



Gadaa Values of Environment

Ginbar Nagaraa*

Adama Science and Technology University

E-mail: ginbar2010@gmail.com

Abstract

This paper discusses gadaa values of environment depending on some major religious-philosophical conceptions, background knowledge and some common facts about gadaa views of nature. Gadaa is a social human system but it has originated out of nature and worked towards its health realization. Scholars of gadaa have defined it as Oromo generational values that have encompassed an entire socio-cultural, political and administrative system of the populace at least before the present. This repository system has expounded the entirety relationship distinctly. However, the aspect is undisclosed in the works of Gadaa scholars and those who studied Oromo natural environment. To this particular purpose, the study has employed descriptive research methods and qualitative approach. Data were obtained through interview, group discussions, observations, personal profile, and analysis of cultural heritage values and written literatures. In the eyes of indigenous experiences, Gadaa is wholly intact with nature through various manifestations depicted in the totality of interrelatedness and affiliation with elements of natural environment. The findings reveal that starting from the root word of gadaa, the relationships between gadaa and the sycamore Odaa tree and the way gadaa defines the interrelatedness and organization of elements in the environment revealed some major inherent values of the system related to nature. Results also showed different forms of culture and nature interrelationships in gadaa are propounding environmental sustainability. Even though, important values of gadaa have declined due to the 20th century imperial Ethiopia colonizing structure that has worked against Oromo wisdom, the process of revitalizing gadaa values at a present apprehends the study sensible. It is recommended that the more gadaa values are studied the better it assists current reemergence of Gadaa system, and the larger possible, to restore the lost Oromo natural and social environment.

Keywords - gadaa, environment, indigenous knowledge, nature conservation

Axerara

Qorannoon kuna duudhaa gadaan naannoo uumamaa waliin qabu sakatta'urratti kan xiyyeeffatedha. Kunis qabxiilee seenduubee beekumsa gadaa, qabxilee ijoo dhugaarratti hirkatanifi akkaataa gadaan qabiyyeewwan uumamaa biroo waliin hidhata uumeefi ofiin of ilaaluu bu'uura godhachuuni. Gadaan sirna hawaasummaa qarooma dhala namaa ta'us uumama walin hidhata dhiheenya qaba. Hayyootni qorannoo, gadaan sirna waliigalaa kan siyaasaa, amantii, duudhaa, bulchiinsaa, fi.k.k.f ta'uun dabaree dhalootaa dhalootatti darbaa kan dhufe beekumsa qe'ee fi ganamaa Oromooti jedhu. Haa ta'u malee, hariiroo duudhaan gadaa naannoo uumamaa waliin qabu xiyyeeffannaan hin qaoratamne. Qorannoon kun mala qorannoo akkamta kan hordofedha. Ragaaleen malleen gaaffii qomaa, daawwannaa, sakatta'a baruulee hordofuun funaanaman. Argannoon qoranichaa akka ibsutti duudhaan gadaa karaa addaaddaan naannoo uumamaa waliin hidhata eenyummaa cimaa qabaachuu isa calaqqisiisa. Bu'aan qoranichaa akka ibsutti immoo hidhatni aadaafi uumama waliin jiru kunuunsa naannoorratti qooda mataa ofii akka taphate agarsiisa. Haa ta'u malee, sirni gadaa jalqaba jaarraa 20ffaa irraa jalqabee dhorkaan irratti taasifamuu isaan laaffachaafi dadhabaa dhufe. Kanas ta'u garuu carraa haaromsa gadaa yeroo ammaa kana argamaa jiru daran cimsuuf qirannoon otuu deeggaramee bu'aa qabeessa akka ta'u mala dhaha.

Jechoota Ijoo: gadaa, beekumsa qe'ee, kunuunsa naannoo, uumama

1. Introduction

Human-environment interactions are unavoidable fact and this direct dependency determined the relationships between both would inevitably be resulted in positive and negative consequences. The interactions between human and natural environment can be seen from various ways and forms relationships are established such as production system, agricultural lore, belief system, ritual and social activities, etc (Hausler, 1995; Rajasekara, 1993).

A given people's view with nature and their interactions with environmental components are primarily determined by the types of worldview a group culturally adopted. Study indicates that African worldview is the concept of the unity of cosmos (Gemtechu, 2005; Dereje, 2005; Samu'el, 2011, Melaku, 2016, Lemessa, 2014). The African concept of cosmology is described as a universe is made up of the spiritual and supernatural realities: the human society, animals, plants, and others. Ritual and other forms of socio-cultural traditions of African society affirm the essential unity derived from the primordial unit that the universe and its elements have the same source father, God (Dereje, 2005; Samu'el, 2011). According to Workineh (2005) many African countries have developed an organic conception of nature that promotes an ecological balance or interdependency between human, plant, and animal life. Nature is an integral part of their day-to-day existence and environmental knowledge relies on both the relationship between humans and nature, and the visible world and the invisible world. Thus, spiritual and material beings have a complementary relationship and

the Oromo share the major African beliefs which consider nature as their integral units (*ibid*; Samu'el, 2011).

It is evident from the works of Gemtechu (2005) that the Oromo knowledge of environment is primarily rooted in their worldview. Categorically, the Oromo views of nature can be matched to more of biocentrism or ecocentric worldview which recognizes natural elements are alike of beings having their own values to the universe and thus, they form strong coexistence (Eshetu, 2008). This type of worldview declared the inclusion of nature and natural substances into the mainstream culture. Biocentrism admits independent existence of natural resources and their intrinsic values as oppose to anthropocentric which diminishes and ends resources to human palatable utility (Taye, *et al.*, 2010:189).

The latter type is expressed in Samue'l (2011) as a mechanistic worldview which has opted natural sources for material and economic needs satisfaction. It is clear from the works of Workineh (2011) that unlike anthropocentrism the Oromo have deep concerns for the future and health of both human and nonhuman creatures. He goes further mentioning that the Oromo world view has included an environmental ethic that can serve as the basis for a contemporary environmental ethic. Other scholars, Jemjem and Dhadacha (2011) expressed the Oromo as naturalistic, the beauty of nature loving inherent traits and greenery worldview (Eshetu, 2008). As can be inferred from the above explanations *Gadaa* view of nature is biocentrism. This is further supported in the findings of the study that its conceptions, philosophies, practices and activities embedded have testified this reality.

One most relevant aspect to study Oromo natural environment is the perspectives and experiences of *Gadaa* system. Scholars of *Gadaa* have discussed, it is an anchorage of the populace whole system generational value around which the Oromo identity have been constructed, defined and maintained (Asamrom, 1973 & 2006; Alemayehu, 2009; Dereje, 2005 & 2012). *Gadaa* is a complex system and consolidated knowledge that covered broader aspects of life (Asafa, 1993 & 2012). As *Gadaa* is meant almost everything to the Oromo, it has encompassed principles which have guided their interactions with the natural environment (Alemayehu, 2009; Dereje, 2005 & 2012). This all-inclusive aspect anchoring political, military, administrative and social issues have been addressed with some significant attentions in various disciplines and by respective scholars instead of its environmental roles. The environmental area will be important like those multifarious aspects shaped the Oromo social, economic, culture, religion, history, etc life.

