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# DIETARY TABOOS AS A MEANS OF ETHNIC AND PLACE IDENTITY OF THE BONO PEOPLE OF GHANA: INDIRECT CULTURAL PRACTICES FOR THE CONSERVATION OF FAUNA SPECIES

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#### Abstract

This study explored the dietary taboos of the Bono people in four selected communities in the Techiman Municipality of Ghana. Arguments from the symbolist and materialist perspectives are presented in the paper within the framework of the Durkheimian theory of sacralization. Qualitative empirical data from 85 purposively sampled participants consisting of traditional chiefs, traditional priests, elderly residents and park officers in the Wildlife Division (Forestry Commission) of Ghana formed the basis of the study. Personal interviews, Focus Group Discussions and non-participant observation under the phenomenology research method were the means of data collection which were analysed thematically. The symbolist perspective of the study revealed the socio-cultural significance of the dietary taboos as markers of ethnic and place identities of the Bono people. The materialist perspective argued the ecological benefits of the dietary taboos in maintaining the buoyancy of the ecology and ensuring the conservation of fauna diversities in the region. The study concludes that dietary taboos hold high potentials as behavioural control mechanisms for regulating the attitudes of people towards the resources in the environment. Also, traditional authorities in local regions could be used as regulatory bodies in ensuring the implementation of environmental conservation programs by the environmental agencies.

**Keywords**: Dietary taboos; Ethnic identity; Fauna diversity; Bono people; Conservation; Culture; Place identity; Theory of sacralization

#### Introduction

Dietary taboos have been part of the rich cultural traditions of many ethnic societies across the globe [1]. Dietary taboo is a subject often situated in ecological-cultural studies and has been an area gaining much academic conservation among scholars in diverse fields from sociology and anthropology to ethnobotanists and zooarchaeologists. As Begossi [2] noted, scholars who have engaged in the academic discourse on dietary taboos have often approached it as symbolists or materialists, with other scholars giving a narration in both streams.

The symbolists often engage in conversations geared toward the relationship of sacred taboos to religion and rituals, focusing mainly on the emic perspectives [3-5]. On the other hand, the materialists are often interested in presenting the environmental and health-related aspects of the dietary taboos [6-10]. Like Bolton [11], Ferro-Luzzi [12], Meyer-Rochow [13], Henrich and Henrich [14], Placek, Madhivanan, and Hagen [15], this paper approaches the

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theme on dietary taboo from both the symbolist and materialist perspectives. The paper is deeply seated more in the area of symbolism due to its application of the Durkheimian theory of sacralization [16] but also in showing the environmental and/or conservation implications of the dietary taboos. The study presents the case of the Bono people of Ghana on dietary taboos and how it has been used as a symbol of ethnic and place identity and how it has indirectly impacted positively on fauna conservation.

On the African continent, these traditional institutions are part of the culture of societies that regulates the moral order in the society [17,8] bringing harmony between human beings and the higher spirits believed to reside in the cosmos [13,18]. The dietary taboos in Ghana offer great insights into the relationship between the people and their environment, especially the animal populations [19]. This linkage of particular fauna species to a group of people aids in establishing their ethnic and place identities. This insight is very useful to the field of zooarchaeology that aims at tracing the historical origins of groups and societies by investigating their relationship with particular fauna species in a region and thoroughly examining their fossil records. Particular fauna species are forbidden to be harmed, killed or eaten because of spiritual, cultural, religious or health reasons [20, 21]. Mythically, some of the dietary tabooed animals or birds are viewed as sacrosanct due to the mythical and/or spiritual affiliation they have with the group of people [22]. Such fauna species are revered religiously and are absolute food taboos to members of the group [23, 24]. In such cases, the dietary taboos are driven by cultural reasons and maybe with no direct ecological reasons [25]. The influence of these cultural or religious drives in abstaining from the killing or eating of these fauna species is very great and often impossible to be eradicated from the lived experiences of a people [26]. The dietary taboos are etched as part of the metaphysical makeup of the people [27], qualifying them to be perpetual members of their ethnic society [17]. Andemariam [28] contends that breaking a dietary taboo or killing a tabooed animal endangers the life of the culprit, his or her family, the society. It is a general belief held by many Africans that the angered deities or spirits can kill the culprit, strike him or her with blindness, mysterious diseases and/or entirely wipe off his or her family lineage [22]. It disrupts the harmony that exists between the physical and spiritual worlds [18]. Aside from the spiritual punishment from the deities, there are monetary fines and sacrificial items imposed by the traditional council that the culprit is expected to pay; making it resilient and unthinkable on the part of society members in breaching them [29]. Though not directly instituted for ecological reasons, dietary taboos are indirect ways of conserving fauna species [30].

