



Western Education vis-a-vis Indigenous Knowledge Inclusion in Ethiopian Education Curriculum: Gadaa System in Focus

ABDISA OLKEBA JIMA¹, AKASHRAJ DEVANGA²

¹Bule Hora University, College of Social Sciences and Humanities, Department of Governance and Development Studies, P.O. BOX 144, Bule Hora, Ethiopia.

E-mail: olkebabdisa@gmail.com. Tel: +251930818102.

ORCID Id: <https://orcid.org/0000-0003-0183-0084>.

² Bule Hora University, College of Social Sciences and Humanities, Department of Governance and Development Studies, P.O. BOX 144, Bule Hora, Ethiopia.

E-mail: akashrajdp@gmail.com Tel: +251949667088

Abstract:

The issues of indigenous knowledge (IK) inclusion in formal education have gotten academic debates recently. Some scholars argue that western education is responsible for IKs attrition. Others refute that IK enriches modern education. Ethiopia endows with varieties of IKs. Gadaa system is one of the Ethiopians IKs. The country counted more than a century since it adopted modern education. However, it has not included IK in the higher education curriculum. It needs the attention of scholars to explore the importance of IK inclusion in the education curriculum and encountered challenges. This study addresses the knowledge gaps regarding the significance and restraint of IK inclusion in the Ethiopian education curriculum focusing on the Gadaa system. The finding shows that the Gadaa IK system inclusion in curriculum integrates IK to formal education, explores Gadaa democratic governance and peaceful power transition, enriches youths' minds with IKs, and promotes peaceful co-existence. But historical factors and western education domination restrain it. It concludes that IKs like the Gadaa system inclusion to Ethiopian higher education buttresses modern education. It recommends the Bule Hora University Gadaa IK system inclusion in the curriculum needs to expand to other Ethiopian universities.

Keywords: Gadaa system, indigenous knowledge, higher education, significance, restraint

1.Introduction

Indigenous people have developed their ways of knowing how to survive before modern science development (World Bank, 1998). Indigenous knowledge (IK) is the unique knowledge confined to a particular society for millennia (Senanayake, 2006; Barnhardt & Kawagley, 2008; Abera, 2020). It further refers to the complex set of knowledge, skills and technologies existing and developed around specific conditions of populations and communities indigenous to a particular geographic area (Noyoo, 2007; Hlatywayo, 2017). It is the cultural and social experiences (Githui et al., 2015). That cover local, traditional, non-western beliefs, practices, customs, and world views (Horsthemke, 2004). IK passed from generation to generation orally and cultural rituals (Senanayake, 2006). Indigenous peoples have preserved distinctive thoughtful, rooted in a cultural experience (Bruchac, 2014).

The current and future generation has given attention to the vast amount of thousands of years old experiences of IK (Safakish, 2015). The IK renaissance interest has increased after it was neglected by the western for many years (Schafer et al., 2004), and it is a growing field of inquiry (Battiste, 2005). The debate of IK inclusion into scientific knowledge has emerged during 1980 in the development and environment fields. Following this, different NGOs began to work on the south globe IK like medical, agricultural, and environmental issues in the mid of 1990 (Lanzano, 2013).

Different scholars explain the relationship between western education and IK differently. Bruchac (2014) argues that Western practitioners posed a threat to the integrity of indigenous cultural traditions and territory by regarding them as public scientific property. Indigenous education is shrinking over time while modern education becomes mainstream. Proper recognition, exploration, and utilization of IK by decision-makers are lacking. Thus, the two education systems are not benefiting from each other (Demssie et al., 2020). Western education focused on the knowledge gained in the classes. And yet, indigenous people acquired knowledge via organizing direct experience in the world. According to western education, the learners' competency depends on predetermined ideas. But in the IK, the competency is based on the practical aspects that relate to the existence (Barnhardt & Kawagley, 2008). However, Safakish (2015) negates that indigenous and formal knowledge are not in conflict. Instead, they are complementary to each other.

The IK has several significances. Education transferred norms, values, experience, science, technology, attitudes, behaviors, and social skills to the coming generation (Nair & Abera, 2017). The inclusion of the IK system into the school curriculum increases the science, technology, engineering, and mathematics curriculum (Abera, 2020). It benefits the researcher because people have practiced it for many years (Barnhardt & Kawagley, 2008). "IK is an adaptable, dynamic system based on skills, abilities, and problem-solving techniques that change over time depending on environmental conditions, making the taxonomic approach difficult to justify or verify" (Battiste, 2005). Different IK inclusion is of paramount importance to build a strong nation (Nair & Abera, 2017). IK can play a significant role in solving problems and formulating policies if it integrates with other forms of knowledge (Noyoo, 2007; Yigzaw & Boudreau, 2010). We need to consider IK because it is as expensive as mines with thousands of years of history (Safakish, 2015). It is the basis for agriculture; and their asset to invest in the struggle for survival, produce food, provide for shelter and achieve control of their own lives (Senanayake, 2006). Generally, IK is practical. It links the survival of every human being to the wholeness of nature and its elements that support life (World Bank, 2004).

As IK, Confucianism emphasized, in particular, the power of education to improve society and citizenship both in the intellectual, social, and moral sense in China. The Chinese presume that Confucian education could transform people morally, intellectually, and socially (Wan, 1980). Confucianism is the cornerstone of traditional Chinese culture. Confucian traditions emphasize group orientation, interpersonal harmony, acceptance of authority, and the importance of education and academic attainments (Ho, 2020).

An IK factor depends on existentialism, communalism, preparation, perennial, and functionalism in African nationality (Mwinzi, 2015). The people of Mqatszeni, in South Africa, for instance, express a strong sense of identity, belonging, and a collective sense of being. They think of the individual in the context of relationships with fellow human beings in both natural and spiritual realms (Khupe, 2014). The relationship between western education and IK in African countries is critical and complex (World Bank, 2004). Western knowledge has expanded to Africa at the IK expense (Ronoh, 2017). Many theories imported from the West have not been able to find innovative solutions to Africa's development dilemmas (Noyoo, 2007). African universities and other institutions involved in producing and disseminating knowledge have not made some of the more fundamental changes required to integrate IKS successfully (Schafer et al., 2004).

