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PRINT: ISSN 0970-9274 ONLINE: ISSN 2456-6608
J Hum Ecol, 76(1-3): 32-40 (2021)
DOI: 10.31901/24566608.2021/76.1-3.3313

Sustainable Land Utilisation among the Guji of Ethiopia

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KEYWORDS Environment. Gadaa. Indigenous. Management. Resource. Symbolic

ABSTRACT Sustainable land utilisation is very important prerequisite for the survival of humanity. Land conservation and sustainable utilisation is the current issue as the result of ecological factors such as population pressure resulted in higher need for additional natural resources, global warming, climate change, and the threat of environmental contamination, biodiversity loss, changes in landscape, monetary globalisation, power safety, water delivery, and escalating conûict among socio-cultural, political-monetary, and ecological goals. The present paper is qualitative in nature and both primary and secondary source data were used to elicit the information on the sustainable utilisation of land among the Guji community in Oromia region of southern Ethiopia. The study reveals that Guji Gadaa system is the time proven indigenous institution responsible for making customary rules and regulations, management, regulating and controlling mechanisms to ensuring the sustainability of natural resources in general and land in particular.

INTRODUCTION

All the way through the track of human history, land has been strongly linked with livelihood, socio-cultural and further human being actions (Lambin et al. 2003). Land gives very important ecological functions, as well as providing, legalising, sustaining and cultural services. These environmental contributions maintain production of foodstuff, nourish, fuel and fibre to community, manages dangers of natural vulnerabilities, and offers cultural and religious contributions for human welfare (UNCCD 2019). According to Alemayehu et al. (2019), land utilisation and changes in land nature are extensive, in a very high speed, and major course of action determined by human accomplishments. As stated by Tesfaye et al. (2014), land through unsuitable agricultural activities, largely human beings and animals inhabitants stress have resulted in relentless land transformation. Nasche et al. (2019) mentioned that in sub-Saharan African countries, land utilisation and land transformation, in wide-ranging, and changing of the normal land into farming land are main permanent happenings, largely resulted from inhabitant actions. According to Bekele et al. (2021) as cited in Negese (2021), the human beings persuade changing of the normal land into farming land, which is the main difficulty in diverse regions of Ethiopia where farming action functions as the backbone of the economy. In Ethiopia, also the majority people inhabit the countryside parts and are basically dependent on land for their economy. Therefore, this study attempts to analyse the land utilisation among the Guji in southern Ethiopia.

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Objectives

- To understand the socio-cultural and economic aspects in managing land resources in Guji community.
- To evaluate the sustainable utilisation of land by the indigenous people in Guji area.
- To analyse the religious and symbolic utilisation of land by the local community.

METHODOLOGY

The present paper has been developed on the basis of qualitative data. Primary data have been collected by employing a semi-structured interview schedule, observation, focus group discussion and in-depth interviews with key informants in Guji area of Oromia region in southern

Ethiopia during July 2020 to February 2021. Both primary and secondary source data have been used to elicit the information on the sustainable utilisation of land and how land is managed from the socio-cultural, economic, political and religious aspects of the Guji community. The employed interview schedule consisted of questions such as what were the socio-cultural and economic aspects in managing land resources, sustainable utilisation of land, and the religious and symbolic utilisation of land by the indigenous Guji community of Ethiopia.

