some tribes in some cultures, such as the Ashanti's in Ghana, employed cultural and traditional methods to protect trees, which were mostly effective (Anane, 2015). According to Asante (2011), Ghana may benefit from a plethora of forest reserves that have been preserved via traditional people's sociocultural beliefs. Cobbinah (2011) stated that the transmission of cultural traditions from one generation to generation ensured the protection of biodiversity and the survival of forest livelihoods. Majority of these laws and regulations are enforced through prohibitions and are based on religious, spiritual, or cultural beliefs and superstitions (Jonathan 2017). The creation of forest reserves in Nigeria by the colonial administration in the early 20th century was with every good intention (Akpan, 2017).

However, ceding ownership of these forests to the government, which claims to hold it in trust for the people, and excluding the local people from the management of the resources proves to be the undoing of the conservation of these forests in recent years (Akpan, 2017). Reaksmey (2011) opined that despite the Cambodian government's contemporary forest management policies aimed at reducing illicit logging, woods continue to be degraded, owing in part to a collapse of the traditional value system that

protected forests. In Kenya, it is said that God penetrates all his creatures with his presence (Julius, 2019). Therefore, we must not treat any of his creatures recklessly but sensitively deal with them, with empathy and reverence. Whoever commits a fault against a creature, commits against God, the Creator (Julius, 2019). Anane (2015) argues that traditional techniques should be integrated into modern forest conservation approaches because they have shown to be beneficial in numerous indigenous communities. People consider indigenous culture and custom to be obsolete and backwards (Yanggen et al., 2010). As a result, the younger generation is encouraged to disregard its culture in favour of a new way of life and technology. Cultural understanding of conservation and sustainability is being lost, contributing to the disregard of traditional natural resource management techniques. The word "tradition" comes from the Latin word "Tradere" which means "to transmit, to hand over, to provide for safekeeping" (Sonja et al., 2020). In classic genre performances, for example, adherence to standards specifying how an art form should be created takes precedence over the performer's personal tastes (Sonja et al., 2020) Traditional beliefs have played an important role in the protection of a wide range of local biodiversity regardless of their utility value (Sonja et al., 2020; George et al., 2017; Shastri et al., 2002). Traditional conservation principles are capable of conserving biodiversity species in particular and the environment in general as long as local people are invested in the process (Utoft, 2020), 'Trust', was a multi-directional dynamic that pervaded all levels of Natural Resources and showed itself in three main areas. It was primarily considered in terms of how the leadership provided trust to the rest of the organization based on their abilities, experiences, and capabilities to make autonomous judgments without direct and immediate supervision. Traditional beliefs/taboo, according to Chacon (2012) and Krech (2005), do not ensure sustainable harvesting of natural resources. Taboos and beliefs have legal basis in the community's laws and institutions, which are powerful enough to compel individuals to follow religious and cultural regulations (Venkataraman, 2020; Cox, 2000). The ascription of supernatural abilities to things known as 'gods' and 'goddesses' is a traditional belief system throughout Africa (Venkataraman, 2020; Cox, 2000). Traditional beliefs have a role in the conservation of natural resources, as evidenced by a range of activities such as holy groves and hallowed landscapes. A floristic study by Paula (2018), discovered 79 holy groves that are homes to at least 514 species.

In Africa, Asia, and South America a variety of consistent resource conservation and management practices were established (Venkataraman, 2020). According to Pedroli et al. (2010), taboo is a tradition of avoidance or rejection, whereas superstition is a belief in prevention that is also used to keep humans from partaking in particu-

lar behaviours. A taboo can function as a point of contact between human concerns and cosmic forces. This is used in some traditional regions to keep humans from participating in particular activities (Pedroli, 2010). Asante et al. (2017) found that in Ghana, there are sacred days on which people are restricted from entering the forest. Taboos, according to Rössler (2016), allowed individuals to avoid offending the "gods" and doing something that would bring the family's name to shame. In some communities, stealing communal property, destroying and farming holy groves and sacred bushes are prohibited (Osei, 2012). Eating totem animals such as tortoises, parrots, eagles, and sacred fish is also taboo (Osei, 2012). It is considered impolite to have intercourse on a naked floor (Turner 2000; Alade, 2007). Taboos were the cornerstone of the whole social order, and there was no element of the social system that was not regulated and ruled by taboos, including ruler-subject relationships, political life, sexual life, family life, and the society's economic life (Alade, 2007). Okafor, (2009: 80), Sacred places may be found all over the world and are recognized by all civilizations and faiths, both extinct and current. The term "Sacred" has various connotations in different societies (Idowu, 2016: 129; Verschuuren et al. 2010: 1). The term "shrine" comes from the Latin word "scrinium," which means "box" or "receptacle," as in "containers of holy significance and power" (Courtright, 2007).