In lines to this, scholars agreed that environmental conservation is integral units of the populaces long established practices (Melaku, 2016; Lemessa, 2014; Temesgen, 2010; Workineh, 2005 & 2011). However, these studies have predominantly given focuses to the general features of Oromo worldview towards major environmental components and natural resources conservation. Hence, this whole-inclusive mega level system views with natural environment of the Oromo are undisclosed purposefully. Thus, this study believes that a more plausible aspect to study Oromo natural environment is illuminating the perspectives and experiences of *Gadaa* system. While environment is the combination of human and its

culture interaction with natural elements how *gadaa* does present its distinctive indigenous experiences. As the Oromo, from its early on time initiation, have made *gadaa* their generational values they would have secured some common background knowledge and understanding which are shared across time and ecological disparity.

To argue on, there are evidences showing as to how closely and what extent *gadaa* has rooted itself in nature and interaction relationship is perpetuated at its background knowledge and practices held at different time and place. It is not surprising being while the *gadaa* system is an indigenous to the Oromo nation and multifarious life aspects have claimed to be tracing their link to its warehouse. In view of this, some basic views and practices embedded at the heart of its political, ritual, spiritual, social, etc aspects reflected this reality. To explicate further, the views of *gadaa* about nature, the link through its various activities, the manners it expounded cosmic elements in unity and its concerns degree establishing mechanisms and setups moderating imbalance relationships between human and non-human elements (Samu'el, 2014; Workineh, 2005 & 2011; Alemayehu, 2009; Dereje, 2005 & 2012). However, apart from some major views, facts and wisdom rooted in background knowledge of *gadaa* the system is at varying degrees of continuity conditions and practices of discontinuity without as such securing a broader base.

Apart from its greater definite historical roles its reviving scenes and emerging scenarios along with current emerging indigenous people wisdom will make any claim of *Gadaa* holistic and the study pertinent. However, the amount of *Gadaa* environmental knowledge and its practices in these study areas itself are varying in its degrees of manifestations. This *Gadaa*-nature relationship are at varying levels of existence and survival, while some have declined and some others are remained spinal but submerged and swallowed by other major views. This is mainly attributed to the past political and historical injustice since the 20th century. Coincided by, contemporary emerging factors like change in religion, globalization and modernism are challenging the continuation of indigenous wisdom and threatening their positions. Nonetheless, being while *gadaa* is a whole thing and everything about the past is almost attributed to it, any claim to justify the Oromo aspect from *Gadaa* points of view is genuine. However, given the paucity of literatures on this area, the complex nature of *gadaa* system and the broad facets it encompassed, this paper has tried to disclose some of its major environmental values in light of indigenous knowledge system perspectives.

2. Materials and Methods

Like most social sciences, this research has dealt with culture that involved claims of values. This study employed qualitative research methods. Both primary and secondary sources were used to compile the data for the study. Mainly interviews, focus group discussions, and document analysis (both published and unpublished) were the instruments used to obtain reliable data for the study.

This discussion is basically made relied on recounts in mainstream tradition of the Oromo, their background knowledge and common facts from three study areas: Gujii, Kokosa and

Tulama of East Shewa where to some extents some *gadaa* elements have been ensured survival and continuity to the present. This was confirmed with the data collected from *Gadaa* leaders, elders and *hayyuus* of these areas which revealed the issue almost overlapping. Elders were referred to cross check how far the tradition is supported in their local *Gadaa* knowledge and practices.

Interviews were held with elder members based on their mastery knowledge of the history, culture and *gada* values of the society. The interview was mainly held with custodian commoners (*Gadaa* leaders and *hayyuus* (advisors), the *Qaalluu/tti* and head of the *Saddeetaa* assembly (particularly in Kokosa). Data collections were held at different time and places sometimes before the present with individuals of the area. The responses of the interviewee were documented by note taking and tape-recording. This tool was used to get detailed data for the entire frame of this study. The study also employed relevant official documents, unpublished and published documents as source of data. Some important official documents were obtained from the library, government office and internet. Data from these sources, thus, were used for the entire frame of the study.

3. Results and Discussion

3.1. An Overview to *Gadaa* and Nature in Oromo

This discussion has emanated out of the view and thinking that in its entirety *gadaa* wisdom is closely affiliated and tied with nature which several aspects, ways and manners reflected at different level perpetuates. *Gadaa* is nature related in almost of all its ways and manners presented. There is believed that *Gadaa* has strongly and earnestly expounded all elements of environment are chained and inseparable from one another. Based on findings of the study all elements of environment are always and intermittently interrelated and put in chain as to which one is inseparable and never indivisible from another. Beyond this conceptual frame and theoretical thinking *gadaa* expressed its holistic approach to nature in establishing various temporal and spiritual mechanisms and setups on regulating and controlling one the other relationships and interactions in broader environment. A lucent approach in *gadaa* views is extended to dealing with maintaining and making green, wet and fresh environment.

Principally, a conceptual and practical aspect of *gadaa* has shown strong nature affiliation and observant of it. To mention some of these are, for instances, the word root of the term *gadaa*, the patterns of *Gadaa* cycles and its early day break laws are derived from natural phenomenon. On the next point, various *gadaa* activities and practices are to be conducted outside in the fields at organic places and shading under trees, particularly the sycamore *Odaa* tree (Alemayehu, 2009, Dereje, 2008 & 2010; Temesgen, 2010). Besides, some major events and ceremonies of cultural, ritual and religious practice are fulfilled whenever accompanying with green, wet and fresh leaves, grasses and thatches. So, under different conditions *gadaa* is nature embedded and enamored by appreciation, admiration and utilization of greens and wet substances. Above all, how *Gadaa* realizes and operates itself in

diverse cosmic and its relationships with environmental components in universe is important to realize some interesting points to the study.

3.2. The Derivative Term of the Word Root Gadaa

The word root of *Gadaa* is one aspect to discuss the affiliation with nature. To begin with, both written source (Dereje, 2012) and oral informants agreed that the etymological linguistic origin and word root of the term *Gadaa* is *gaaddisa* (shade). In this sense, the linguistic meaning of *gadaa* is derived from *gaaddisa* which to imply a shade intention at its background. The meaning of the word shade is to shelter something underneath and/ provide protection from natural and social calamity which also the word root of *gadaa* shared. The sources mention that the word root of *gaaddisa* implicates *gadaa* is provisions of ultimate protections and security to thing retreated to its shelter and bound to its system. In the perspectives of *gadaa*, the term shade, at a prime level, is said to be explicating the necessities to be roofed under most of all fundamental element, God (Waaqaa) and Its law (law of nature/*seera* Waaqaa) and in order, the *gadaa* law(*seera gadaa*) which is claimed to be its imitate. This is agreed in Alemayehu (2009:37) that the term *Gadaa* was the combinations of two separate words: ‘ga’ which represents *seeraa* (law), and ‘da’ that implies Waaqa (God). *Gadaa* system laws are subordinated to the laws of nature.