OBSERVATIONS AND DISCUSSION

The Guji Community

Guji are among the many groups of Oromo people in the nation. The Guji community belongs to the Oromo ethnic group of Cushitic family. They speak Oromo language and practice the original Oromo culture. As per the current administration of the country, the Guji people are part of the Oromia Regional State. The Guji live in a large territory found in southern Ethiopia approximately 450 kilometres away from Addis Ababa. The area is bordering with Borana in the south, Walayta and Gamo Gofa in the west, Sidama and Gedeo in the north, and Bale and Arsi in the east. Therefore, the Guji are neighbours with the Borana, the Walayta, the Gamo, the Gedeo, the Sidama, the Aris and the Bale people. The Guji has not been restricted to Guji territory, but have been diffused in the adjacent areas occupied by other ethnic groups. Some of them live mixed with the Gedeo and Sidama people in Gedeo and Sidama Woredas (districts) and Kebeles (villages) (Van de Loo 1991). The Guji community lives in different environments such as lowland, highland and semi-highland. Lowland area is characterised by erratic rainfall and experiencing frequent drought while the community is thinly populated in a wide space and mostly depending on animals' husbandry and small scale farming activities. In dry season there is a shortage of pasture and water where they go to semi-highland areas. On the other hand during rainy season, they shift to highland and semi-highland areas while they go to lowland areas where grazing lands are covered by crops and lowlands are covered with grazing pasture for their cattle's (Berisso 1988; Van de Loo 1991; Debsu 2009). Debsu (2009) stated that Guji has a more diverse ecology with wide ranging altitudes and climatic conditions. As a result, Guji has significant mineral potential and diverse plant and animal species. The suitability for various crops and livestock types also varies across different ecological zones. In the lowland areas, pastoralism dominates, while the highland areas support various cash crops such as coffee and tobacco, and food crops such as maize, finger millet, *teff* (Eragrostis tef), and barley. Areas with altitudes above 1800 meters mostly grow these crops while the lowland areas grow them to a lesser extent but mainly practice pastoralism. The Semi- highland part of Guji land is full of green vegetation and covers large forest area. Compared to lowland areas, high population and mixed agriculture practices as the result of high amount rainfall the area, cash crops like coffee production exists. Mostly *Mattii* group of the community resides in the area. On the other hand the majority of the community which is *Hookkuu* group lives in lowland and the *Uraagaa* group resides in Highland area.

The Guji people have special relationships with their lands and environment. They possess good knowledge about their land resources and environment by virtue of their experience. Indigenous knowledge is important to the Guji systems of land resource management and it can be best understood along with their traditional socio-political and belief systems. It is noticed that the *abbaa gadaa* (community leader and head of *gadaa* system) of Guji plays a vital role in natural resources management in general and land in particular. They believe that land resources are the indigenous gifts, blessing and creation of supreme deity (*waaqaa*), which is the source of life, livelihoods to the past, present and future generations. The people of Guji believe that the *Waaqaa* provides them with knowledge of proper use of natural resources and their management, which transmits to their next generation.

Sustainable Land Management

Axelsson (2011) and Findell (2017) emphasised that Sustainable land utilisation is very important prerequisite for the survival of humanity. Land conservation and sustainable utilisation is the current issue as the result of ecological factors

such as population pressure resulted in higher need for additional natural resources, global warming, climate change, and the threat of environmental contamination, biodiversity loss, changes in landscape, monetary globalisation, power safety, water delivery, and escalating conûict among socio-cultural, political-monetary, and ecological goals. Shoyama et al. (2020) opine that sustainable land management enables the multifunctional use of land-based resources including soils, water, animals and plants to produce goods to meet changing human needs while simultaneously ensuring long-term productive potential with the maintenance of environmental functions. Achieving SLM is a key challenge in addressing the growing issue of land degradation. Regional land use policy and planning are central to disaster risk reduction and climate change adaptation, which could reduce the number of affected people, economic losses, and social impacts due to extreme climate events and disasters in particular. As mentioned in the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (Scholes et al. 2018), the loss of multiple ecosystem services through land degradation is a critical concern in many parts of the world. Urgent action is needed to avoid further degradation in the face of climate change as well as unprecedented consumption caused by population growth, changes in income and consumer preferences, and other factors. Currently the world experiencing high amount of ecological, social and economic challenges are confronting the present production mechanisms and continuity of every human activities. This is real because there is unbalanced dependency on the resources where the activities are based on. Land the main resource for most of these activities for existence of all societies. This hot issue requires appropriate policy and best practices of land conservation and management in maintaining ecological equilibrium. As the result appropriate land conservation and management needed for properly utilisation of land resources (Saar 2012). According to De Groot et al. (2010), adjusting land utilisation or controlling mechanisms not only alters provision system but also changes over all benefits we get from the environment. Land use is determined by the purpose of active and passive management of land by people and the material and non-material benefit they drive from it.