There are numerous examples of robust dietary taboos that have contributed significantly to fauna conservation and have assisted in reconstructing the lost identities of groups of people while deepening the understanding of indigenous people and their landscapes [31, 25]. In Ghana, Ola-Adams [32] reports of the people of North Nkoranza in the Brong Ahafo Region that they do not kill or eat monkeys because they believe that the monkeys were their kinsmen. Likewise, in preliminary research conducted by the author among the people of Sampa, living on the borders of Ghana and Cote D'Ivoire, he was told that they do not kill or eat monkeys because they view them as their ancestors. The people hold an oral history that their remnant ancestors were metamorphosed into monkeys by a traditional priest to save their ethnic society from being wiped out during a war. Furthermore, the Asantes living in Kyirapatre in the Ashanti Region of Ghana does not kill or eat Tilapia (Apatre) because it was detested by their great ancestor, Okomfo Anokye who founded their society [33]. Besides, the Gas and Akans of Central Ghana do not kill or eat sea turtles because oral tradition has it that their ancestors were saved by the sea turtles that appeared and helped them back to shore when their boat nearly sunk at night while fishing [34]. Dietary taboos have largely contributed to the conservation of significant diversities of fauna species. The study aimed at exploring the socio-economic significance of the sacredness of the dietary taboos among the Bono people and how it has assisted in the conservation of the fauna diversities in the Techiman Municipality. This was investigated in four local communities in the Techiman Municipality, Brong Ahafo Region of Ghana namely Tanoboase, Tuobodom, Bono-Manso, and Tanoso. This question has been

examined using the empirical data gathered from the study with the Durkheimian theory of sacralization. The study attempted to describe the zooarchaeological significance of the dietary taboos on the place identity of the Bono people, the fauna diversities indirectly conserved and how such conservation has enriched the local economy of the Bono people in terms of their ecotourism potentials. The introductory part of the paper has given a theoretical insight into how some societies have used dietary taboos in establishing their place identities. The second part of the paper describes the theory of sacralization and its relation to taboos. The third section of the paper describes the study area and the methods for the study. The fourth part of the paper gives a systematic presentation and discussion of the qualitative empirical data from the study in the theoretical lens of the Durkheimian theory of sacralization. The final part of the paper draws valid conclusions from the findings discussed and suggests possible policy interventions in the planning of fauna conservation strategies and/or ecotourism development aimed at sustaining the fauna diversities in the study areas.

#### The Theory of Sacralization: Explanatory Framework

The study is underpinned in the Durkheimian theory of sacralization [16, 24]. The theory is used as a lens in explaining and analyzing the data garnered, with a focus on the research questions for the study. 'Sacralization' in the theory is conceptualized as the process of investing the property of sacredness on an object [24]. The object can be a place, people, ideas or actual objects [35, 16]. This superimposition of sacredness on the object is by observer(s) so that the sacred object is treated differently from their observable properties [24]. The sacred objects are accorded respect, special reverence, and authority [36, 16]. This sacredness of the object is expressed exclusively through taboos [37, 38]. Thus, the taboos impose a duty where the two together reflects on the behavior expected toward the sacred object, that is, what is accepted or not accepted in the society where the sacred object situates itself [24]. Sacred taboos are irrational, absolute [37] and are independent of the physical laws of the universe [39]. Sacred taboos hold the power to automatically command conduct [16] and their observances are done religiously [40]. They are characterized by strong states of motivation (temptation) and suppressed by socially mediated forms of behavioural control (tradition) which are ignorant of the degree of the offense [24, 37]. Sacred taboos are contagious, preempting exacerbation of temptation or imitation of the example of the individual who flouts them, resulting in moral outrage and the need for moral cleansing [41]. The absolute nature of sacred taboos does not allow any sympathies or justification for breaching them with eventual punishment meted out to the culprit and/or the culprit shunned to serve as a deterrent for others not to tempted to imitate the socially unacceptable behavior [38].

#### **Materials and Methods**

#### Study Area

The study was conducted in four local communities, namely Tanoboase, Tuabodom, Bono-Manso and Tanoso, all in the Techiman Municipality (Fig. 1) in the Brong Ahafo Region of Ghana. The Techiman Municipality is located in the central part of the Brong Ahafo Region with a population of 147, 788, 649.0714 sq.km total landmass and lies between longitudinal zones of 1°49 East and 2°30 West and a latitudinal zone of 8°00 North and 7°35 South [42].

A greater section of the population is engaged in agricultural activities with the farming of crops being the major. The municipality has a robust traditional council consisting of twenty-eight divisional chiefs headed by the Omanhene Oseadeyo Akumfi Ameyaw IV. They monitor the traditional institutions of the ancestors that bring order and harmony in the municipality. The people owe allegiance to the highest of the Akan deities, Tano Akora who resides in a brass pan (Fig. 2), is believed to have founded the Bono Manso kingdom, the first centralized Akan state that the Brong Ahafo Region emerged from. The deity is believed to dwell in the Tanoboase sacred grove (Fig. 3a) as well as in the Tano Sacred River (Fig. 3b). As such, the biological diversities in the forest tract of over 300 hectares of land as well as the Tano Sacred River and all the aquatic resources are viewed as sacred.