In this regard, the concept of shading communicates an orderly manner organization and arrangement with laws of nature and *gadaa* which governed everything in universe. This is reinforced by the fact that as the law of nature governs every entity in cosmos, *gadaa* is mastermind to all aspects of Oromo life. *Gadaa* is an agent for laws of nature exact realization and committed to make beneath the belly of divine Waaqaa (God), the Supreme Being and following shade of *Gadaa* laws, the leading social human system. *Gaaddisa* is emanated out of the desire to be awaited under ultimate protections as law is a governing principle. *Gadaa* is an umbrella under which provisions of peace, security and coexistence are ensured obedience of its power and authority. An environmental role of shade is here conceptually implied in a way to maintain both social and natural system equilibrium. In both its symbolic and practical meaning shading has given direct environmental implication harmonized natural and social world.

3.3. The Cycles of Gadaa Affiliation to Nature

A point to say about *gadaa*'s evolvement in nature is the cycles of *gadaa*. Informants agreed that the cycle of *gadaa* was imitations of some natural phenomenon principally *podocarpus* tree (*birbirsa*). To be specific, every eight years cycle of *gadaa* is said to be imitated from within the same years' range blossoming period of *podocarpus* (*birbirsa*) tree. *Birbirsa* blossoms and gives seeds every eight years from which every series of *gadaa* cyclic period was adopted. A work based on scientific prove (Abdela Gure, 2008) indicated that *Podocarpus* gives blossom at every 7 to 8 years which Oromo knowledge of the tree species shares. The following song of *foollee* grade (16-24 years of *gadaa* age class) depicts the interrelationships between *gadaa* and *birbirsa*. This is enticed as follows:-

Afaan Oromo	English
<i>yaa foollee, birbirsi daraaree</i>	oh! foollee, <i>podocarpus</i> has flowered
<i>birbirsi ni asheetaa</i>	<i>podocarpus</i> gets ripe
<i>gadaatu na waamee</i>	it is <i>gadaa</i> which called me
<i>gadaan kan saddeetaa</i>	<i>gadaa</i> that is every eight years one recurring

According to informants, *birbirsaa* is a natural grown giant tree species which casts its shades over wide area and used to serve for various purposes. It is believed that *Podocarpus* has had distinct features from other trees with the attribute to lightening (*bakakkaa*) attraction given that under which Waaqaa is said to have punished the down time sinner breaches of Its *seera* dropping 'iron' (*sibiila bakakkaa*) with rain down to the earth. From then on, *birbirsaa* is coincided with extreme lightening susceptibility. In Waaqeffannaa (Oromo religion) faith (Daanyaa, 2004) the power of Waaqaa is partly manifested in dropping lightening and this happening is said to have connected the tree species to an area Its power to punish the sinners is demonstrated.

Birbirsaa tree is one of the floras known to the Oromo since ancient and that received rules of utility in a customary law of the Oromo. For instances, among the Arsii during the reformation of *Seera Ambaa/Arsii* (c.a. 15th century) one of the species of plants which enumerated to the top classes of *Mukkeen Seeraa* (Trees of Law) was *Birbirsaa*. In Tulama it marked the purity and genuineness of *Qaalluu* (spiritual head) as such that to be a *Qaalluu* there needs to erect *birbirsaa* and make pourage (*Qaalluu jechuun kan birbirsaa dhaabee jaaloo marqedha*). In coinciding to this, the Oromo spiritual insignia (*kallachaa*) is believed to be made from 'iron' dropped through lightening by Waaqaa and the earliest *Qaalluu* is also said to be sent from Waaqaa with *bakakkaa*. To this presumable reason *Qaalluu*, who is the highest spiritual head wears *kallachaa* which is symbolic to Waaqeffannaa. *Birbirsaa* which gave its own elements to *gadaa* has interconnections to Oromo spiritual dimension.

3.4. Ecological Knowledge with the Sycamore Odaa Tree

Gadaa is a systematized and comprehensive body of wisdom and knowledge in which natural resources and environmental issues are integrated. Its experiences with trees are also importantly shining. Gadaa is intact to the sycamore Odaa Tree for its whole thing activities. In the history of the Oromo people since the beginning of gadaa institutions its general assembly was held at the café under the shade of the odaa tree. Shade of odaa was both the central office of government where the gadaa assembly met and was a sacred place for ritual practices (Alemayehu, 2009; Dereje, 2005 & 2012). The discussion about *Gadaa* underscores its center, Odaa Tree which is claimed as the most gifted sycamore plant from among diverse natural flora species. This is the reasons that the relationships between Gadaa and Odaa are founded on secret and deep philosophical thought about nature explored through the Oromo ecological wisdom.

Odaa tree is the most holy and sacred flora by its ecological merits. Oral sources from the entire study areas corroborated that the selection of Odaa has basically grounded on its full

ecological justifications addressed in Oromo worldview. Accordingly, the selection of Odaa is attributed to the following presumptions. Odaa is a natural ever green tree, which grows at wet and fertile environment, the branch of which grows up and covers wide areas. Roots of Odaa tree go deeper into the earth by breaking stones and rocks to sack water that it remains green the whole years including during winter seasons. These ideas are supported in the works of Alemayehu (2009) and Dereje (2005 & 2012). According to the tradition, Odaa tree owns unique ecological characteristics endowed with the capacity to retain understory water absorbing to the upper surface. It is naturally grown in mild plain and rainy ecological zone.

In addition, the shadow of Odaa accommodates large number of people varying on its age. *Odaa* provided a pivotal role of shading and sheltering functions reinforced by its extensive growing steams covering over a wide area, sending their green and wet broader branches and leaves throughout the year to harbor and moderate the immediate ecosystem, its canopy branches, edibility, hospitality, etc made their first choice. In this regard, shading environment services and socio-cultural reservoir values are overlapped around the philosophy of Odaa tree. In its physical natural appearance, like any other tree, *oda* provides shading environmental attainment services that trees and forests provide to inanimate and animate organisms. However, it has combined together environmental and non-environmental security roles which surpasses and brings *oda* at the top and superior to others. Environmentally, trees and forests provided a retreatment services to living organisms from heat and dry temperature, retirement for rest and dwelling from enemy (Workineh, 2005 & 2011; Melaku, 2016; Lemessa, 2014).