A Shrine is a physical element within a holy territory that represents the divine dwelling. (Courtright, 2007: 299). The collection of ceremonial artifacts distinguishes the shrine as a cultural institution (Idowu, 2016). Moral principles are the concepts of what to do and what not to do, or what is right and wrong. Idowu (2016: 149) agrees that religion appears to be a trustworthy source of morality. Visiting sacred locations to gain religious merit, wash away sins, and fulfil desires has been a popular activity across Africa for centuries (Frembgen, 2012). Gyamfi-Fenteng and Abbiw (2017), land and water are extremely valuable gifts from God the Creator in traditional African belief systems Land is considered not simply a source of income, but also a place of worship, sacrifice, and offerings (Gyamfi-Fenteng and Abbiw, 2017). If there is a conflict or fight over land among traditional African society or members, it is for socio-cultural, moral, and religious reasons, not just economic dominance (Gyamfi-Fenteng and Abbiw, 2017). This literature provides a foundation for empirical data analysis on connecting traditional belief systems, natural resource conservation and sustainability in the West Gonja traditional area of Ghana.

## 2. Materials and Method

### 2.1 Profile of the Study Area

West Gonja traditional area is located in the West Gonja district of the Savannah Region of Ghana. It shares boundaries to the south with Central Gonja District,

Bole and Sawla-Tuna-Kalba Districts to the west, Wa East District to the North West and North Gonja to the east. It has a total land area of 4,715.9 square kilometres part of which is occupied by the Mole National Park and Kenikeni Forest Reserves. The reserves occupy a portion (3800 square kilometres, or 30% of the traditional area). It lies on longitude 10 51 and 20 581 West and latitudes 80 321 and 100 21 North (Profile of the municipal assembly of West Gonja, 2008). There are other river bodies that run through the area. The traditional area has a total population of 63,449 Population (2021) – Census 4,692 km<sup>2</sup> Area 13.52/km<sup>2</sup> Population Density (2021) 4.1% Annual Population Change (2010 → 2021) The average household size in the district is seven (7) persons. Agricultural production in the West Gonja traditional area is largely focused on Cassava and Yam, which are major staple foods grown by farmers and constituted 91.8 percent of overall production during 2010-2015. The area lies in the tropical continental climacteric zone. The West Gonja traditional area is growing rapidly hence some recurrent bushfires, illegal logging, unsustainable agricultural practices and other activities. The traditional area's lands are governed by customary laws and customs. In the traditional area, land also serves as a home for spirits and "gods" ("adiimaa") (Shanumu, 2012). There are some salt deposits in the area. Since prehistoric times, salt has had a significant impact on human life in the area.

### 2.2 Research Design and Data Collection Methods

Data collection is critical for any research process; inaccurate data might jeopardize the research's trustworthiness (Ader, 2008). The study adopts a qualitative data collection method to gather relevant data for analysis. Secondary and primary sources of information were used to compile the data. The socio-economic-demographic characteristics of a research population are critical in data gathering (Adusu et al., 2022). The convenience sampling approach was employed for the study. It was selected because responders were easily accessible. Not all of the West Gonja Traditional area was selected for the study but only Damongo Traditional Area. The open-ended, closed-ended interview guide, oral interviews, visitation and observation were employed to collect data. Qualitative analysis Approaches to data were used.