The notion of education in Ethiopia started in the sixth century following the entrance of Christianity. The church continues to dominate the education system in Ethiopia for many years. In 1908, Menelik II introduced modern education. The contents and purpose of education depend on the political ideology of the Emperors (Shishigu, 2015). And yet, the scientific education system introduced in Ethiopia did not appreciate the indigenous education system (Demssie et al., 2020). Ethiopia still gives less attention to IK. Instead, it follows the colonial curriculum under implementation (Abera, 2020). The current Ethiopian educational system marginalized IK and excluded experienced local people (Nair & Abera, 2017). Ethiopia has not developed a modern educational system that produces students

who can solve problems and enables the country to be competitive in the contemporary world (Yigzaw & Boudreau, 2010). Generally, the curriculum did not depend on the economic, social, and cultural realities of Ethiopia. The country copied its components from other countries. It translated textbooks for primary education from other languages without reflecting the Ethiopian situation (Bishaw & Lasser, 2012).

Ethiopia is rich in varieties of IK. To mention some: Konso people terracing system, Awramba people gender equality, Oromo Gadaa system, Sidama Fiche Chambalaalla New Year celebration, Hadiyya Yaahode Maskala New Year celebration, and Tigray people Ashenda women festival. However, this research focuses on the Oromo Gadaa system indigenous knowledge.

2. Gadaa system indigenous knowledge

Gadaa is a black philosophy that has many abstractions to be explored and put into practice for the good of humanity. It is the legacy of the Oromo to Ethiopia in particular and humankind in general (Negari, 2018). Gadaa is a base of Oromo nationalism (Jalata, 2012). It is an invaluable ancient civilization that the Oromo offered to the world as an intangible cultural heritage by UNESCO (Ta'a, 2016; Negari, 2018). The Gadaa is the most comprehensive indigenous African institution (Negari, 2018). Gadaa is the Oromo socio-political democratic system that regulated political stability, economic development, social activities, cultural obligations, moral responsibility, and the philosophy of religious order of the society (Hinew, 2012; Ta'a, 2016; Gutema, 2017; Sirna, 2018). Hinew (2012) posits the political philosophy of Gadaa depends on three values: terms of eight years, balanced opposition between parties, and power-sharing between higher and lower levels. The Gumii Gaayyoo is an expression of the exemplar model of the unwritten Oromo constitution (Jalata & Schaffer, 2013). The Gadaa system was under threat from external forces from the pre-medieval period because of the expansion of Islam and the Christian kingdom (Sirna, 2012). It operated effectively for centuries among most Oromos until the Menilik's conquest suppressed it (Ta'a, 2016). The Gadaa system is an oral form of the nation's constitution in the modern sense. It developed and evolved from the cumulative experiences gained from experiments, practices, customs, and lessons of many generations of the Oromo society in a very long period (Gutema, 2017).

Education transferred norms, values, experience, science, technology, attitudes, behaviors, and social skills to the coming generation (Nair & Abera, 2017). But the rulers' interests shaped the embedded Ethiopian education (Degafa, 2018). The curriculum did not depend on the Ethiopian economic, social, and cultural realities (Bishaw & Lasser, 2012). Educated Oromo has become unfit and detached from their fathers and mothers in their thinking and way of life. These educated Oromos who have lost their identity have to be engaged in the processes of self-discovery and self-definition (Degafa, 2018). For generations, the Oromos have mainly transmitted their history and culture through oral discourse. Since Oromo scholars and others have been discouraged or prohibited by the Ethiopian colonial state from documenting Oromo oral traditions, adequate information is lacking (Jalata, 2012). But Oromo people struggled to preserve and redevelop their indigenous democracy, written records of which go back to the 16th century, long before European nations embraced the principles of democratic governance (Jalata & Schaffer, 2013). To shift Gadaa indigenous system from oral teaching to academic teaching, Bule Hora University began to incorporate the Gadaa system into the curriculum in 2019. Later, Metu University followed the footstep of Bule Hora University and included the Gadaa system into the curriculum. This research investigates the significance and restraint of the Gadaa system IK inclusion in the Ethiopian higher education curriculum. It answers the following questions:

1. What are the significances of the Gadaa system indigenous knowledge inclusion in the Ethiopian higher education curriculum?
2. What are factors that affect the Gadaa system indigenous knowledge inclusion in the Ethiopian higher education curriculum?

3. Methodology of the Study

This research employed qualitative methods to scrutinize the indigenous knowledge inclusion in

Ethiopian higher education, focusing on the Gadaa system IK. In qualitative research, the researcher is a primary instrument of data collection and analysis. The researcher mediates data (Kothari, 2004). The researcher used a qualitative method to collect data from Abbaa Gadaas, elders, Bule Hora University instructors, students, and administrators of the Gadaa and Cultural Studies Institute via semi-structured interview and focus group discussion (FGD).

The researcher stratified the participants of the study because of the homogenous sub-population. Accordingly, the researcher formed four strata: stratum one (student participants), stratum two (instructor participants), stratum three (Gadaa and Culture Studies Institute representatives), and stratum four (Abbaa Gadaas and elders).