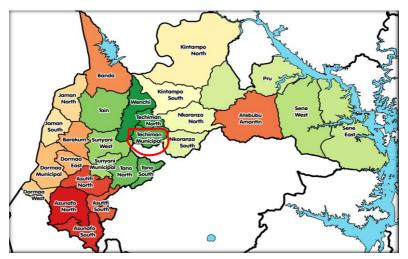


Fig. 1. Map of the Study Area (Source: Archives of the Techiman Municipality, Brong Ahafo Region)



**Fig. 2.** The Pictorial Representation of the Tano Akora Deity guarded by Baboons Source: Courtesy, Office of the Traditional Council of Tanoboase



Fig. 3. Tanoboase Sacred Grove (a) and river (b)

The study was carried out in a qualitative approach because it was rooted in a sociocultural climate and had zooarchaeology impact linked with the historical relationship of the people to specific fauna species. This culture theorized study was undertaken from November 2017 to March 2018. Personal Interviews, Focus Group Discussions and Non-Participant Observation which are the main data collection instruments in Anthropology were utilized in the garnering of the data for the study. A total of 85 purposively sampled respondents consisting of traditional authorities, traditional priests and elders in the Traditional Council of Techiman, elderly residents in the four local communities in the Techiman Municipality and the Park Officers of the Wildlife Division of the Forestry Commission in Ghana were involved in the study (Table 1). This was after those who initially missed the criterion for inclusion were excluded. The recruited participants were purposively selected because they were seen to have tremendous knowledge of the phenomenon under investigation [43]. Ethical considerations were satisfied in this study because the nature of the study was thoroughly explained to the participants in their local language and the selected participants willingly volunteered and demonstrated great enthusiasm to engage in the study [44]. The researcher assured the participants of the study that their identities would not be tagged with their expressed views in the writing of the research paper. To do this, the researcher implemented pseudo-identification that allows for the coding of the views of participants in anonymity [43].

The phenomenology research method was used for the study. This method aims at having a deep comprehension of a phenomenon among particular groups through an extensive engagement of their members via insightful personal interviews, focus group discussions and observations of their activities for considerable periods [45]. Adopting this approach for this study assisted the researcher in gathering rich interpretations and an insider's perspective [46] into the socio-cultural significance of the dietary taboos of the Bono people in the areas of establishing their ethnic and place identities, conserving the baboons, fishes and crocodiles in the region leading to the enrichment of their local economies through ecotourism development. Finally, the garnered qualitative empirical data from the study were analyzed thematically under the close lens of the Durkheimian theory of sacralization [16]. The *emic* perspective of the respondents in thick quotes together with the *emit* perspective of the researcher based on substantial evidence from the existing literature were used in drawing valid conclusions from the empirical data from the study [47, 48].

Table 1. Breakdown of Interviewes

No.	Categories of the Interviewees	Total Number Selected	Details
1.	Traditional Authorities	4	Personal Interviews were organized for the four divisional chiefs in the four local communities
2.	Traditional Priests	4	Personal Interviews organized for each of the traditional priests in the four local communities
3.	Elders in the Traditional Council of Techiman	12	Three Focus Group Discussions with four elders of the Techiman Traditional Council in each group were organized
4.	Elderly Residents in the Tanoboase, Tuabodom, Tanoso, and Bono-Manso local communities	60	Eight Focus Group Discussions were organized for elderly respondents in eight groups of eight participants.
5.	Park Officers of the Wildlife Division	5	One Personal Interview with the head of the Wildlife Division and One Focus Group Discussion was organized for the remaining three park officers

#### **Results and Discussion**

## Socio-Cultural Significance of the Dietary Taboos: Dietary Taboos linked with the Unity and Development of the Bono Communities in the Techniman Municipality

The findings of the study revealed that the dietary taboos are part of the rich cultural tradition of the people of Techiman. They are to be observed by all residents whether native or alien. The people believe that the progress of their communities solidly hinges on how well they obey the statutes of their sovereign deity, Tano Akora. The elderly folks, as well as the traditional authorities, were very much convinced that the unity of the various ethnic societies of Techiman is benchmarked on the strict observance of the dietary taboos. Annually, all the four divisional chiefs in the Techiman municipality meet to celebrate rites in connection with the dietary taboos of their great deity, Tano Akora. This has fostered great unity and oneness among the members of the four communities. The dietary taboo is part of their celebrated rich cultural heritage that identifies them, serving as a uniting anchor for the Bono people. The elderly respondents in one focus group discussion in Tanoso in the Techiman municipality told the researcher:

'The dietary taboos that all the Bono people in the four communities follow has served as a uniting force, giving us place identity. Also, every year, because we meet to venerate our deity, Tano Akora, during the Apoo festival to remember who we are, especially our historical beginnings tied to the fauna species we revere as sacrosanct, there is peace and unity amongst us' (TA-E-FGD-4, Focus Group Discussion, 3rd December, 2017).

Also, the findings of the study revealed that when the Bono people meet purposely for the celebration of the Apoo festival, which is the event for remembering their allegiance to the Tano Akora as a people and their resolve to observe all the dietary taboos he has decreed, they use the opportunity to settle disputes amongst the divisional chiefs and the people in the four communities. Also, developmental plans are often discussed during the annual Apoo festival. One of the divisional chiefs told the researcher:

'We [referring to the other divisional chiefs] deliberate on issues that would enhance the development of our communities and we use the event to resolve our intercommunity conflicts to earn the favour of our deity, Tano Akora' (C-TBC-PI-3, Personal Interview, 6th January 2018).