Religious and Symbolic Utilisation of Land

Roba (2021) identified that the Guji classified land as sacred (*Woyyuu*) and profane or non- sacred (*Faanshoo*) according their indigenous environmental knowledge representing landscape functions. Berisso (1988) observed that sacred lands are equivalent to churches and mosque for Guji community. On sacred land Guji undertake prayer rituals to their creator *waaqaa*. The representation of landscape in the culture is based on their worldview of land as sacred and profane. Secondly, the Guji Gadaa leaders select the sacred places where the land has access to morning sunrays directly. Therefore, these *Gadaa* leaders regularly perform prayers and rituals to *waaqaa* by facing towards the east. This facing towards the east symbolically implies the commencement original life, harmony, optimism, fruitfulness and good forecast. The concept is best known in the representation that takes all practices and activities naturally significant to the community. It is also observed that the sacred places are predominantly found on the highland hilly area, which is visible to the local community. Tuma (2011) observed, "Most of the *Woyyuu* and ritual places among Guji are found in highland areas where dense forest and abundant trees are found than in lowlands". A similar observation was made by Van de Loo (1991) on *Woyyuu* among Guji and it was mentioned that symbolically the place or object was related with devil, which is the hesitant representation of existence and passing away. Dedicating land to creator is founded on the indigenous knowledge system that clearly shows how the community connected with natural ecology, indigenous knowledge and the spiritual world in the culture.

According to *Abbaa Gadaa* Jilo Mandho (head of the *Gadaa* system of Oromo and Guji in particular), the Guji *Gadaa* system has got around 370 sacred places of rituals and ceremonies. The major ceremony of transfer of power, which is locally known as *baallii* is undertaken at the sacred place known as *mie-boko* from current *Abbaa Gadaa* to another newly appointed *Abbaa Gadaa* upon completion of eight years of leadership. On the other hand, *Abbaa Gadaa* has four rituals in four selected months in a year at different ritual sites. The special months for rituals in the Guji Gadaa system are September (*adoolessa*),

November (*birraa*), February (*arraasaa*) and June (*caansaa*). A bull (*korma*) is slaughtered in each specified month under culturally prescribed trees locally known as *odaa, woddessa, kilta, gololcha* and *uddessa* at selected sacred places. For instance, *gololcha* tree is mostly used for ceremonies performed in lowlands and semi highland areas, but *uddessa* tree is mostly used in highland areas. All the three phratries have their own sacred deity and ritual places called *haaganaa* (hidden sacred item) in Guji culture. These three *haaganaa* (phratries) have the common most sacred places known as *fuutoo*, which is located near the Genale River in Adoola Woreda. Every elected *Abbaa Gadaa* from these three big groups will go to *fuutoo* to take and return their *haaganaa* for every eight years during power transfer from one *Gadaa* leader to newly elected *Abbaa Gadaa* at *mie-boko* assembly. The newly elected *Abbaa Gadaa* uses *haaganaa* during his leadership tenure.

Land Management

FAO and WHO (1991) mentioned that Land conservation is the experience of authentic utilisation exercise by indigenous community, which is continuous. Furthermore it consist of land utilisation arrangements, property right issues, and conservation mechanisms of natural resources, gender balancing in the utilisation especially women and disabled individuals in the livelihood systems and development activities by all concerned bodies at different level and respecting the indigenous community right. Debelo (2016) observes that there is no clear consensus about the place of human beings in the environment and the best approach needed to avert ecological problems that arise from anthropogenic factors. While most mainstream Western notions of environmental conservation emphasise a human-non-human dualism, most indigenous cosmologies holistically embrace human, non-human, and supernatural beings as integral parts or 'societies of nature'. Moreover, most conceptualisations of nature among indigenous peoples are deeply rooted in their beliefs, norms, values, and customs, which are performed and enacted in rituals that convey profound interconnectedness between humans and nature.

It is observed that there are basic categories of institutions functioning for land resource management and sustainable conservation in Guji community such as household (*worra or ardaa*) large family groups (*dudda, roga or gooroo*) and village (*ollaa*). The major institutions are Phratries (*haaganaa*) and Gadaa institution. The institution village (*ollaa*) is headed by a village leader who is known as *abbaa ollaa*. The father (*abbaa manaa*) is the head of a household in Guji culture. This institution does have demarcated areas where the members of a family are responsible to conserve and manage natural resources in general and lands in particular. Almost in every Guji housing compounds, there is a plot of land that is conserved by family members. It is not allowed for outsiders to access the land and its products without permission of the family members. Village (*Ollaa*) institution is bigger than the family institution that consists of more than two households that are from different kinship or related family. Sometimes it is the combination of extended families. They relatively settle in a wider area in order to conserve, manage and utilise lands and its resources. The Phratry is the next upper stage above village groups. The stage functions as both judiciary and executive of the customary rules and regulations. All the groups are responsible for execution and interpretation of the customary rules and regulations related with natural resources conservation and management in general and land in particular. All phratries are headed by their own regional *Abbaa Gadaa* who is responsible for taking action according to the direction from the general *Gadaa* assembly held for every eight years at *mie-boko*. The *Gadaa* system has the supreme power in Guji community, which functions as the executive body for different customary rules and regulations. It is the regulatory body in managing and conserving of natural resources in general and land in particular. Additionally, the *Gadaa* institution is responsible for administering the political, economic, social and cultural aspects of the people. This institution is equally functioning in all three Guji phratries. Generally, Guji community members sit under *odaa* trees, which are found in sacred lands to make customary rules during twenty-seven days of law making. This clearly shows how they give great cultural values for lands and its products. Most of the Guji customary laws are made