Stratum one consists of students who learn the Gadaa system IK. This stratum deals with Bule Hora University BA degree, MA degree, and Ph.D. students. According to the Gadaa and Culture Studies Institute, 37 students (16 males and 21 females) learn BA degrees in Gadaa and Oromo History departments. The department has opened in 2020. Thus, there are only first-year students who learn a BA degree. Since the MA in Gadaa and Peace Studies opened in 2019, the MA program has first-year and second-year level students. In the first year MA level, there are 11 students (ten males and one female). And in the second year MA level, eight students (six males and two females) attend the program. Generally, 19 students (16 males and three females) in both the first and second year attend the MA program. Lastly, the University opened Ph.D. in Gadaa and Governance Studies in 2020. Hence, there is only a first-year student in the Ph.D. program. The Institute reported that eight students (seven males and one female) attend their Ph.D. program. Generally, there are 64 students at all levels. The researcher selected 24 participants from this stratum for FGD and interviews. Two FGDs employed with students. FGD one held with BA degree students. The number of undergraduate students is greater than the number of graduate students. Hence, FGD one consists of more participants than FGD two. This FGD consists of 12 participants. Also, they did not adapt to the campuses very well compared to graduate students. Their knowledge is not equal to those students. As a result, the researcher conducts independent FGD with them. FGD two deals with postgraduate students (both MA and Ph.D.) because their knowledge is related. This FGD consists of seven participants because of the above reasons. Semi-structured interviews involved two BA students (one male and one female), one first-year MA student, one second-year MA student, and one Ph.D. student. The researcher used a proportional stratum to select the participants. And attempt made to balance gender equality. To select 24 participants, the researcher formed a sub-stratum as explained in Table 1.

Table1: Stratum one sampled participants (Own computation, 2020)

Students by sex & level	Total No.	Obtained participant (%)	Selected sample size
Male, BA	16	25	6
Male, MA	16*	25	6
Male, Ph.D.	7	10.9	3
Female, BA	21	32.8	8
Female, MA	3*	4.7	1
Female, Ph.D.	1	1.6	--
Total	64	100	24

**=both first-year and second-year MA students*

Additionally, the researcher selected two students purposively from those who learn Introduction to Gadaa system generic course to include their views regarding the significances of the Gadaa system IK in Ethiopian higher education. The interview holds with the participants. The researcher obtained one male and a female to balance gender. Generally, stratum one consists of 26 participants.

Stratum two has instructors who teach the Gadaa courses. There is no aggregate data of instructors

who offer courses because some are guests, others are joint instructors, and others are composed of different departments based on their related academic background. No instructor has specialized in the Gadaa system before. For this reason, the researcher obtained eight participants for FGD and two senior instructors for the interview. Generally, 10 participants were selected through purposive sampling from this stratum because it enables the researcher to obtain specific data. It also helps the researcher to glean information from various extremes of population groups.

Stratum three consists of the Gadaa and Culture Studies Institute representatives. The Institute has a director and two vice directors. The researcher obtained two participants purposively because their works related to the research title. Also, they have knowledge relating to the Gadaa system.

Stratum four deals with Abbaa Gadaas and elders. The research selected six Abbaa Gadaas and four elders via purposive sampling technique for interviews. The participants have sufficient knowledge and experience concerning the Gadaa system IK. Generally, the researcher selected 48 participants for this research. Furthermore, historical documentation such as archives, books, articles, and minutes related to the research title applied to enrich the primary data. Finally, the researcher analyzed the collected data by content and theme data analysis method. The researcher triangulated collected information with secondary data to increase the data reliability and validity. The detailed participants' summary is presented in Table 2 below.

Table 2: Data collection summary, participants, and sample sizes (Own computation, 2020)

Stratum types	Respondents	Activities	Employed Tools	Sample Size	Time Taken
Stratum 1	Undergraduate students	Discussion Interview	FGD Semi-structured Interview	12 2	1:30 hours 40 minutes
Stratum 1	Graduate Students	Discussion Interview	FGD Semi-structured Interview	7 3	1:15 hours 1:00 hour
Stratum 1	Students who take the generic course	Interview	Semi-structured Interview	2	50 minutes
Stratum 2	Instructors	Discussion Interview	FGD Semi-structured Interview	8 2	1:45 hour 1:05 hour
Stratum 3	Institute representatives	Interview	Semi-structured Interview	2	1:00 hour
Stratum 4	Abbaa Gadaas	Interview	Semi-structured Interview	6	2:00 hour
Stratum 4	Elders	Interview	Semi-structured Interview	4	1:10 hours
Total				48	

4. Findings and discussions

4.1 Teaching Gadaa system indigenous knowledge

Ethiopia still gives less attention to Indigenous Knowledge. Instead, it follows the colonial curriculum under implementation (Abera, 2020). The pre-existing hegemonic education system denied peoples' identities. The effort to teach the Gadaa system has faced challenges (Hinew, 2020). Modern education in Ethiopia detached from Ethiopia without localizing and conceptualize (Demssie et al., 2020). Abbaa Gadaas' interview results exhibited that the Gadaa system cannot separate from the Oromo people. The Oromo has practiced it for several years before the Menelik II conquer. It is the identity of the

Oromo. The Oromos transfer the Gadaa system IK from generation to generation orally. Senanayake (2006) elucidates that IK passed from generation to generation orally and cultural rituals.

The church education continued to dominate the education system in Ethiopia until Menelik II introduced modern education in 1908 (Shishigu, 2015). Between 1908 and 1935, education aimed to master different languages such as French, Italian, Geez, Arabic, and Amharic. During the Italian occupation, schools either closed or used for the military camps. The education focused on Italian ideology socialization. However, the Italian allowed indigenous languages like Amharic, Afaan Oromo, and Tigrigna (Bishaw & Lasser, 2012). After the Italian occupation, Ethiopian education followed the British education system model. The country imported syllabus, teaching materials, and even teachers from England to prepare Ethiopian students for the General Certificate Examination of the University of London (Nuru, 2000 in Shishigu, 2015). The country translated textbooks from other languages for primary education without reflecting the Ethiopian situation (Bishaw & Lasser, 2012). Hence, indigenous education is shrinking over time while modern education becomes mainstream (Demssie et al., 2020). Between 1952 and 1974, USA ideology dominated Ethiopian education. During the Derg government, Ethiopian education centered on socialism and the Eastern European education system (Bishaw & Lasser, 2012).

The current Ethiopian educational curriculum needs to validate and recognize the IK and integrate it into formal education (Nair & Abera, 2017). Accordingly, Bule Hora University has begun to incorporate the Gadaa system and taught both undergraduate and graduate students since 2019.