The non-indigenes of the four communities have been able to enjoy peaceful association with the Bono indigenes because they also adhere to the dietary taboos. There is always a peaceful disconnect between the indigenes and the non-indigenes whenever dietary taboos are breached. This often results in the expulsion of the non-indigene from the community, sometimes forcing him/her to vacate their residential premises. One of the divisional chiefs was very firm on this, saying:

'Whenever a non-indigene come to us for a parcel of land to construct a residential site, we remind them that if they abuse our dietary taboos which is part of our robust cultural practices, we would banish them from our locality. We made this proposition after some non-indigene residents in the past carelessly killed our fauna species [while driving or engaging in hunting activities]. However, now, we have seen much cooperation from the non-indigenes with few bad nuts that are made to face the penalties for breaching our dietary taboos (C-BN-PI-2, Personal Interview, 12 December 2017).

The findings concur in principle with the theory of sacralization that avers that it is the observers, herein being the leaders of the communities, who through their deity, Tano Akora, impose the sacredness of the object for their members to follow. The researcher noted from the personal interview with the traditional priest of Tanoboase that the instructions for the sacralization are often relayed to him in a trance and dreams by the Tano Akora deity. He added that many of the statutes were orally handed down to him by his father who was then the

traditional priest referred to as the vertical cultural information format by Placek, Madhivanan, and Hagen [15].

'I was thoroughly instructed by my father on all the statutes of Tano Akora deity. Some of the instructions I received in a trance or dreams. I quickly inform the paramount chief who convenes an urgent meeting with his sub-chiefs and elders in the traditional court. We, in turn, relay the information to the members of the community in a communal gathering' (TP-BN-PI-1, Personal Interview, 7 January 2018).

He, in turn, informs the traditional authorities to be told to the entire society. Thus, the adherence to the sacredness of the object [dietary restrictions on some fauna species] by the members of a group endorses their affiliation [13]. The findings indicate that individuals who breach dietary taboos renounce their membership and/or affiliation to the Techiman Municipality. Such persons are banished from the community after serving their sanctions which are bi-fold, physical and spiritual. The researcher was informed by the traditional priest that the expectant spiritual consequences could be death, blindness, or madness. On the other hand, the physical consequences included paying of huge monetary fines, presentation of sacrificial items such as white fowls, sheep, and cows. This agrees with the assertion of Omobola [17] that for a society member to maintain his or her membership in a group while earning their support and favour, s/he has to abide by the social prohibitions of their dietary taboos. In this way, the dietary taboos also enhance the cohesion of the Bono people because of its role as a pointer of social identity [49, 13].

Again, the larger section of both indigenes and non-indigenes strictly maintaining the sacrilege of the dietary taboos validates the Durkheim theory of sacralization in that the dietary taboos among the people commands automatic behavioural adherence due to the unique position the belief associated with it occupies in the cognition of the perceiver [24]. This may also be attributed to the seemingly high religious climate among the Akans in general as Adom, Kquofi, and Asante [50] assert. Similar findings were noted by Maliwichi-Nyirenda and Maliwichi [10] in Malawi that the adherence to the taboos on pregnant women avoiding the eating of fish, eating food sold in the market and food prepared by unknown people was high owing to the deep rootedness of the cultural beliefs associated with them.

#### The Sacralization of Baboons among the Bono People: Tradition and Temptation

All the twelve elders of the Techiman Traditional Council in three separate focus group discussions were in one thought that the baboons in their vicinity are not supposed to be harmed, killed or eaten in the because they are the protective guards of their deity, Tano *Akora*. In one focus group discussion, the elders narrated stories of how their forebears were instructed to revere and refrain from all activities that would endanger the lives of the baboons. The researcher observed the passion with which this position was expressed by the elders who, in the feeling of the researcher, would be unapologetic to even the 'tiniest unintended violation' [37, 16] of this dietary taboo as evident in the Durkheimian theory of sacralization:

'We [Bono people] believe that the baboons are our kinsmen. We know they are our great grandfathers who voluntarily metamorphosed into baboons to serve as guardians of the Tano Akora deity [Oral tradition among the Bono people in the study areas]. Therefore, it will be the cruelty of the highest order to harm or even kill any of these baboons' (ET-TM-FGD1, Focus Group Discussion, 12th February 2018).

Describing the same act of harming or killing any of the baboons, the researcher noted these other strong words in the remaining two FGD sessions with the members of the Techiman traditional council: "unpardonable" (ET-TM-FGD2, Focus Group Discussion, 17th February, 2018), "deserving great punishment" (ET-TM-FGD3, Focus Group Discussion, 20th February, 2018).