The tradition also emits environmental cleanness and neatness quality of Odaa tree and its immediate sites which is collectively named as *ardaa jilaa/saddeetaa*. Odaa and its immediate surrounding are always kept clean as insects; trees climbing wild beasts and biting organisms are said never made their night at and on *oda*. Thus, *oda* is clean from fluid, solid droppings and bad smells created with the presence wild beats and insects at the area. As elders revealed the issues through their tested experiences the miraculous feature of *oda* is being neat and clean from spoiled while being stands at forest. Besides, Odaa is also said to have additional extraordinary values like its fruits edibility. Besides, the elders recount, Odaa possesses different milk which has nutritional and ritual symbolic roles in Oromo. Milk is used to be served during ritual and spiritual activities sought for mediation of nature and against catastrophic. Again, Odaa tree is mentioned to be the most honest and humble under whose shade someone can haven ultimate protection without fear and loss of life. This is reinforced by the view that lightening is never dropped on *oda* (*odatti bakakkaan itti hin bu'u*) and sheltering can be made intermittently including during rainy season. This is as opposed to the story of *Birbirs* which is said to be susceptible to its strike.

The aforementioned discussion depicted the *gadaa* wisdom centered ecological knowledge with selection of *oda* tree. The selection criteria raised various issues in what and which *oda* is appeared to be distinct and thus, chosen for *gadaa* meeting center and assembly ground. The qualifying reasons are basically expounded, attributed and mentioned to as its intrinsic values and features. From the sources, why *gadaa* social human system has abode

under *Odaa* tree and how it was chosen from entire species of the natural world reflected Oromo view of nature at its background. Accordingly, attributing points are made around its shading distinct purposes, environmental cleanness (unspoiled by wild beasts' droppings), its resources endowment like special milk and fruits. Following the traditional recount, in almost all terms of sycamore *Odaa* tree selection for *Gadaa* system, its environmental and ecological merit preference are being underlain.

Through the ecological qualities social human and non-human life formed intact and this ultimate goal is realized in their life. *Odaa* tree is a meeting ground and a center where fundamental principles of life like unity and unanimity, richness, prosperity, hope, aspiration, etc are rectified. Under the tree their merits and demerits, success and failure in natural and social environment are brought to a common point of ground. Discussions, decisions and enactments about nature conservation and natural resources utilization are made passed onto the people. *Gadaa* is not simple aspirant when it has chosen and utilized *odaa* for extraordinary services. But, *gadaa* law has clearly made rules of utility on *odaa* tree by which the tree species is elevated to be most honored enjoying special prerogatives and privileges over anything else without comparisons. This is to reinforce *odaa* ultimate protections from any direct and indirect physical exploitation and utilize of its resources. As the result, the ecological merits and benefits of *Odaa* tree and its immediate organic sites are made to be kept at a place. To this aim, *Odaa* tree is made to receipt highest prerogatives of *gadaa* laws from among entire flora species.

3.4.1. The Prerogatives of *Odaa* Tree: *Seera Odaa* (*Odaa* law)

Odaa is a tree under whose physical shading the issues of *Waaqaa* and *Gadaa* are brought to harmony and, hence, formed invincible unit. As *Gadaa* was derived from *Seera Waaqaa*, *Odaa* was a center where to exercise enact and act whole governing laws. Above its physical environmental shading, *Odaa* is a center where pivotal issues are ultimately made. It is mentioned in Alemayehu (2009); Dereje (2005 & 2012) that in long established culture of the Oromo people, *odaa* is regarded as the sources of peace, symbol and unity among the people. *Odaa* is the most single tree a rule of utility was made in *gadaa* and its administration was submitted to legal matter.

According to my informants when *odaa* was made to be chosen it was clearly for ritual, religious, political, social, etc purposes which are non-palatable exclusive demands category and affirmed to assigned services in *gadaa* law. *Odaa* has been made recipient of rules privileged the tree and its values protections from any anthropogenic reasons and consumptive demand activities. Accordingly, anything pursues direct physical exploitation and utilization is prohibited underlain as violating and contravening its sanctity. The law has made clear itself on issues that sanctioned with the prerogatives against from any other uses, other than assembling and meeting purposes. The privilege is extended to the right against any economic and material palatable activities, pouching, hunting, grazing and farming, cutting any of its parts, burning, etc at its close proximity. Moreover, speaking noisily voices at nearby, using anger sounds, speaking disappointing words and expressions, insulting and

talking bad say about it, spoiling its environs, treachery, etc are banned from around *odaa* natural site. The prerogative protected its site against from spitting impure such as loudly disturbing sound and speech, human mental, attentions, faith, spirit, etc grabbing and embittering words as environmental purity ethics. This is in lines to the expression of Workineh (2011). The prohibition privileged and empowered *odaa* only met exclusive *gadaa* assembling purposes to make every discussions, resolutions and decisions faithfully final.

With the means, Odaa socio-cultural values have beaten against any economic and material utility seeing that they are cheapening its sacred values. Prohibitions from any direct physical exploitation and expropriation of its resources impelled its organic nature protections. Odaa is to which highest form of all punishment for its compensation is made in case its prerogatives are mistreated. Odaa is never cut down for any direct use purposes and any of its part including its leaves is never taken to home. According to *seera odaa* made in *gadaa* anyone who damaged any branches of *odaa* is made to pay material form of penalty amounted to 100 heads of cattle. Hence, Odaa is elevated over other flora species winning indemnity of *gumaa* (reparation payment). Besides, the doer is expected to conduct ritual for purifying from its sin. Any of such actions will also end to other forms of punishment: cursing, social, cultural and political impeachment.

3.4.2. The Prerogatives of Sacred/ness (Wayyuu & Ulfoo) with Odaa and Meeting ground: Ardaa Jilaa/saddeetaa

The area whereon *odaa* grown on and gave services at its natural site for center of *gadaa* assembly. *Gadaa* is assembled on physical land site whereon *odaa* stood and cast its shades over people under its shelter. Odaa is key nit of *gadaa*. Odaa and its immediate site *gadaa* meeting ground is sacredly named as *ardaa jilaa*(Booranaa, Gujii and Tulama) and *ardaa saddeetaa*(Arsii). For instances, among different groups of the Oromo such as Arsii and Gujii sacredness is mentioned to as *Wayyuu* whereas named to as *Ulfo* in Tuulama (Alemayehu *et.al*, 2006). In the mentioned locality both *Wayyuu* and *Ulfoo* are generic terms used to refer something which is given the ascription of sacredness and enticing respective prerogative for its protections. Sacredness is ascription made to different things having varying degrees and roles each is assigned to provide in particular. Different entities have varying degrees of respect and protections emanated out of the type of roles and services assigned and pertinent to them. Accordingly, *ardaas* are assigned to serve only for meeting and assembling purposes and disqualified any economic and material movements.

Tradition and scholarly works on *gadaa* agreed that the earliest man named by *garamticha walabuu* (the innocent man of Walabu) is said to have rested under the shade of Oda tree and where Waaqa revealed His laws, moral values and ordered him to teach the people of Waalabuu. The person became a messenger (Nabi) of Waaqa and Odaa Tree was a sacred tree where Waaqa laws revealed and taught (Dereje, 2005 & 2012; Alemayehu, 2009; Alemayehu *et.al*, 2006). This seemed to have prompted the sacredness of Odaa Tree and its immediate sites, *Ardaa Jilaa*. Sacredness is common in most African society and several

species and sites have been brought and protected in their connections to it (Workineh, 2005).