Gadaa and Culture Studies Institute interview results showed that it teaches the Gadaa system IK at different levels. Introduction to the Gadaa system course offered as a generic course for undergraduate students. Bule Hora University is the first university that began to incorporate the Gadaa system IK in the Ethiopian higher education curriculum. Hence, all students who graduated from the Bule Hora University learned the Gadaa system. A generic course taken student interviewee presented that:

Learning the Gadaa system changed my attitude toward IK. Before I have studied it, I thought IK is backward. I presumed to the Gadaa system never adds any value to my wisdom. And yet, I learned that Gadaa is peace, love, harmony, unity, and governance. It helped me to live with my classmates peacefully. I wish I had studied other IK in addition to modern education. I am happy to be a student of Bule Hora University that begins to teach the Gadaa system IK publically.

Abbaa Gadaas’ interview results showed that Bule Hora University made history in launching the course that unthinkable in other universities. The Gadaa and Culture Studies Institute representative further stated that “Search and exploit IK, bring into the curriculum, and teach students is the University priority because it is one of the centers of excellence of the University”. In the same vein, the University has launched an MA in Gadaa and Peace Studies for a graduate class in the same year. And accepted students and completed the first year successfully. The University launched Ph.D. in Gadaa and Governance Studies in 2020. Also, the University is under work to introduce a post-doctorate in Indigenous Knowledge and Gadaa Studies (as summarized in Table 3). Following this, Metu University began to teach Introduction to the Gadaa System. The Oromia Regional State started to include the Gadaa system into the school curriculum for all students from Grade one to eight.

Table 3: Summary of Gadaa programs at Bule Hora University (Source: BHU, 2020)

No.	Level	Name of program
1.	Generic course for undergraduate	Introduction to Gadaa System
2.	Undergraduate (dept.)	Gadaa and Oromo History
3.	Master	Gadaa and Peace Studies
4.	Ph.D.	Gadaa and Governance Studies
5.	Post-doctorate fellowship (under review)	Gadaa and Indigenous Knowledge

Undergraduate student interview results indicated that Bule Hora University made history because of Gadaa system IK inclusion in Ethiopian higher education. Instructor focus group discussants explained that the university made the impossible thing possible because IK inclusion in higher education is unusual in Ethiopia. Generally, Bule Hora University has laid a foundation for other Ethiopian universities to integrate indigenous education into the curriculum.

4.2 Significances of Gadaa system inclusion in the curriculum

Gadaa system IK inclusion in Ethiopian higher education has many significances: IK integration with formal education, Gadaa system IK exploration, explore the democratic governance and peaceful power transition, enrich youths mind with IK, strengthen the Gadaa system renaissance, and promote peaceful co-existence.

4.3 Indigenous knowledge integration with formal education

There is a debate related to the mutual inclusion of IK and western education. Some argue that western knowledge eroded IK. Western knowledge has expanded by the expenses of IK (Ronoh, 2017; Demssie et al., 2020). Others debate that IK inclusion strengthens scientific knowledge. Hence, they confirm each other (Barnhardt & Kawagley, 2008; Safakish, 2015; Abera, 2020). Lanzano (2013) elucidates that the debate of IK inclusion into scientific knowledge has emerged during 1980 in the development and environment fields. Contrarily, IK inclusion in Ethiopian higher education is strange. Interview results with Gadaa and Culture Studies Institute representative exhibited that Bule Hora University smashed records for IK inclusion in the curriculum. The graduate student FGD showed that the Gadaa system integration into the curriculum increases the student's knowledge and diversifies the source of knowledge.

One of the instructor representatives explained that:

Gadaa system inclusion in the Ethiopian higher education curriculum helps students compare and contrast IK and scientific education. The IK enriches scientific knowledge. Most of the Ethiopian education undermined IK and imported scientific education. As a result, students relinquished IK and adopted scientific knowledge. That made the country's development challenging because Ethiopia adopted western knowledge without conceptualization and contextualization. However, the IK inclusion into the curriculum addresses the modern knowledge weakness and integrates the former into the latter.

The Oromo societal development confirms Rostow's development stage. Indeed, Rostow's model has its weakness. Rostow's development model classifies economic growth into five stages: primitive society, pre-take-off, take-off, maturity, and mass consumption (Mallick, 2005). Similarly, Oromo societal development stepped into Guddina, Gabbina, Bal'ina, Badhaadha, Hoormata, Dagaaga, Dagaahooraa, and Finna (Jalata, 2012). As each of Rostow's stages has the characteristics, Oromo societal development stages also feature the unique character. The integration of indigenous with modern education helps for the sustainability of education (Abera, 2020). Generally, Gadaa system inclusion in Ethiopian higher education increases creativity, innovation, and science and technology exchanges. The IK integration into scientific education allows students to conceptualize and contextualize modern education and solve local problems accordingly. "IK is an adaptable, dynamic system based on skills, abilities, and problem-solving techniques that change over time depending on environmental conditions, making the taxonomic approach difficult to justify or verify" (Battiste, 2005).

4.4 Power the Gadaa system renaissance

Following the Menelik II conquer of the Oromo people, the Gadaa system eroded for many years. The Oromo exercised the Gadaa system effectively for centuries until the Menelik conquest suppressed it (Ta'a, 2016). Gadaa was functional during the leadership of about 225 Abbaa Gadaas. This means the Gadaa system was functioning in the 3rd century (212) AD at Odaa Nabee (Alemayehu et. el. 2006 in Sirna, 2012). But the Oromo people never surrendered to Menelik II fully. Abbaa Gadaas and elders'

interview results revealed that the Oromo people fought against different regimes to sustain the Gadaa system. The Gadaa and Culture Studies Institute representative interviewee argued that the Gadaa system revived recently. As a result, UNESCO registered as an intangible world heritage in November 2016 (Negari, 2018).