Their views show that the forebears of the Bono people have deliberately superimposed sacredness on baboons because of the mythical affiliation they believe to have with them as kinsmen. As such, the traditional authorities in the Techiman municipality expect the baboons in their vicinity to be respected and revered among the Bono people as the theory of sacralization contends. Tagged as sacred, baboons are tabooed to be harmed, eaten or killed. According to the elders in the Techiman Traditional Council interviewed, if anyone engages in

this folly, s/he will anger the Tano Akora deity and bring misfortune onto himself or herself and the entire society. During the focus group discussions with the elders, the researcher was told numerous stories of individuals who suffered painful deaths and that of their family members as a result of breaking the dietary taboo of killing and eating baboons. The most outspoken elder in the Techiman traditional council narrated one of the stories to the researcher in one FGD:

A certain stubborn hunter who is not a native of this community arrogantly killed and ate a baboon secretly. He and his family were spiritually attacked by Tano Akora deity with a mysterious sickness of no cure. When his folly was exposed through an oracle by the traditional priest, he was asked to pay 1000 Ghana Cedis as monetary fine as well as sacrificial items of four schnapps and two white fowls to appease the deity. This was meant to purify the entire society from being attacked by the deity. However, he and his son who went hunting the baboon died. His wife and his two female children survived a stroke of their mouths and right arms after their banishment from the community (ET-TM-FGD3, Focus Group Discussion, 20th February 2018).

Though the stories to the researcher sounded mythical, strange and irrational, the elders believed they were real-life cases. Admittedly, some of the elders (8 out of the 12) in three separate focus group discussions said they were told these stories by their parents while the remaining four aged between 84 and 86 insisted they heard of the death of an entire family who was reported to have been killed by the Tano Akora deity for eating a baboon. Even though the validity of these narrations is contested, it was observed in the daily life activities of the Bono people who were studied that the stories have found a deep seat in their thoughts, commandingly great influence in their attitudes toward baboons in the region. As the theory of sacralization points out and was evident in the findings of the study, there are no sympathies or justification for indulging in the breaching of the prohibition. As noted by Marshall [24], 'unintended violations' are seen as 'massive and willful defiance' (p. 66) that merits both physical and spiritual punishments. The spiritual repercussions, as well as the monetary sanctions and sacrificial items offered, are strong instruments for ensuring that the dietary taboos were observed by the people. This concurs with the conclusions of Fershman et al. [29] and Adom et al. [50] that the dual punishments for breaking dietary taboos are robust traditional monitoring mechanisms for their strict observance resulting in the conservation of many fauna species. Cunningham [21] reports the striking with lightning by the deities of persons who infringed on taboos against the gathering of traditional medicine during growing seasons among the ethnic people of Durban in South Africa. In the thoughts of Durkheim [16] and Freud [38], the contagious nature of the one who has broken a sacred taboo makes it imperative that s/he is shunned. This prevents other members of the society from mirroring the bad example.

## Presence of High Taxas of Baboons is a Sign of Protection from the Deities and Ancestors

As guardians of their deity and kinsmen, the study garnered that the Bono people hold the belief that the huge presence of baboons [their kinsmen and ancestors] is a sign of spiritual and physical protection as well as goodwill from the spirits and ancestors. The traditional priest at Tanoboase told the researcher that:

'Whenever evil forces want to attack our people, it is the baboons that spiritually fight against them. I have the 'eyes' to see them, especially the witches in the many households who want to stampede the progress of the society by standing against the businesses of the enterprising indigenes of our society. The baboons spiritually fight for us' (TP1-P1, Personal Interview, 3rd December 2018).

Therefore, to earn this perpetual favour from the deities and ancestors, the traditional authorities and elders in the various communities ensure that every member of the society honors the sacred statutes of the Tano Akora deity which includes observing all the dietary taboos. This supports the theories of Adom [18] and Mhaka [27] that the cosmology of an individual, who believes that his or her blessings from the higher spirits depend largely on living in harmony with the sacred values enshrined in dietary taboos. In this way, the object [baboons], has been accorded with authority as Durkheim's theory of sacralization. This spiritual authority imposed on baboons for protecting the Bono people has assisted in ensuring

their conservation. The Bono people believe that the higher the numbers of the baboons in their region, the more protection they earn. As a result, the traditional courts in the local communities ensure that their populations increase rather than depreciate. They do this by protecting their forest habitats, even declaring their grounds as sacred for entry. It is only the traditional priest and few members of the traditional court, who after performing libations are allowed to enter the zone to perform spiritual cleansing [Figure 3(a) shows a picture of the sacred grove at Tanoboase where most of the baboon populations reside in the caves].

## Aquatic Species in the Tano Sacred River believed to be the Children of the Tano Akora Deity and the Kinsmen of the Bono People

Aside from the baboons tabooed, all the aquatic species in the Tano Sacred River are not supposed to be harmed, killed or eaten. This dietary taboo is held in high esteem by the people like the baboon dietary taboo. Culturally, the people believe that the mud fishes and crocodiles that are numerous in the Tano River are the children of the Tano Akora deity. The elderly residents in Bono-Manso in a focus group discussion told the researcher that:

'The fishes and crocodiles are the children of Tano Akora. So, they are not supposed to be killed and/or eaten. When a parent loses a child because of murder, what do you think the parent will do to the murderer? Tano Akora is incensed at anyone who breaks this dietary taboo and strikes him/her dead' (BN-FGD-2, Focus Group Discussion, 21 December 2018).