Key informant interview was conducted with several stakeholders in the area relative to the custodians of Rivers, Land, and Forest in West Gonja Traditional Area Some of the key stakeholders are the chiefs, the land custodians, guardians as well as the overlord of the traditional area. They were conveniently selected because of the key roles they play in the management and sustainability of natural resources and also are readily available. Open-ended and closed-ended interview guide was used for the traditional area's chiefs and sub-chiefs. Interviews were also conducted with sacred groove owners, shrine own-

ers, rivers owners, forest owners, and landowners. The data used in this paper was obtained through empirical research carried out in the Damongo Traditional Area in August 2021.

### 3. Results and Discussion

#### 3.1 Cultural and traditional belief systems used in maintaining and sustaining natural resources in the Damongo Traditional Area of Ghana

The field data identified taboos, myths, belief systems, proverbs, exile or banishment, death threats, barrenness, traditional communication (“soothsaying”) and songs are the belief systems that are mostly used for the conservation and sustainability of natural resources. The findings back up Diawuo and Issifu (2015) who contended that myths, taboos, traditional beliefs, traditional communication (“soothsaying”) and cultural beliefs have a significant influence on natural resource conservation. In an interview with some of the sub-chiefs, why they will like to protect some species of the forest? The data indicate that the importance of forests cannot be underestimated, they depend on forests for survival, from the air we breathe to the wood we use. Besides providing habitats for animals and livelihoods for humans, forests also offer watershed protection, prevent soil erosion and mitigate climate change. On the other hand, a custodian of land forest, in the traditional area stated:

*“collectors of plants for traditional remedies ensure that their sources are safeguarded by mythology, especially if the herbs are hard to discover, Rivers, Land, and Forest, Guardians as well as keeping bee habitat untouched, he added.”*

The data also revealed that these areas are also bathing locations for widows, witches, and magicians. The findings back up Diawuo and Issifu (2015) who contended that myths, taboos, traditional beliefs, traditional communication (“soothsaying”) and cultural beliefs have a significant influence on natural resource conservation.

#### 3.2 Benefits of Taboos to Natural Resources Conservation

The field data revealed that the female (sub-chiefs) respondents agreed that strict taboos provided genuine protection to vulnerable species. Taboos also decreased pressure on some commercially valuable indigenous species by prohibiting the sale of vulnerable species or limiting harvest season. A few of those polled do not respond to the question. This finding supports the view of Utoft (2020), who indicated that natural resources issues are multi-directional and dynamic that pervaded all levels of Natural Resources management. Also, the findings re-emphasises Schoffeels (2019) who opined and acknowledge

that culture is a driver of sustainable and conservational development in natural resources. In an interview with one of the river’s traditional chiefs on the observance of Taboos and belief systems during fishing, he stated:

*“In traditional fishing societies, the observance of taboos in the context of local fishing communities is used to: conserve nature and maintain ecosystem balance; protect fish stocks and maintain subsistence fishing pressure within sustainable production, and as such traditionally Fridays are not meant for fishing in the study area”.*

This finding supports Paula et al. (2018) assertion that a taboo is a tradition of avoidance or rejection, whereas superstition is a preventive belief that is also used to keep humans from engaging in certain behaviours. The idea also confirms Asante et al. (2017) who indicated that in Ghana, there are sacred days on which people are restricted from entering the forest and going for fishing. Similarly, during an exclusive interview with the sub-chiefs, they had this to say:

*“Taboos completely preserve animals, communicate traditionally (“soothsaying”) to animals and plants, both in time and space, by banning their slaughter and the destruction of the forest and but for the use of all members of a community. The deities are the ‘gods’ who are the custodians and guardians of cities and villages and rejecting or failing to respect them will bring calamity to the community”.*

The study supported Opoku (2011), who stated that “gods” despised actions that disrupted community harmony, traditional communication and punished those who violated the moral code of the community, as well as Diawuo and Issifu (2015), who reported instances where people suffered from a variety of misfortunes such as death, barrenness, disappearance, and mental disorientation for violating cultural taboos. Results support the idea of using beliefs and taboos for Sustainable conservation and maintenance of ecological integrity (Anoliefo 2020).