One of graduate student focus group discussant posited that:

Gadaa system practice was limited to only some areas such as Borena, Guji, Karayyu, Tulema, and Gabra. But recently, it has revived. Nowadays, we see the Gadaa system as the Oromo's identity. Among Mecha Oromo, who live in the Oromia western parts, the Gadaa system has forgotten. Nevertheless, it is on the stage of a renaissance now. Irrecha, the Wakeffana festival hold at Bishoftu every year in September, unifies the Oromo people. It accelerates the Gadaa system renaissance. Above all, the Gadaa system included in the higher education curriculum raises the awareness of the Oromo people. It changes the flawed views of non-Oromos toward the Gadaa system.

Most of the instructor focus group discussants presented that the Gadaa system inclusion in the Ethiopian higher education power the Gadaa system renaissance. The elders' interview results showed teaching the Gadaa system shifts oral transfer into organized documents. Generally, Bule Hora University has made history to include the Gadaa system in the curriculum, which powers the Gadaa system renaissance.

4.5 Enrich the mind of youths with indigenous knowledge and thought

So far, the adolescences have relinquished the IKs and adapted to western cultures. Through the Gadaa system, Oromo has its hospitality, respect, gender equality (Siiqqee institution), harmonious relationship, peaceful coexistence, and peaceful power transition. One of Abbaa Gadaa interviewees explained that:

When the elder, father, and guest enter the house, the young youths stand up until they take a seat. The younger never wash hands before the elder, father, and guest. In addition, the Oromo wash the legs of the guest. The respect and food prepared for guests are unique among Oromos. Nonetheless, such Oromo norms have become diminished nowadays. Youths are not doing the same things now. Thus, the Gadaa system inclusion in the curriculum enriched the minds of the youth with IK and thought.

Furthermore, Gadaa is peaceful and love. The system respects the rights of individuals. It preaches about the harmonious relationship among people. When the Oromo surrendered enemies, they adopted to Oromo via Guddifachaa—adoption. We have to invest in the youths' minds to equip them with IK and thought. Otherwise, youths favored the western styles by giving up IK. Besides, in the Gadaa system, power is transferred peacefully via Baallii. The Luba ruled only for eight years. After eight years, he handovers the Baallii to the next Luba. Also, there is check and balance. Luba's success and failure are evaluated after four years, mid a year. If the given Luba unable to bring the desired goals, he will be removed from power and replaced by others. Jalata (2012:132) presents that the Gadaa system has checks and balances principles (through a succession of every eight years). It has power division (among executive, legislative, and judicial branches). The Gadaa system balanced opposition (among five parties) and power-sharing between higher and lower administrative organs to prevent power from falling into the hands of despots.

One student who has taken the Gadaa system as a generic course argued that:

Learning the Gadaa system has improved my mind. I did not know how power is handover in the Gadaa system. Also, I did not know whether check and balance exist in the Gadaa system or not. Rather than learning the Gadaa system, I strived to learn and read about western cultures and knowledge. That happened because of being attracted and adapted to western. I perceived the IK as backward and meaningless. And yet, I regret late learning of the Gadaa system as equally important and valuable as western education. I am happy to learn it again because the Gadaa system has fundamental concepts and knowledge. I encourage the coming generation to learn more about the Gadaa system. Generally, learning the Gadaa system shapes the minds of youth regarding IKs.

Women have a special place among Oromo people. As Gadaa is for males, Siiqqee is for females. Most scholars agree that the male cannot hold the Haadha Siiqqee position, and females cannot hold the Abbaa Gadaa position. That means their jobs and power are classified based on gender. No one can cross Haadha Siiqqee. The crossing is taboo. Oromo women use different Siiqqee mechanisms to maintain their rights; such mechanisms included the law of muka laaftuu (soften wood), the abaarsa (curse), Iyya Siiqqee (scream), and Godaana Siiqqee (trek) (Jalata, 2012:137). Generally, including the Gadaa system in higher institution curriculum equip youth with IK. That brings the paradigm shifts in Ethiopian education.

4.6 Gadaa democratic governance and peaceful power transition exploration

As their political culture, the Gadaa system governs the Oromo people (Ta'a, 2016). The Gadaa is an Oromo indigenous and democratic system of governance (Gudina, 2018; Berisso, 2018). It developed from knowledge gained by community experience over centuries (Berisso, 2018) that accommodate basic modern democratic constitutional principles, elements, and values (Gudina, 2018). Gadaa indigenous governance system is the asset of Oromo society. It can serve the same purpose as the modern democratic constitution. It also serves as a mechanism of socialization, education, religious expression, peace maintenance, and social cohesion. It promotes the principles of equality and freedom (Gudina, 2018). At the beginning of the 16th century, when they began to intensify their territorial recovery and expansion through the Buttaa wars, all Oromo were under one Gadaa government (Jalata, 2012). Gadaa oriented constitutional democracy. It sets a lifelong social and political responsibility than simply a ballot box gratification. The neo-Gadaa reinvigorates the indigenous Gadaa renaissance of politically and economically marginalized Oromo emancipation (Sirna, 2018). The political philosophy of Gadaa depends on three values: terms of eight years, balanced opposition between parties, and power-sharing between higher and lower levels (Hinew, 2012).

The Gadaa system is a generation segment that succeeded each other every eight years in assuming political, military, judicial, legislative, and ritual responsibilities (Sirna, 2012). Abbaa Gadaas and elders' interview results exhibited that teaching the Gadaa system enables the students to know the democratic governance and peaceful power transition. Instructor focus group discussants explained that in the Gadaa system, power is transfer peacefully among five Shanan Gadaa Oromo (five Gadaa parties). Those parties are Birmajii, Michillee/Muudana, Duulo/Halchiisa, Meelbaa/Hambissa, and Roobalee. Albeit the party names are different among Oromos, the roles and numbers are the same. Graduate student interview results revealed a party comes to power once every forty years because there are eight consecutive years among each party.