Accordingly, *ardaa* is center whereon ultimate mediation from Waaqaa sought to the whole cosmic elements than particular and specific purposes attainment. By the virtue that *ardaa* is a center whereon prosperity and solutions for other things and issues are addressed the site is made to be an entity recipient of highest degrees of *gadaa* laws and received maximum protections. For instances, in Tulama *ardaa jilaa* is *ulfoo* whose position and status is never defied. To express its legal positions it is termed as *ardaana jilaa akka seerri* (it is respected as made in the day break laws once). *Ardaa jilaas* are sacred places protected by its site respective holy spirit from impurity and any encroachment and undesired in *gadaa* laws. There is believed that the site Holy Spirit protects *ardaas* causing strike on the doer and violator. *Ardaa jilaas* are nowadays key physical cultural landscape and organic sites maintained for over generations to this period. *Ardaas* are cut off from any material and economic appetites and manipulative nature. Doing something around and with *ardaas* is violating and defying the power and authority of *gadaa* laws which is meant explicitly rebellion against the established order and values. This act is the most badly intolerable one.

This recognition made in *gadaa* elevated *ardaas* from mere physical site and oadaa wild species of natural floras to center of egalitarian governance. Grounded on the site and shaded under its tree belly most genuine decisions are made to protect laws of nature. The power of *gadaa* assumed by its leaders holds them with the accountability to maintain the prerogatives through blessings, prayers, songs, speech they made in public and laws effectuated and revised during their *gadaa* term offices. At public gatherings and events leaders teach what people do and do not regarding sacred shrines and natural resources utilization.

However, given by the deteriorations of forests and trees coverage, the sycamore Odaa tree is not in a different conditions and those historically mentioned fewer sycamore ones (Odaa Roobaa, Odaa Nabee, Odaa Bultum, Odaa Bulluq, etc) and *Ardaa Jilaas* (the Sacred Gadaa Sites) (Alemayehu *et.al*, 2006) are endangered heritages. This explicit deterioration in ecological knowledge, environmental ethics, social problems solving capacity, etc of the people which combined and need to be addressed together urgently. The trend and strategy made to possible conserving floras for combining cultural, ritual, spiritual, political, administrative values with natural features and ecological significance.

3.5. Gadaa and Other Environmental Components

Another important point of this discussion is the manner *gadaa* defined diverse cosmic entities through its perspectives and in relations to itself. *Gadaa* put cosmic element in its own way unified process. According to views of *gadaa* every creature is chained to together in manner that one has respective functions and roles to support another in cooperative terms determining existence of the other in unity. Along this line, the whole elements in universe, whether tangible and intangible are absolutely interrelated as mutual element. The interrelatedness is held on one in totality trust the other.

The talk about *gadaa* values of environment basically emanated from the manner and way that *gadaa* expounds and defines itself in relation to cosmic elements in universe and how it does intend to do with the relationships putting itself among and in the midst of the whole. *Gadaa* communicates entire elements of cosmic are established together and formed indivisible unity. This is the view that entire cosmic elements whether social and natural sorts are structurally and functionally interlocked together to reinforce and support one another. On the conditions that entire cosmic elements have sufficiently cooperated in joint there is only possible to grasp health and wealth circumstances to all in one. Whenever, every element is health and there has carried out its functions to maintain the entire units being in joint persistent. To explicate further, *Gadaa* has made itself clear in how health relationships can be maintained and moderated problems whichever happened from nature and by human induced activities.

In *Gadaa* views of nature there are three essential elements leading, opening and initiating the whole relationships came to be formed and hence integrate the remaining diverse elements. The three spearheading elements fundamental in environment are: rain, grass and milk. Their relationships are constructed around the tent of support and dependence. They are desirable sources of food and water for the whole life. These sources of basic demands are determined and affected by the type of relationships reinforced among themselves with each one presence and absence. They are chained orderly in a way to supporting, enhancing and supplying the other health existence in the first place.

In lines to this, rain (water) is the most primal element and source of life whose availability rinse the earth (1st beneficiary of rain but benefactor for grass) and ensures a grass to grow (becomes 1st level feeder) that its eaters (cattle/ herbivorous-2nd beneficiary) provided milk food for breast suckers (human/mammalian-3rd feeders). In this level of feeding, rain is caused from God and only its regular and sufficient provision enables the earth (second benefactor next to sky) rinse and grows grass and greens ecology, which marked affluence and wellbeing provision for grass eaters to get sufficient food in order to produce milk to their offspring and other reliant. In the interrelationships, the functions and roles of other components of environment like the earth, soil, minerals, etc are also compulsory. It is supported in literatures that in Oromo worldview water is a primordial source of life (Alemayheu, 2009; Gemechu, 1998; Dereje, 2005).

Between and among the spearheading elements are other numerous constituents varying from inanimate to animate organisms formed supporters and dependents. In order that, the earth is cooperative and becomes fertile enough, dependents of grass (herbivorous) will be provided with food as to their demand to give milk and meat to their beneficiaries. Milk and meat are among the two most cultural foods mentioned to as *dhangaa abbaa* Oromo. As to *gadaa* views milk has both nutritional and ritual values while the Oromo hold and sprinkle milk as *dhibaayyuu* (libation purpose). Pouring ritual milk is to express ones satisfactions to God and means to mediate whenever problems occur in the totality relationships. In this natural order arrangement human appears at third level as utilize of milk and ritualistic being of thanks-giver to its Waaqaa(God). This is an aspect of *gadaa* wisdom maintaining and making rain-

grass-milk in their orderly manner. Here, human activities negative consequences are clear to *gadaa*. Human is appeared to be sole causal agent through its unappealing views, behaviors and activities. Bewaring this, *gadaa* interrogate human and its every aspects to be a modest and serve at equilibrium point between maintaining and disturbing the environment.

A ritualistic agent is intermittently advocated to play positive role with the required manner in its activities, views, ethos and behaviors. When human performs rites and kept always ritualistic there is believed to be rain sufficiently available and the whole environs filled with food healthily. Human consistent loyalty is bounded and guided under *gadaa* laws. Human declares its loyalty to the *gadaa* intellect being submissive and observant of its ethos and laws in its views, behaviors and activities. The place of *gadaa* is held by human agent performing necessary ritual and spiritual requirements as a symbol of its loyalty. In doing and being so, ritual and prayers pledged for rain empowering milk on grass. In this regard, the natural order is maintained through milk-grass-rain procession initiated by social order.