and ratified by the Guji participants at *mie-bokko*. As a result, all phratries return to their home villages by taking the announcements and inform the rest of the community members. Accordingly they practice these rules in their day-to-day life activities. Usually the laws are enforced and implemented by *Abbaa Gadaa* in the locality of their respective phratries. A similar observation was made by Negessa and Pal (2021) in his study on Gadaa system among Guji in southern Ethiopia.

The land is classified as one of the primary sacred things among others mentioned above as per Guji customary rules. This clearly shows how land is culturally well taken and it is respected by Guji community of Ethiopia. The children are brought up among Guji with this mindset practicing this culture for generations. This has been contributing a lot for generations in order to properly manage, utilise, protect and conserve lands, and its products in the community. For instance, the *dabballee* group of the *Gadaa* institution serves to enforce laws and follow up the implementation of the rules at local level. Different cases, which are not resolved at the households and village level, will be resolved at *Gadaa* institution. In this case, the person who does not follow the norms of the *Gadaa* system related to management of different lands and their conservation measures will be advised for the last time in the *Gadaa* meeting. The accused person will be beaten again and will pay penalty in the form of an ox or a cow (*duddaagoronsa*) if he or she fails to follow the advice of the *Gadaa* system. The forms of penalty such as beating and bull offering are decided by the *Gadaa* leader for breaking the rules of land use and its management by its community members.

Economic Utilisation of Land

It is observed that land is everything for Guji people. It is the source of livelihood, wild foods for human beings, source of medicinal plants, hunting ground, place where their livestock graze, agricultural activities practiced, the place where to obtain house construction materials, clay containers, and firewood. The Guji land is categorised into two major parts. They are highlands (*Baddaa*) and lowlands (*Gammoojjii*). According to Debsu (2009), the Guji area has a diverse ecology with wide ranging altitudes and climatic conditions. As a result, it has significant mineral potential and diverse plants and animal species. Its suitability for various crops and livestock types also varies across ecological differences. In the lowland areas, pastoralism dominates while the highland areas grow various cash crops like coffee and tobacco, and food crops such as maize, finger millet, *teff* (Eragrostis tef) and barley. The lowland areas grow these crops to a lesser extent but mainly practice pastoralism. As stated by Berisso (1988), the traditional Guji farming systems had little effect on the environment. First, the tools and methods of cultivation were simple and did no significant damage to the environment. The Guji mostly used the hoe (digging stick) for cultivating and breaking up the soil, and the small axe to cut down trees. Second, when farmland lost its fertility, the Guji would leave it fallow and use other plots until the former regained its fertility. This shifting cultivation is less destructive with regard to soil fertility when human and livestock populations are small. The Guji traditional socio-economic system played an important role in preserving the environment. The communal land tenure system and the free movement it entailed the low population density that was regulated by the *Gadaa* system, simple technology, and traditional religious beliefs enabled them to maintain a balance between population and resources.

High and Semi-highland Economic Activities (*Baddaa*)

Branca et al. (2011) stated that the mechanism incorporates trees and livestock rearing activities are called mixed livelihood system. Farming and afforestation includes experiences that enhances land fertility by facilitating constant vegetation cover-up, upgraded soil arrangements and natural carbon element, high water intake and productiveness. It is observed that the coffee and maize varied agriculture method is substantial ecosystem variety of the environment to sustain extensive farming and animals. Accordingly, the normal farming land utilisation method is founded on a variety of agriculture that uses physical labour and low efforts. The coffee was the most important yield in the method, a harvest, which was produced by mutually for profit and low level agriculture. Farmers had to regulate their har-

vesting models to satisfy short period requirements. Rooster, sheep and goats grazes in the common pasture land in summer and in arable land throughout winter. The most important yields consist of maize, beans, barley, Irish potatoes, wheat and *teff* (Eragrostis tef). Cabbage, potatoes, coffee, pineapple, papaya and avocados are also produced in the highlands of Guji area. Indigenous feed yields for instance sweet potatoes and vegetables are also grown. Regardless of the distinction among highland and lowland regions, maize is cultivated on the biggest region of Guji land. The occasion to rotate yields is restricted as a result of the lack of high quality land because of the maize yield is so significant. They shift to wheat, *teff* (Eragrostis tef) and barley for a season and then relapse to maize again. As far as they are grown for family use, tomatoes, onions, and leafy vegetables are also included in small farming nearby homestead. The vegetable farming is done by women and few men. Horticultural crop production has been a very significant element in the small scale farming activity.