Jalata & Schaffer (2013) clarify:

The Gadaa system has the principles of checks and balances: periodic transfer of power every eight years and division of power among executive, legislative and judiciary branches, balanced opposition (among five Gadaa grades), and power-sharing between higher and lower administrative organs to prevent from falling into the hands of despots. Other principles of the system have included balanced representation of all clans, lineages, regions, and confederacies, the protection of women from abuse, the protection of women's economic resources, accountability of leaders, the settlement of disputes through reconciliation, and the respect for fundamental rights and liberties.

The Gadaa grades and the socioeconomic and political duties associated with the grades are as follows: Ittimakoo (0-8), Dabballee/Junior Gaammee (9-16), Foollee /senior Gaammee (17-24), Kuusaa/Raabaa/Qondaala (25-32), Raabaa /Doorii (33-40), Gadaa /Luba (41-48), Yubaa I (49-56), Yubaa II: (57-64), Yubaa III (65-72). Gadamojjii (73-80), and Jaarsa (above 80) (Hinew, 2012). After completing an office term, the Gadaa council members did not abandon. In the Gadaa system, they render counseling services to the general assembly (Gumii or Caffee) (Sirna, 2018). Generally, teaching the Gadaa system introduces how the Gadaa system distributes power across generations and down to community members and creates a strong link between successive generations. The power

distribution depends on equality and fair recruitment.

4.7 Teaching Gadaa values and practices

The Gadaa system has different values on social, economic, political, cultural, and environmental aspects. Debele (2018) presents:

The Oromo has a unique respect for the environment. They see trees as human beings. No one can cut the tree without replacing it. Gadaa values and practices recognize the environment as it is a natural gift so that all Oromos have duties to preserve the environment. Some trees like the Odaa have a special status among Oromo societies. Odaa is a symbol of rituals, unity, peace, love, and green for Oromo. The decision is made and passed under Odaa. Similarly, Gadaa values and practices are rooted in societal welfare.

Abbaa Gadaas' interview results showed that Oromo's livelihood and welfare depend on cooperation, coordination, and unity of social values and practices. According to elders' interview, Oromos help each other both during pleasure and pain. Oromo plows together, harvest together, build together, and fight against enemies together.

In the same vein, Gadaa values and practices encourage and ensure social well-being. Sirna (2012) states that as an age-based social organization, the Gadaa system provided the mechanism to motivate and organize members of the society into the social structure. The Oromo has strapping social justice and order. No one can violate that social justice and order. Gadaa prohibits early marriage, deception, theft, and lie. The Abbaa Duulaa must protect the well-being of his people from external invasion. Lastly, Gadaa values and practices have political solidarity. Abbaa Duulaa mobilizes the military and people if enemies attack them. Members of the community are organized and active in politics according to their age grade.

Jalata (2012:135) argues that:

The Abbaa Duulaa (the defense minister) was one of the leading figures in the Gadaa government. He is an elected Qondaala (army). His responsibility included assisting the Abbaa Bokkuu, especially during the time of war. The council, Shanee or Salgee, and retired Gadaa officials support Abbaa Bokkuu. Gadaa laws were passed by the Caffee (assembly) and implemented by officials.

Sirna (2012) explains that the Foollee had to develop a quality and capacity of fighting against injustice. Gadaa system is the most democratic governance because power is handover peacefully, and the Abbaa Gadaa tenure is limited to eight years. The socio-economic development of Oromo is unique. Albeit Rostow's stage of development emerged after the mid of 20th century, Oromo has practiced its socio-economic development before the Rostow. Jalata (2012:140-141) summarizes:

The Oromo social development concept is constructed in seven interconnected phases. Those are Guddina, Gabbina, Bal'ina, Badhaadha, Hoormata, Dagaaga, and Dagaahooraa. Guddina indicates an improvement in cultural life due to the introduction of new experiences to Oromo society. But Gabbina involves integrating cumulative cultural experiences with social conditions through broadening and deepening the system of knowledge and worldview. Gabbina emerges through democracy, peace, cooperation, and consensus of all members of Oromo society of different levels to improve economic, cultural, and political conditions. Next to Gabbina, there is a Bal'ina phase. It involves the enriched cultural and political experiences from Oromo society to another society. It expands through cultural borrowing, resource sharing, and interdependence based on the principles of democracy. Badhaadha is a phase at which the Oromo and their neighbors who accept their philosophy of social development obtain peace, prosperity, and wholeness since there are no incidences of conflict, poverty, disease, and natural calamities. During the Hoormaata phase, animals and people reproduce and multiply because of abundant resources and peace. At the Dagaaga phase, development cycles are assessed and integrated to maintain even and sustainable development. At the final stage of development called

Daga-hoora, Oromo society expands its cumulative cultural experiences of development to neighboring peoples through different mechanisms depending on a given condition.

Generally, Oromo respects laws, elders, assemblies, values, norms, rules, and regulations and encourages equality, justice, peace, democracy, and solidarity. Teaching students these all values and practices of the Gadaa system have a pivotal role by launching the Gadaa curriculum at all levels. (Berisso, 2018) outlines that Gadaa regulates political, economic, social, and religious activities of the community and serves as a mechanism for enforcing moral conduct, building social cohesion, and expressing forms of community culture.

4.8 Gadaa system teaching restraints

Though teaching the Gadaa system in the Ethiopian higher education curriculum has many opportunities for Oromo people and non-Oromos, some constraints challenged it.

The first factor that restrains Gadaa system teaching is historical constraints. Oromo is an indigenous society that lives in its lands and has language—Afaan Oromo—and system—Gadaa. But the Habesha and Arab authors have written that Oromo is a migrant, has no land, values, norms, and language. Haleke Taye and priest Abba Bahre are notable. They further wrote that Oromo is uncivilized. Even so, Oromo is the most civilized nation in Africa. Hinew (2020) argues that historical narratives about the Gadaa system have been the primary challenging issues in the renaissance and recognition of the Gadaa system in the academic arena. A participant from instructor focus group discussants elaborated that:

Oromo is a big nation at the horn of Africa. Many speakers speak its language both in and outside of Ethiopia. Contrary, Habesha writers assumed Oromo as a beast. They feared the braveness and hugeness of Oromo. And they attempted to control its lands and forced Oromo to leave the lands they already occupied. Also, Oromo has its religion and the Gadaa system. The Habesha and Arab authors developed a negative attitude towards Oromos since they were unwilling to accept the Christian and Islam initially. Hence, they defamed and undermined the values, norms, system, culture, identity, and language of Oromo for many years. Reversely, they imposed their languages, identities, religions, and cultures on Oromo.