On the contrary side, whenever human departed itself from observing ritual and religious necessities and the consequences of its disloyalty caused disruption on the three essential elements and following on the while cosmic. Human sin could be perceived either when it stops from harming or whenever interfere into the natural functions and order motivated through its self-desire as a rebellion of obedient. The line between maintaining and violating obedience is resulted to sufficiency/availability and unavailability of three essential things at a prime level. As the former is ringing health, the latter is problems.

The following picture portrays *gadaa* based cycle in cosmos

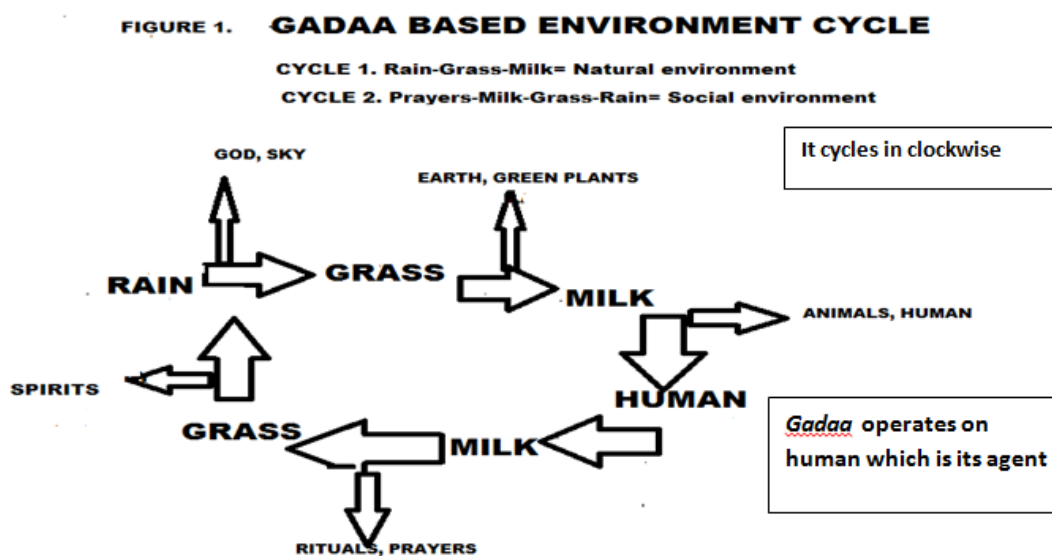


Figure. 3.1. Gadaa Based Environment Cycle. Source: own interpretation

As it is seen from the picture, the natural order world is half part of the cyclic constituent three essential elements initiated by Waaqaa, whereas the second half is the social order world dictated by *gadaa* and human shouldered the accountability. The procession is

outcome of each individual element as well as the whole. The entire unified cyclic has two halves: the nature world order-God and social human world order-Gadaa ritual. This is the 1st halve phase: Rain (primary feeder of the earth causes green wealth)→grass (primary living organisms feeder/ herbivorous)→milk (secondary living organisms feeder/breast sucking/mammalian)→human (the maintainer ritualistic). It is one the other reinforcing natural world order. The 2nd halve phase: human →milk →grass →rain is another form of reinforcing order through social human system. As the result, interconnected diverse elements formed a spiral network in the form of primary and secondary feeders and suppliers.

As grass caused cattle to produce milk, conversely the milk is sprinkled ritually on grass and empowered spiritually to cause rain through human social agent. Human has the roles to initiate as well as constrict. Relationship pursued between two consecutive elements of natural order world is health whenever not human has surpassed. Human ritualistic initiated the second halves of the chain commenced, as social order world. While grass naturally pursues milk, in the social world case it is reversibly the milk empowered on the grass to cause rain. Ritually, human pours milk on the grass which is spiritually empowered and together pledged God for rain, peace, prosperity, health and tranquility for all things in the whole universe and to maintain the natural order recurring.

Accordingly, universe is the outcome of a unified wave formed from unity of diverse elements of environment constructed in *gadaa* conception. The whole relationship is formed from combination of each separate element which has together developed into a sort of food web. Change against the established order is mediated through human holist ritual activities and frameworks. While being the full presence of each element and their proper functions initiate the procession, their insufficiencies and shortages affected the whole relationships impious. This is presented in the absence of rain/water and food that is subsequent to drought, hunger, starvation, disorder, etc.

3.5.1. Environmental Analysis

With a normal recurrent, the chain marked affluent and abundant circulation of environmental wellbeing. As the abundance of rain, grass and milk symbolize sufficient availability of food and prosperity, their absence/insufficiency are environmental shortening which is presented in the absence of rain, drought, hunger, disease, war, lack of peace and stability, poverty, etc (Eshetu, 2008; Alemayehu, 2009). Contrary to shortage of rain that causes absence of food and disruption of the health cyclic procession, its availability ensure affluent grass, green floras and wet ecology which has testified richness, wealth, tranquility, abundance of peace, harmony among human and with non-human organisms. Gadaa conception strongly underlies that both social and environmental merits and crisis are reinforcing one another and inseparable. In lines to this, *gadaa* bewares how to maintaining and making the established relationships persistent. *Gadaa* views that on the conditions that each element carries out its functions and human interventions are moderated to desired line, the whole relationships is persistent healthier.

A diverse form of nature manifested in *gadaa* is to be evident for this relationship. The ritual, religious, social, political and cultural elements practices of *gadaa* are only complete and rightful whenever compulsory requirement and qualifying natural elements and substances such as green grass, wet substances, thatches, etc exists and strictly ingrained. Particularly forms of wet and green natural foliage of leaves, thatches and grasses are those essential required substances for its healthiness and completeness measurement insurance.

3.6. Institutional Setup Working around Gadaa Environment Management

3.6.1. Gadaa Cardinal Laws (Seera Iikkee) and Nature

It is believed that Waaqaa (God) is the source of everything and *gadaa* is a responsible instrument watching the order and arrangement made and put at a place by Waaqaa (God). *Gadaa* is a system that presupposes the relationships among whole elements governed through its laws. Laws of *gadaa* have worked on actions, behavior, manner, attitudes and practices of human form of loyalty. *Gadaa* is devoted itself to ensuring ultimate peace and order in the society and among the various elements of the natural environment. For this purpose various reinforcing institutions have been established and formed spiral networks under the banner of *gadaa* system. According to Samuel (2011); Alemayehu (2009); Dereje (2005) *Gadaa* has two major divisions of laws named as *Seera ikkee* (cardinal law) and *seerota biroo* (other/supplementary laws). The cardinal law of *gadaa* is said to be fundamental of all laws and it has comprised of five laws categories. These are law of the God (*seera Waaqaa*), law of the earth (*seera dachee*), the law of father (*seera abbaa*), the law of mother (*seera haadhaa*) and the law of *Qaalluu*(spiritual head). Particularly speaking, the law of Waaqaa and *lafaa* are key units' reinforced necessary respect for every element in universe.