Utilisation of Forest Land in Guji Area

It is noticed that there are varieties of wild foods gathered from forests land. These include vegetables, fruits, roots and tubers, honey, meat obtained from hunting animals and birds. Therefore, forestlands are properly conserved and managed because they are sources of wild foods in both dry and wet seasons in Guji area. Most of the vegetables used as food in Guji area are available immediately after rainfall from forestlands. These vegetables need little rain to grow and are consumed during the crop season. During this time there is shortage of food. Most of the vegetables consumed in the area locally known as *hadhawa fi raafuu* (wild cabbage), *laalessa, dhansa-wocho, cirka-simbirre, ononi, dobbi, huddunama rafe, cirka (shaanaa simbirre),* and mushrooms (*shophaa*). These vegetables are usually collected by women in the forest. The vegetables are cooked and consumed with different crops like maize, wheat and barley. They are believed to give good flavour and nutrients. It is observed that forest areas are protected for grazing in the dry season. Hence, rotational use of grazing land is the customary practice of the society. The carrying capacity of the land is also considered, and if the number of cattle is found to be beyond the carrying capacity of the grazing land, the owner of the cattle is asked to search for another grazing land. There are some special grazing lands known as *kaloo,* kept for weak and small animals that cannot go the long distance. This traditional rotational use of grazing lands help in the recovery and maintenance of forests in the Guji area. Planting and growing trees to rehabilitate the degraded lands and the use of aged and big trees for different purposes and replacing them by young ones, as practiced in modern forestry for their economic values. According to Debsu (2009), the modern practices of conservation that came into being following the grabbing of the communal lands of Guji specially the forestlands, however, seem to have followed the same pattern, as it has not been typically participatory and beneficiary to the surrounding community. Forest land is open to the people apart from the land in the border area that is administered by the state as per the conservation arrangements. The people have the authority to utilise it except for profit function. Local community can have the right to use the forestland for non timber productions. Indigenous community witnessed the alteration in the forestland and indicated the reasons are high population pressure that resulted in the increased need for farming activities where current generation can get land through inheritance from family. Tuma (2011) has identified that the Guji men do not cut down big trees during the preparation of farm lands because of cultural values attached to them, their ability to attract rain and help to get good harvest. Based on their growth and their uses for human beings and in growing the richness of the topsoil, some trees are more useful than the others. The land utilisation has been little-size farming with changing agriculture, fallowing and forestland. Therefore, irregular farming is the activity established practice by the Guji community as part of their livelihood.

Low Land Economic Utilisation (*Gammoojjii*)

As discussed by Devereux (2016), the Guji arid land is fragile from repeated famine while the community is extended meagrely over the huge land, the livelihood activity mainly depends on animal husbandry and small-scale farming. Throughout drought time pasture shrinks and