All the participants interviewed in the other three local communities shared the same belief about the prohibition to eat and/or kill the mud fishes and crocodiles in the Tano River. These aquatic species have been treated differently (forbidden to be killed, harmed or eaten) because of the sacredness bestowed on them [16]. The same spiritual and physical sanctions applied on persons who flout the dietary taboo on baboons are applied for the dietary taboo on the fishes and crocodiles in the Tano River. The elderly residents in Tuobodom in a focus group discussion told the researcher that the crocodiles are also emissaries of the Tano Akora deity. They said:

'The crocodiles are the messengers of Tano Akora deity. He sends them to deliver news of evil that is about to befall the community. Their presence on land out of the river is an indication. There are times when the crocodiles lie across the roads and streets instead of being in the river. When this happens, the traditional priest propitiates Tano Akora to find out the bad news and ways the society could avert such calamities from happening' (TU-FGD-1, Focus Group Discussion, 3rd January 2018).

Owing to their assigned spiritual roles, the crocodiles assume a sacred position that elevates them to reverence [24] and as such, are not to be harmed, killed or eaten in any way. It is viewed by the people as an act of cruelty to engage in such debased and abominable act as Andemariam [28] equally noted about the Gukuyu women of Kenya. The same sanctions, monetary and spiritual are the repercussions of infringing on this dietary taboo. The researcher was told of the strange deaths of three pastors of the Christian faith who out of the challenge of the powers of the Tano deity by killing and eating the mud fishes in the River. The stories of the death of the three pastors in the Tanoboase and Bono- Manso communities who blatantly infringed on the dietary taboos and were purported to have been killed by the deity is known by both indigene and non-indigene residents. This tradition suppresses the temptation of society members in flouting the dietary taboo for fear of death. Ingrained in their thoughts, all the members in the local communities do well not to harm, eat or kill the aquatic species in the Tano River.

## Zooarchaeological Significance of the Dietary Taboos on the Place Identity of the Bono People

The elders in the Traditional Council of the Techiman Municipality disclosed to the researcher that the existence of the baboons is linked with the origin of the Bono people. This can be used as a means of establishing the zooarchaeology of the Bono people. They told the researcher:

'The baboons are our first kinsmen. They formed the nucleus of the Bono kingdom. When our ancestors settled on the sacred grounds of Tano Akora [the name of the

deity], they lived concurrently with the baboons. The baboons, thus, define our identity as Bono people and the beginning of our existence. We were the first Akan settlers in Ghana during the 1200s and not the Asantes' ((ET-TM-FGD2, Focus Group Discussion, 17th February 2018).

The researcher observed the great pride that was shown by the elders in making the above remarks. The Asantes, a vibrant kingdom governed currently by the Asante King, Otumfuo Osei Tutu II, was the former rivalry of the Bono people. The first Akan settlers in Ghana among the Asantes and Bonos had been hotly contested. However, history literature supports the view of the Bono elders interviewed that it was the Bono people who are the first Akan migrants from the north of the Sahara to have settled in Ghana. Anane-Agyei [51] notes that the baboons in the local communities date back to the 1200s and it was the same period that the Bono Kingdom was formed by the king Asaman and his queen, Nana Ameyaa Kese long before the Asante kingdom was formed in the 1600s by Otumfuo Osei Tutu I. Therefore, despite the later influence and domination of the Asantes among the Akans, historical literature supports the early position of the Bonos as forerunners of the Akans. The Bonos living in Boabeng and Fiema in North Nkoranza in the Brong Ahafo Region also taboo the harming, killing and eating of monkeys, a primate similar to the baboon as they share the similar cultural tradition. Also, it is very likely that the dietary taboo of the Bonos of Techiman against the eating of the mudfish (Apatre) later spread to other Akan communities like Kyirapatre [33] and Ejisu [52] in the Ashanti Region.

In the view of the researcher, the oral history is not exhaustive and must be substantiated by a more credible scientific inquiry into the fossil records of the baboons in the local communities in the field of zooarchaeology. However, this finding of the study that unites with the established oral history of the first Akan settlers in literature gives an important starting point for zooarchaeologists in using scientific experimentation in validating it. Future studies in this area would be interesting and worthwhile in affirming the oral tradition of the Bonos as the first Akan settlers.

## Dietary Taboos as a Cultural Practice for indirectly Conserving Fauna Diversities among the Bono People

Though not designed directly for conservation purposes, the dietary taboos of the Bono people have aided in the conservation of fauna diversities in the local communities in the Bono Municipality. The researcher observed a high population of various primates from the old and new world monkeys in the four local communities, especially in areas around the Tanoboase Sacred Grove and the Tano Sacred River. The park officers in the Brong Ahafo regional Wildlife Division interviewed told the researcher that:

'Aside from the high numbers of baboons, there are also high taxas of the Pata monkey (Erthrocebus patas), birds and antelopes in the Tano Sacred Grove. Besides, there are great diversities of avifauna species as well as fruit-eating cave bat species in the four communities you studied. We know that the conservation of these fauna diversities is as a result of their sacralization by the traditional authorities in the Techiman Municipality' (PO-FGD-1, Focus Group Discussion, 29 January 2018).