The other category of *gadaa* law has comprised of many supplementary laws particularly referred to specific element such as the law of grass (*margaa*), the law of water (*bishaan*), the law of mineral water (*hora*), the law of mountain (*tulluu*), and etc (Alemayehu, 2009). This particular law is reinforcing conservation of particular and specific species and sites by making rules of utility and appropriating them to customary and communal ownerships rights system. Rules of utility are established either to moderate open access utilization of nature and natural resources or to prohibit. Thus, *gadaa* has clearly devoted to manner of maintaining and making greenery/green foliage, wet/water/rain and fresh food. These are ultimate indicators for health and wealth environment and the cosmic.

3.6.2. Other Strategies of Institutional Setup

Gadaa has also reinforced other mechanisms of customary temporal and religious centered institutions. The knowledge in natural resources utilization put inviolable lines between use and unused through laws of interactions (Gemtechu, 2005; Melaku, 2016). The diverse human interaction is also moderated from harming elements of environment through some ethos and ritual networks established to regulate each other relationships at various points and during varying seasons of a year. Some of these networks formed spiral at hearts of

gadaa include the ethic-moral code *safuu*, *irreessaa*, *hoofuu*, *adbaarii*, etc. While *Irreessa* (thanks-giving), *hoofuu/adbaarii* (sacrifice), *eebba* (blessing), *dhibaayyuu* (libation), *jeekkarsa* (Waaqeffannaa prays), etc are life proliferation means in Oromo practices, *safuu* (ethical-moral) *abaarsa* (cursing), *seera* (temporal law), etc are nature protecting frameworks (Daaniya, 2004). These are institutional setup worked around environment remedial as preparedness acting at pre- and post- environmental hazards. They are reinforced through the preventive system such as blessing and cursing, material punishment, moral impeachment, physical corporal sentences, etc.

Every relations and contacts of human are submitted to the established institutions which worked towards harmonizing and stabilizing relationships from imbalances. These include refraining to take unwanted interventions to practicing necessary ritual, spiritual, religious, temporal, etc requirement as remedies mediate against all things unallowable. The manners of wrongs could be in action, behavior, attitudes, views, gestures, body movements, etc are given nature conformity and/ unconformity implication and adhered to the established institutions for ultimate obedience and against environment problem.

3.7. Gadaa in Continuities

The present seemed to have welcomed Gadaa to be one of the beneficiaries of the shift to re-indigenization policy in Ethiopia politics as of 1991. What Gadaa is meant to the nation and the world at large-as UNESCO registry prompt its reemergence. Studying *gadaa* multifarious values through the perspectives of indigenous wisdom of environment conservation assists this effort.

Gadaa has maintained certain forms of continuities in some parts of Oromiya and has fresh memory among the Oromo in general while it has shaped their life aspect minimum before the present. For the Oromo the engagement in Gadaa system paves a platform whereby they address the merits and demerits. But, seeing in continuities Gadaa is practicable at very few areas and grass root level that it does not strongly repeat itself at a present as it did sometimes prior to the 20th century. Its actual current status, Gadaa seemed to be more of an affair of *gadaa* elders, leaders and rural people. Whether attempts made from politicians, professionals and other sections of Oromo nation to the expectations to exploit the prevailing opportunities is a question of our time.

Besides, since 20th century Ethiopia political system demise of *gadaa* which as the result is still unable to restore its high time, the absence of cultural legal framework in the country to empower its adherents on their heritage treasures, knowledge, sites, etc increased vulnerability of *gadaa* values to destructions. Mainly there is prevalent to indigenous rights violations in the name of religious conversion and expansion, modernism, globalization, etc. In some parts of Oromiya, apart from the past regime injustice there is increasingly evangelization process underwent against and clearing the Oromo wisdom, sacred shrines and abuse of its indigenous faith. By its using Afaan Oromo as church language how particularly Protestantism is systematic in eroding the past regime survived elements at today is withering. Subsequently, many Oromo indigenous values are running out little protected

and secured due to the absence of culture, historical and sacred sites legal empowerment in the cultural policy of Ethiopia. As the same time the country's environmental conservation policy does not include holistic indigenous wisdom, bearers of the knowhow, physical cultural landscape and sites prompted through practices of indigenous society. Given that the area is still only narrowly studied and a practical balanced attention is not seen given in academic studies and government development policies. However, *gadaa* is emerging to be the centric unifying claim, symbol of the nation, warehouse of their indigenous knowledge and part of their reviving identity.

4. Conclusion and Recommendations

4.1. Conclusion

Gadaa is consolidated indigenous knowledge. *Gadaa* knowledge of environment is integral unit of *gadaa* system thought. In leading and guiding the populace life under its banner, how *Gadaa* views, knowledge and practices with environmental components was so crucial in shaping both human and natural environment of the Oromo nation. But, it is unfortunate to this anchorage of generational wisdom that its environmental value is not being so far explicitly disclosed both by the scholars of *Gadaa* and others studied Oromo natural environment. More or less, a discussion held at any level on Oromo would almost have never barred the *Gadaa* system.

Like any indigenous wisdom, *Gadaa* has its own distinct experiences with nature through its cultural institutions and strategies of adaptation. Some of the point of ground for *gadaa* and nature interrelatedness are realized held with views, knowledge and practices around which relationships and interactions with key natural physical resources are established. In general, starting with the origin of the word *gadaa*, its cycles, the knowledge with *Odaa* center of assembly, its relationships with various components of environment and the manner relationships held through certain enforcing mechanisms are some of the evidences.

Gadaa is derived from the term *gaaddaisa* (shading) that implied something from the above provided asylum to the thing under. Shading conveys receiving protections and being covered under the roof of an entity provided shelter for the next from the above against hazard. Particularly, this implies the need to be abode under the law of nature and its derivative *Gadaa* rules that in turn underlies the need to protect day break laws, nature, diverse cosmos and natural resources.

Gadaa knowledge of nature is also held in its relationships with other components of environment. Environment conservation is defined with the differences between the availability and unavailability of key natural resources in environment. Environmental health and wellbeing is the result of reciprocal relationships among the diverse cosmos led by three essential elements (rain, grass and milk). Preceded by these, the remaining elements are interrelated in a way each is desirably provided with entities the second to carryout functions for the other and this is rounded in cyclic food chain. In the whole process human is the sole

causal agent turns the whole interrelationships among elements of universe to imbalance. When there is a step into a function of an element by another, it signals environmental problem which is moderated through mechanisms established at its hearts. In this regard, both social environment and natural environment wellbeing supported each other the either side shortening is directly implicated on the next.

This concept and practices of green and wet ecology centric in Gadaa values of environment are overlapped in modern secular conservation program. There is no affluent environment and its wellbeing in their absence, they are essential far beyond the mere to fill basic palatable needs. These key resources for the survival of entities in the universe as initiators and constrainers are beyond what they (traditions) appear to anthropogenic view and someone outside the culture. However, this does not show the exact present practical status of Gadaa but it will spit some lights on the area and substantiate the claim in revitalizing *gadaa*.