water points dried up, the community residing in the region shifts their animals to the highland area. The economic activity of the people is mainly based on animal husbandry and farming. They are largely rearing animals, engaged in mixed farming. The Guji person has the *Gadaa* institution in the managing of pasturelands and the environment. Nowadays, they have been involved on mixed farming activities. Types of enclosed space incorporated the *kaloo yabbii* (used mostly for calves), which are individually owned, small, and comparatively close to the homestead. They are owned both privately and communal forms of enclosures. Communal enclosures were available to all group members of the community and unfasten to communities when feed was used up in communal pasture areas in the extensive dry season. Communal enclosures were restricted by *abbootii dheedaa* (the elders who were selected to supervise pasture land) and these pasture lands were frequently open. The individual enclosures were owned by individual families and restricted to guarantee preservation of feed for the livestock. Enclosures were usually situated just about the homestead and farmlands mostly utilised for feeding of milking cows, calves, and fragile or ill animals throughout the dry period. The community classified the pasture landscapes into two major areas, such as the highland (*baddaa*) and lowland (*gammojjii*) using a mixture of climate (rainfall and temperature), soil, topography, and vegetation. The *baddaa* landscapes were characterised by high amounts of rainfall, cool temperatures, highlands, and dense vegetation cover. The *gammoojji* landscapes had low rainfall, hot temperatures, lowlands, and sparser vegetation. These are mostly used for wet period grazing and they are found commonly in Guji area. Diversifying livestock composition and splitting up of livestock based on the type and group of animal was found to be a widespread activity. They also divide their animals into *worra* animals (village-based) and *foora* herds (satellite herds). In village-based animals, calves and small ruminants are reserved in the region of the homestead, as are milking animals (lactating cows), sick animals, and calves in the dry period. *Foora* animals such as bulls, heifers, cows and camels exploit pasture and water distant from the homestead throughout the rainy period. The Guji community utilises seasonal animal movement and shifts herds seasonally to utilise regions far from lasting resident location. The degree and course of mobility based on the accessibility of rain, water, pasture, and protection. In the dry period herds, cows, bulls, heifers, goats, sheep, and camels were shifted to far locations where water and pasture were plentiful. A father and youngsters over fifteen years of age were in charge for the relocation of the livestock. Pastures, bushes and harvest remains were the main supply for herds in Guji land. Regardless of little accessibility of harvest remains, straw from maize, sorghum, and *teff* (Eragrostis tef) were utilised for the period of the dry period. As the majority of the lands were enclosed with forested plants, trees and shrubs were the base of herds feed. The natural pasture was the major type of feed consumption, and pasturelands were shared and utilised constantly all over the year. Natural pasture was obtainable to herds mostly from March to May and September to November. The natural pasture, browse vegetation and standing hays were significant all through the dry period. The shared land would build up public associations amongst society, as they consider it is their traditions to share land. The people used abundant signs to explain degradation, on all sides of the top soil, plants, herds and water.

Agro-pastoral Systems

Almagro and Martínez-Mena (2014) mentioned that the branch out forms of livestock rearing incorporates diverse small scale farming. Animal husbandry is the livelihood and community system often adjusted to the harsh environment for farming as highland areas. It is the package of diverse experiences and knowledge system allowed to keep the balance between animals and the community. It is noticed that the livestock rearing is the first economic activity in the history of the Guji people. *Gujo* who was born and lived around *Adoalaa* area, moved north-eastward with his three sons *Uraago*, *Maatto*, and *Hookkuu*, then settled in the area called Girja. After the lapse of a very long period of time by raising cattle, the descendants of *Gujo*, moved in to the present Guji land. In Guji culture, cattle have multiple purposes of functions that range from consumption to ceremony and culture. Women are pioneering in facilitating the benefits from

cattle. There are different indigenous land utilisation and conservations mechanisms in the Guji community such as mobility, herd splitting, range burning and enclosures. Mobility is a fundamental strategy for the good management of natural resources and it is a very important strategy used by Guji pastoralists to respond to the variability, unpredictability and dispersed nature of pastoral resources. In excess consumption of pasture has ever more turn out to be the subject for Guji pastoral community as a consequence of augmented population and livestock number and decreased land right because of the reason such as degradation and change to other land utilization.

CONCLUSION

Sustainable land utilisation is very important prerequisite for the survival of humanity. Land conservation and sustainable utilisation is the current issue as the result of ecological factors such as population pressure resulted in higher need for additional natural resources, global warming, climate change, and the threat of environmental contamination, biodiversity loss, changes in landscape, monetary globalisation, power safety, water delivery, and escalating conûict among socio-cultural, political-monetary, and ecological goals. The Guji *Gadaa* system is the time proven indigenous institution responsible for making customary rules and regulations, management, regulating and controlling mechanisms to ensuring the sustainability of natural resources in general and land in particular. This has been manifested through the management, religious, symbolic, socio-political and economic practices of the community. Therefore, the *Gadaa* system is a model institution for the other parts of the world since it follows a normative system in the management of natural resources.

RECOMMENDATIONS

In light of the findings of the study, the *Gadaa* system of land utilisation should be taken into consideration by the world nations and international organisations working on sustainable utilisation of land and natural resources. Concerned government agencies, which are dealing with land and agriculture utilisation, should follow the *Gadaa* system in dealing with utilisation of land resources in Guji area. Therefore, it is recommended that the local knowledge of Guji community should be properly made use of by the policymakers and policy managers in managing land resources in a sustainable manner.

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Paper received for publication in April, 2021
Paper accepted for publication in June, 2021