Also, it was noted by the researcher that the Tano Sacred River is a rich aquatic ecology that harbors diversities of freshwater fish fauna with two main fishes being mudfish and tilapia. Also, large numbers of crocodile live in the Tano River. The freshwater fish species in the river include Clarias anguillaris, Ctenopoma kingsleyae, Sarotherodon galilaeus, Sarotherodon melanotheron, Tilapia discolor, and Tilapia zillii [52-54]. The bat species recently discovered by zoologists who carried out a study in the grove showed that it is a haven for the Epomophorous gambianus, Rousettus aegytiacus, Lissonycterus angolensis, Epomops buettikoferi, Eidolon helvum, Hypsignathus monstrosus and Nanonycteris ueldkampi cave bats [55]. The avifauna species in the Tano Sacred Grove include Graphium illyris, G. Latreillianius and Hypoleucis sophia [56].

Of course, many of the dietary taboos may demonstrate ignorance on the part of local communities as asserted by Maliwichi-Nyirenda and Maliwichi [10], and may or may not be scientifically correct, they are often meant to protect the ives of humans and the environment

[13]. It is possible the old sages of the Bono people deliberately enveloped the ecological benefits of the fauna species in their sacralization aside from their ethnic and place identities. They may have had reasons for wanting the members of the society to engage in fishing in other rivers in the communities while imposing sacredness on the aquatic species in the Tano River. When the fish populations in one river increase, through the process of 'dispersal' [57], it is likely that some of the fishes would swim to other nearby rivers where fishing is not tabooed. Thus, it's possible the intelligent local authorities then, were thinking along the lines of sustainability by instituting the dietary taboos. The researcher observed that the gazette tracts of forests that house the high taxas of the fauna species-particular the baboons and other primates, leopards and so forth. Interestingly, these sites were the locations of the water headways in the communities. The researcher noted similar findings in other areas in Ghana [33, 22]. Thus, it can be concluded that the dietary taboos in the study areas are adaptive behavioural control mechanisms used by the leaders of the Bono people to conserve the rich fauna diversities in the Techiman Municipality.

### Economic Significance of the Dietary Taboos to the Bono People in the Techiman Municipality

The dietary taboos that have ensured fauna species richness in the Tano Sacred Grove and the Tano Sacred River have assisted in the development of these areas into eco-tourism sites since 1996 [58]. Many tourists visit these sacred areas created and preserved by the dietary taboos for recreation, nature study and appreciation as well as for cultural and zooarchaeological education. These ecotourism sites contribute to the US \$1.6 billion annual tourism revenue of Ghana [59]. Due to the aesthetically scenic nature of the geography and landscape of the sites, especially, the rocky caves that serve as abodes for the primates, cave bats and avifauna, it has become an avenue for hiking amongst most tourists. According to the traditional authorities interviewed, when the Tano Sacred Grove was instituted as an ecotourism site, patronage to the site was encouraging and considerable revenue was generated. The site boosted local enterprises and industries and many of the unemployed residents gained employment. In a focus group discussion, the elders at Tanoboase told the researcher:

'The tourists who constantly visit the Tano Sacred Grove patronize the services offered by the residents in the community. These services include transportation services, accommodation services, and food services. Other tourists patronize the farm produce by the local people, especially the yam, which is the common tuber grown in the Techiman Municipality. Also, watermelons and tomatoes produced by the local farmers are patronized by the tourists. This has helped in improving the local economies (TB-FGD4, Focus Group Discussion, 14 December 2017).

The above findings concur with the view of Monterrubio and Espinosa [60] that an ecotourism program is often used as a developmental strategic tool in local communities for the generation of employment avenues for those living in and around the ecotourism site. Its establishment in a locality is to boost the economies of the numerous rural communities [61]. Some of the elders who were in the committee set up by GACON (Ghana Association for the Conservation of Nature) admitted that the revenue that was generated from the ecotourism revenue was also used for developmental projects in the local communities in the Techiman Municipality. In a focus group discussion at Tanoboase, they disclosed:

Some of the revenue from the ecotourism site was used for the construction of the Tanoboase Presby Primary School together with some support from the Presbyterian Church in the locality. GACON aided in using the revenue in constructing latrines for the various homes in the locality to prevent the bad habit of passing feces in the forest tracts in the region due to the lack of latrines. Also, the revenue was used for providing street lights in various communities (TB-FGD5, Focus Group Discussion, 17 December 2017).

The park officers told the researcher that after the handing over of the ecotourism site to the local authorities to manage it, the place is not as it is. Instead of using the revenue generated to maintain the site and to develop the localities, they are using it for personal enrichment. The elders in the local communities mentioned that the traditional court members and the members

of the royal family are the only beneficiaries of the ecotourism site developed at the Tano Sacred Grove. The members of the committee have left the management in their hands because of poor accountability on the part of the traditional authorities.