4.2. **Recommendations**

For holistic sustainability there should be devises which will ensure survival of some useful indigenous values. There should be measures to empowering local institutions, bearers of the knowhow, indigenous right claim and cultural landscape of the Oromo through legal frameworks and integrate to their relevant modern developmental policies and practices. Indigenous knowledge, the Oromo various cultural landscape managements should be introduced and supported through legal frameworks to protect Odaa and the various *Ardaa Jilaas*.

Ethiopia environmental conservation policies participation approach only incorporated the physical people not people's knowhow and sites under their banner. So, there should be strategies designed to integrate and incorporate, at least in a regional state environment conservation policies on how to promote indigenous knowledge and sites brought under its banner to the present by empowering the local society, Gadaa leaders and elders on their resources.

The ecological knowledge with Odaa tree and its species is extinct with deterioration of forests in Oormiya. The concept of protecting Odaa tree at certain centers like establishing cultural value tree species conservation pools. There needs to collect the specimen at heritage center or museum. There is Oormiya Gadaa Leaders Council and at various local levels Gadaa assembly and leaders shall be empowered with legal frames and enforcing mechanisms to defend their positions and tangible and intangible Gadaa wisdom from non-cultural consumptions. Including Office like Culture and Tourism in Oormiya is not backed through rules and regulations and empowered through such frameworks.

Gadaa cardinal law, the prerogatives of sacredness of Odaa tree and its immediate environs have so far enforced their survival. However, these are running outdated and little interested by many significant sections of the people and youth generation due to the impact of modernism, urbanism, change in religion, etc and the incompatibility between exogenous and

endogenous views. There needs to teach generation through curriculum and adopting into education system.

The way to prompt its conservation should include the adoption of landscape management, delineate and define their physical territory, conducting extensive study and making to be known to the public through education curriculum, introducing new programs like local environment knowledge, etc. A clear standing from the concerning body including government in setting culture regulatory frame works will empower and make the local populace assume full control and ownerships rights over their cultural ecology, their resources (both nature and culture), associated values, etc.

References

- Abdella Gure (2004). "Seed-borne Fungi of the Afromontane Tree Species *Podocarpus falcatus* and *Prunusafricana* in Ethiopia". Doctoral thesis Swedish University of Agricultural Sciences Uppsala. Retrieved 20-04-2013
- Alemayehu Haile *et. al.*(2006) *History of the Oromo to the Sixteenth Century*. 2nd Edition/ First Impression /Oromiya Culture and Tourism Bureau, Finfinne.
- Alemayehu Haile.(2009). *Gada System: The Politics of Tulama Oromo*. First Edition. Oromia Culture and Tourism Bureau. V.1, 2009.
- Asafa Jalata. (1993). *Oromia and Ethiopia: State Formation and Ethno- national Conflict, 1868-1992*. Lynne Rienner Publisher, Boulder.
- _____ (2012). *Gadaa (Oromo Democracy): An Example of Classical African Civilization*. *The Journal of Pan African Studies*, vol.5, no.1.
- Asamrom L. (1973). *Gadaa: Three Approaches to the Study of African Society*, (New York: Free Press).1973
- _____ (2006) *Oromo Democracy: An Indigenous African Political System*. Asmara: The Red Sea Press, USA.
- Bartels L (1983) *Oromo Religion: Myths and Rites of the Western Oromo of Ethiopia- An Attempt to Understand*. Berlin: Dietrich Reimer Verlag, Germany.
- Daaniyaa. (2004). *Waldaa Duudhaa fi Aadaa Oromo* (Association of Oromo Culture and Value) Finfinnee,
- Dereje Hinew. (2005). "Historical Significance of Some Major *Gadaa* Centers in Oromia". A.A.U School of Graduate Studies.
- _____. (2012). Historical Significances of Odaa with Special Reference to Walaabuu. *Science, Technology & Arts Research*, 1(2): 81-90
- Desalegn Chemed. (2007). *Indigenous Systems of Conflict Resolution in Oromia, Ethiopia. Community-based Water Law and Water Resource Management*. (eds) B. van Koppen,). CAB International 2007
- Edwards, Sue (ed.). (2010). *Ethiopian Environment Review No. 1. Forum for Environment*, Addis Ababa

- Eshete Gameda. (2008). "Oral Literature as Field of Scholarship: Folklore Genres in Socio-Cultural and Political Environment". PhD dissertation. University of Frankfurt.
- Gemetchu Megersa. (2005). Oromo World View. *Journal of Oromo Studies* 12: 68-79.
- Hausler, Sabine. (1995) "Listening to the People: The Use of Indigenous Knowledge to Curb Environmental Degradation," in Stiles, Daniel (ed.). *Social Aspects of Sustainable Dryland Management*. Chichester and New York: John Wiley and Sons, pp. 179-188.
- Jamjam Udessa and Dhadacha Gololcha. (2011). *The Gadaa Democratic Pluralism with A Particular Reference To The Guji Socio-Cultural and Political Legal System*. RELA Printing Press,
- Kuwee Kumsa, (1991). "The *Siqqee* Institution of Oromo Women," in *the Journal of Oromo Studies*, vol. 4, nos. 1 & 2.
- Lemessa Mergo .(2014). Indigenous forest management among the Oromo of Horro Guduru Western Ethiopia. *Ethiop.j.soc. lang.stud.* 1(2), 5- 22. eISSN: 2408-9532
- Melaku Getahun J (2016) Oromo Indigenous Knowledge and Practices in Natural Resources Management: Land, Forest, and Water in Focus. *J Ecosys Ecograph* 6: 181 doi:10.4172/2157-7625.1000181
- Taye Demissie, Tadesse Aklog and Desalegw Mesfin. (2010). *Module on Civics and Ethics*. Bahir Dar University,
- Temesgen Chibsa. (2010). *The Oromo Indigenous Knowledge and Practices: Implications for Environmental Conservation: The Case of the Oromo of Adama, Eastern Shawa Zone, Ethiopia*, VDM, Verlag,
- Rajasekaran, B. (1993) *A Framework for Incorporating Indigenous Knowledge Systems into Agricultural Research and Extension Organizations for Sustainable Agricultural Development* Technology and Social Change Series, No. 21. Ames, Iowa: Iowa State University.
- Samu'el Yonas. (2011). *Cultural Ethics and Interreligious Coexistence and the Ethiopian Context: The Case of Karayyu Oromo*. Mekane Yesus Seminary, Addis Adaba.
- Workineh Kelebesa (2005). The utility of ethical dialogue for marginalized voices in Africa. Discussion Paper. IIED (International Institute for Environmental and Development. Addis Ababa University
- _____ (2011). Indigenous and Modern Environmental Ethics: A Study of the Indigenous Oromo Environmental Ethic and Modern Issues of Environment and Development *Ethiopian Philosophical Studies, I. Cultural Heritage and Contemporary Change Series II*, Africa, Volume 13