Another factor that challenges the teaching Gadaa system is the lack of qualified instructors. Every subject needs specialization. The Ethiopian regimes undermined the identities of Oromo and attempted to eliminate them. They never gave recognition to Oromo's identities. Degafa (2018) posits educated Oromo has become unfit and detached from their fathers and mothers in their thinking and way of life. Instructor focus group discussants suggested that they learned western education throughout their lives which forced them to forget IK. Hence, they faced challenges to deliver the course. Some of them do not know the contents and core values of the Gadaa system very well. The researcher argued that short-term training has to set to instructors who teach courses related to the Gadaa system.

Additionally, there are no organized Gadaa system teaching materials. Albeit the Oromo has practiced the Gadaa system for a long time, the organized materials on the Gadaa system are not sufficient, instructors outlined. Oromo is vast and so do its values and Systems. Jalata (2012) shows adequate information is lacking since Oromo scholars and others have been discouraged or prohibited by the Ethiopian colonial state from documenting Oromo oral traditions. Student focus group discussants claimed that “We lack the well-organized documents which unify the Gadaa system of all Oromos because there is no synonymity among Oromos' Gadaa system.” Indeed, what students claimed is true. Different scholars have written about the Gadaa system many times. However, the written materials which covered all Oromo are minimum. Unless the organized material that wraps all Oromos confederations and clans printed, it creates confusion among students because they have come from different areas.

Similarly, western-oriented Ethiopian education challenges teaching the Gadaa system. Ethiopia still gives less attention to IK. Instead, it follows the colonial curriculum under implementation (Abera, 2020). Nair & Abera (2017) elucidate Ethiopian education has never reflected IK since the country copied from the western. The Western donors are a base for Ethiopian education. The federal government also pursues universities to follow the footsteps of the western. Also, western countries are competing to impose their educational ideologies on developing countries through grants and aid. Modern education considered IK irrelevant and excluded it (Demssie et al., 2020).

5. Conclusion

Ethiopia diversified in indigenous knowledge. Konso people Cultural Landscape, Awramba People Gender Equality, Oromo Gadaa System, Sidama Fiche Chambalaalla New Year celebration, Hadiyya Yaahode Maskala New Year celebration, Tigray people Ashenda women festival, and Wagnira people Ashandiye/Solel women festival are some notable Ethiopian IKS. Some of IKS such as Gadaa System, Fichie-Chambalaalla, Meskel Festival, and Tiya stone are registered by UNESCO. However, Ethiopia has low experience of IKS inclusion in the school curriculum. From lower grades up to higher education, the western education systems dominated the country's education system. The modern education system introduced in Ethiopia did not appreciate its predecessor i.e., a seventeen centuries-old Ethiopian indigenous education system (Demssie et al., 2020). For several years, religious educations, particularly, Orthodox Christianity had taken superior advantages. The notion of education in Ethiopia is started in the sixth century with the entrance of Christianity (Shishigu, 2015). In 1908, Menelik II introduced modern education. And yet, the education system reflected the emperors' interest. Specifically, Emperor Haile Sellase attempted to modernize Ethiopian education that caused IK marginalized.

Bule Hora University has begun to include the Gadaa IK system in the higher education curriculum in 2019. The University offers a Gadaa system at undergraduate and graduate (both MA and Ph.D.) levels. Gadaa is the Oromo socio-political democratic system that regulated political stability, economic development, social activities, cultural obligations, moral responsibility, and the philosophy of religious order of the society (Hinew, 2012; Gutema, 2017; Ta'a, 2016; Sirna, 2018). The Gadaa system inclusion in Ethiopian higher education has many significances. It integrates IK with modern education, fills the gaps of scientific education, powers the Gadaa system renaissance, increases harmonious relation and mutual coexistence among different nations, enriches youths' minds with IKS, and diversifies the sources of knowledge. But the historical constraints, the western education domination, lack of specialized instructors in IKS restrain Gadaa system IK inclusion in the Ethiopian higher education curriculum.

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References

1. Abera, T. (2020). Integrating Ethiopian indigenous knowledge and international knowledge: Special emphasis on STEM education. *International Journal of Multidisciplinary Research and Development*, 6(12), 204–208. <https://www.researchgate.net/publication/338897110>
2. Barnhardt, R., & Kawagley, A. O. (2008). Indigenous knowledge systems and education. In D. L. Wiens & C. J. R. (Eds.), *Why do we educate? Renewing the Conversation* (1st ed., Vol. 110, Issue 13, pp. 223–241). <https://doi.org/10.1002/9781444307214.CH16>
3. Battiste, M. (2005). Indigenous Knowledge: Foundations for first nations. *WINHEC: International Journal of Indigenous Education Scholarship*, 1, 1–17.
4. Berisso, T. (2018). The Oromoo Gadaa System: Why considered democratic? *Gadaa Journal*, 1(1).
5. Bishaw, A., & Lasser, J. (2012). Education in Ethiopia: past, present and future prospects. *African Nebula*, 5, 53–69.
6. Bruchac, M. M. (2014). Indigenous knowledge and traditional knowledge. In C. Smith (Ed.),