They alleged that the traditional authorities have employed their family members to oversee the place and serve as tourist guides and cultural historians. However, any personnel employed at an ecotourism site must be trained [62]. Unfortunately, these family members at the site have not been offered any rigorous training on how to serve as tour and escort guides. Probably, this may be the bane behind the lack of tourists visiting the ecotourism site. The recruitment of the local people must be generalized and not be marginalized to only individuals close to members from the seat of the local governance system. Granted, preference for the appointments should be the local indigenes. Fairness in the selection can be achieved by using quotas from each of the families in the local communities. The appointment committee should have representatives from all families as well as some representatives from the government ministry, preferably, the Wildlife Division. Their appointments should be solidly based on those with requisite skills to manage the ecotourism site after they have been enrolled in training programs in their assigned duties [63].

The elders added that the poor management of the ecotourism site has resulted in less generation of revenue. When the researcher questioned the traditional authorities at Tanoboase about it, they denied squandering the ecotourism revenue. They attributed it to poor publicity and low turnout of tourists to the Tanoboase Sacred Grove. They called on the government and other private agencies to come to their aid and develop the place into a fully-fledged ecotourism site to boost the numbers of tourists that visit the site as well as generate more employment avenues for their residents, especially the youth.

Dumm, Moore, Soles, Patterson and Terborgh [62] contend that there is the need to ensure transparency and clarity in the management of the revenue generated from ecotourism sites. They warn that the mismanagement of ecotourism revenue can lead to the failure of good ecotourism programs. The situation noted by the researcher at the ecotourism sites in the study areas where revenue is not properly accounted for will eventually lead to inactivity of the ecotourism program. Wearing and Neil [64], as well as Kiper [65], caution that mismanagement of an ecotourism facility offsets its projected benefits as a panacea for unemployment and an avenue for providing alternative sources of livelihood to boost local economies. It is not surprising that the traditional authorities are registering low turnout of tourists to the ecotourism sites. As a result, the earlier patronization of the Tanoboase Sacred Grove as an ecotourism destination that boosted employment avenues and generated revenue for community developmental projects has ceased completely. To avert this condition, Dumm et al. [62] encourage the comprehensive accounting of all the generated revenue and deposit of all revenue in a bank account rather than an advantaged group keeping the proceeds from the ecotourism site. Good planning of the financial as well as cultural and natural activities at ecotourism sites [65] as well as strict and permanent monitoring team [62] from the Ghana Tourism Board and/or the Wildlife Division (FC) will bring sanity into the managerial activities at the Tanoboase Sacred Grove.

#### Conclusion

The main tenet of the study was to find out how dietary taboos have been used as markers of the ethnic and place identity of the Bono people and how it has indirectly assisted in the fauna conservation in the Techiman Municipality in the Brong Ahafo Region of Ghana. The theory of sacralization [16] was the theoretical framework for the study. The findings of the study have shown that though the dietary taboos were formulated as flagship points for ethnic and place identity, they have indirectly conserved various fauna species found especially in the Tano Sacred Grove and the Tano Sacred River. These fauna species include the freshwater fishes, crocodiles, baboons, monkeys, antelopes, bats, avifauna, and birds. The sacredness imposed on them makes it a taboo for any of them to be harmed, killed or eaten because they are viewed as the guards, messengers, and children of the highest Akan deity, Tano Akora. The

study concludes that dietary taboos hold high potentials as behavioural control mechanisms for regulating the attitudes of people towards the resources in the environment. Also, traditional authorities in local regions could be used as regulatory bodies in ensuring the implementation of environmental conservation programs by the environmental agencies. To help in maintaining and preserving the cultural traditions of the dietary taboos, the security agencies like the police and military departments must be tasked by the government to aid the traditional authorities in the local communities in prosecuting all recalcitrant culprits who breach the dietary taboos. Also, the Ghana Tourism Authority and the Wildlife Division of the Forestry Commission must assist the local communities in the Techiman Municipality in expanding and upgrading the ecotourism developments in the sacred sites to modern standards to yield more economic revenue for the local communities especially, many of whom are impoverished. The Ministry of Tourism, Arts and Culture of Ghana must intensify the sensitization and publicity of the ecotourism sites of the local communities studied as well as their rich dietary taboos on various platforms, especially taking advantage of the new smart tourism systems to draw more tourists into the sites. The government must organize training workshops and programs in the field of art and craft as well as ecotourism management for the youth in the local communities in the Techiman Municipality. This would equip them with the required skills in producing interesting Ghanaian art and craft and sell them as souvenir items to the tourists. These art cottage enterprises would help generate employment avenues for the youth in the localities.

The Wildlife Division of the Forestry Commission and the Ghana Tourism Authority must propose and implement a co-management system of the Tanoboase Sacred Grove to effectively manage the place. Also, the management team that will be set up must be tasked to account regularly on how the revenue from the ecotourism site will and/or has been utilized. Proper documentation of the financial transactions at the ecotourism site must be put in place by the management team. This would ensure that the ecotourism revenue is used judiciously for the maintenance and expansion of the ecotourism site as well as promote societal enrichment and development.

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