#### 3.3 Ignorance of Traditional and Cultural Beliefs in Natural Resource Conservation

The study also revealed some reasons for the ignorance of traditional and cultural belief systems in the sustainability of natural resources. The data revealed that traditional and cultural ideas are being disregarded in the traditional area as traditional beliefs are seen as obsolete and conflicting with contemporary scientific and technology conservation concepts. Lack of attention paid to traditional systems in conservation activities was due to the idea that the systems and beliefs were barbarous. The beliefs are unscientific and cannot be proven, as well as

the traditional area's perception of cruel and outmoded cultural customs. Modernity and advances in science and technology, according to Boon (2015), frequently jeopardize indigenous peoples' religious systems. The study's findings support this viewpoint. Myths and traditional communication ("soothsaying") were the most frequently utilized belief system in the traditional area, based on observation and visitation to different protected locations such as holy areas, shrines, rivers, and forests. This might be linked to the goal of a myth, which is to give the hearer a reality that they can interpret for themselves within their culture's value system. The zonal chiefs, sub-chiefs, land and forest custodians indicated that myths connect people through traditional communication ("soothsaying") and that magical occurrences occur along the road to make "founders" appear more attractive and heroic. The findings back up Elyadeh's (2015) claim that myths work in four ways: mystically, cosmologically, pedagogically, and sociologically.

### 3.4 Importance of Traditional Belief Systems in the Traditional Area

In a one-on-one interview on the question of how important is the forest to the traditional area chiefs? the sub-chiefs and zonal chiefs stated the following: Forests shrink, more and more species are at risk of extinction, forests are not just home to wildlife but provide homes for sustainable livelihoods and the deep and complex root systems of a natural forest play a key role in the water cycle in the traditional area. One of the custodians of land and forest said:

*"Forest regeneration is linked to the sustainability of local customs and beliefs systems, which allows for the conservation of flora at burial sites. Slash and burn farming adhere to traditional laws and methods that protect the survival of local cultures as well as the environment."*

The findings imply that, as suggested by Kirsop-Taylor et al., (2020) the narratives of communication, collaboration, trust, and empowerment could be used to mobilize the cultural changes required to achieve complex social-ecological goals within challenging political and economic circumstances. The custodians for rivers, land and forest revealed that:

*"Respect for cultural customs and beliefs produces a tranquil environment for the 'gods', who in turn boost the production of their natural resources. Plants, animals, and trees have souls and should not be harmed or disturbed, and that chopping down certain trees for fuel to create a local cuisine known as 'Waasawasa' by women who menstruate to*

*cook renders the meal impure. These findings agree with Diawuo and Issifu's (2015) finding that myths, taboos, traditional and cultural beliefs have a significant influence on natural resource conservation. This finding also gives us a sense of belonging, personal and cognitive growth, and the ability to empathize and relate to one another as a result of our culture."*

In an exclusive interview with the overlord king of the Gonja traditional area (Yagbonwurah) on his view on today's youth on belief systems, customs, traditions and taboos, he said:

*"Elders are dying with knowledge in traditional belief systems because youths are less interested in traditional functions. Youths are modernized to the extent that they do not want to hear traditional beliefs systems and functions. In the community, those who perform rituals are viewed as witches. I remember an incidence in which one of the holders of traditional practices was killed because people associated ritual sacrifices with witchcraft."*

The youth of that traditional area will lose a lot if they fail to connect cultural belief systems to Natural Resource Conservation and its Sustainability. The findings support Boon's (2015) opinion that modernity and advances in Science and Technology frequently jeopardize cultural and religious belief systems of indigenous peoples.

## 4. CONCLUSION

The study examined the connection between cultural belief systems, natural resource conservation and sustainability in the West Gonja Traditional Area of Ghana. The analysis showed that myths, proverbs, death threats taboos, banishment and traditional communication ("soothsaying") are the most used traditional norms in the conservation and sustainability of natural resources. Based on the findings, it is clear that belief systems aid in implementing laws and regulations for natural resource conservation in the traditional area. Thus, understanding the connections between cultural, traditional communication ("soothsaying") and traditional belief systems improves knowledge and practices relating to the protection of natural resources in Ghana. For instance, the attributions of supreme powers and belief systems as well as reverence and respect for the land's "gods" hold the string to respect for these cultural and traditional items and/or environmental goods. Consequently, policymakers and natural resource managers must develop internationally driven, geographically focused, interdisciplinary and inclusive policies and programmes for the protection and conservation of the environment and natural resources considering traditional and cultural belief systems.

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