- Encyclopedia of Global Archaeology (pp. 3814–3824). Springer Science and Business Media. Introduction.
7. Debele, E. (2018). Relevance of Gadaa values and practices in current development. *Arts and Social Sciences Journal*, 9(3). <https://doi.org/10.4172/2151-6200.1000346>
 8. Degafa, A. (2018). The harmful effects of the suppression of Oromo indigenous knowledge system on Oromo identity: The role of Oromo intellectuals. *Gadaa Journal*, 1(1).
 9. Demssie, Y. N., Biemans, H. J. A., Wesselink, R., & Mulder, M. (2020). Combining indigenous knowledge and modern education to foster sustainability competencies: Towards a set of learning design principles. *Sustainability (Switzerland)*, 12(17). <https://doi.org/10.3390/SU12176823>
 10. Githui, W., David, N., & Maurice, S. (2015). The role of indigenous knowledge in socio-economic development. *International Journal of Science and Research*, 4(4), 32–37.
 11. Gudina, G. (2018). Gadaa indigenous governance system in light of modern democratic constitutional principles. <http://etd.aau.edu.et/handle/123456789/12641>
 12. Gutema, S. E. (2017). Harnessing Gadaa System as a black covenant in modern constitutional administration: Appraisal of prospects and challenges. *Sociology and Anthropology*, 5(1), 52–62. <https://doi.org/10.13189/sa.2017.050106>
 13. Hineu, D. (2012). History of Oromo social organization: Gadaa grades based roles and responsibilities. *Science, Technology and Arts Research Journal*, 1(3), 88–96. <https://doi.org/http://dx.doi.org/10.4314%2Fstar.v1i3.98802>
 14. Hineu, D. (2020). Issues of Gadaa teaching: Possibilities and challenges. *Journal of Indigenous Knowledge and Development Studies*, 2(1), 1–19.
 15. Hlatywayo, A. M. (2017). Indigenous knowledge, beliefs and practices on pregnancy and childbirth among the Ndau people of Zimbabwe [KwaZulu-Natal]. https://researchspace.ukzn.ac.za/bitstream/handle/10413/15296/Hlatshwayo_Anniegrace_M_2017.pdf?sequence=1&isAllowed=y
 16. Ho, S. (2020). Diversity and inclusion in global higher education. In C. S. Sanger & N. W. Gleason (Eds.), *Diversity and Inclusion in Global Higher Education*. Springer Singapore. <https://doi.org/10.1007/978-981-15-1628-3>
 17. Horsthemke, K. (2004). Indigenous knowledge: Conceptions and misconceptions. *Journal of Education*, 32, 31–48.
 18. Jalata, A. & Schaffer, H. (2013). The Oromo, Gadaa/Siqqee democracy and the liberation of Ethiopian colonial subjects. *AlterNative An International Journal of Indigenous Peoples*, 277–295. <https://doi.org/10.1177/117718011300900401>
 19. Jalata, A. (2012). Gadaa (Oromo democracy): An example of classical African civilization. *The Journal of Pan African Studies*, 5(1), 126–152.
 20. Khupe, C. (2014). Indigenous knowledge and school science: possibilities for integration [Witwatersrand]. [http://mobile.wiredspace.wits.ac.za/bitstream/handle/10539/15109/C. Khupe Thesis.pdf](http://mobile.wiredspace.wits.ac.za/bitstream/handle/10539/15109/C._Khupe_Thesis.pdf)
 21. Kothari, C. H. (2004). *Research methodology: methods and techniques*. New Age International.
 22. Lanzano, C. (2013). What kind of knowledge is ‘indigenous knowledge’? Critical insights from a case study in Burkina Faso. *Transcience*, 4(2), 3–18. http://www2.huberlin.de/transcience/Vol4_Issue2_2013_3_18.pdf
 23. Mallick, O. B. (2005). Development theory: Rostow’s five-stage model of development and its relevance in globalization. In *School of Social Sciences, Newcastle* (pp. 1–21). https://web.archive.org/web/20120402114239/http://jpkc.swu.edu.cn/data/gjzrzygl/web_prepare20110608/paper/Rostow_Development_Model_1960.pdf
 24. Mwinzi, J. M. (2015). Theoretical frameworks and indigenous knowledge systems. *International Journal of Education and Research*, 3(2), 677–684.
 25. Nair, S. B., & Abera, T. (2017). Indigenous knowledge in the Ethiopian school curriculum. *Review of Social Sciences*, XVIII(2), 89–95.
 26. Negari, W. (2018). Indigenous knowledge for good governance and development: Unleashing the wisdom of the Gada System. *IJARIE*, 4(5), 907–923.

27. Noyoo, N. (2007). Indigenous knowledge systems and their relevance for sustainable development: A case of Southern Africa. In E. K. Boon & L. Hens (Eds.), *Indigenous Knowledge Systems and Sustainable Development: Relevance for Africa* (Vol. 1, pp. 167–172). <https://www.researchgate.net/publication/228799155>
28. Ronoh, J. C. (2017). *Indigenous Knowledge in the School Curriculum: Teacher Educator Perceptions of Place and Position*. Nelson Mandela.
29. Safakish, M. (2015). The role of indigenous knowledge in socio-economic development. *Journal of Applied Environmental and Biological Sciences*, 5(9), 285–289. [https://www.textroad.com/pdf/JAEBS/J. Appl. Environ. Biol. Sci., 5\(9S\)285-289, 2015.pdf](https://www.textroad.com/pdf/JAEBS/J. Appl. Environ. Biol. Sci., 5(9S)285-289, 2015.pdf)
30. Schafer, J., Ezirim, M., Gamurorwa, A., Ntsonyane, P., Phiri, M., Sagnia, J., Salakana, L., & Bairu, W. W. (2004). Exploring and promoting the value of indigenous knowledge in early childhood development in Africa. *International Journal of Educational Policy, Research, and Practice: Reconceptualizing Childhood Studies*, 5(3), 61–80.
31. Senanayake, S. G. J. N. (2006). Indigenous knowledge as a key to sustainable development. *Journal of Agricultural Sciences*, 2(1), 87. <https://doi.org/10.4038/jas.v2i1.8117>
32. Shishigu, A. (2015). Foundation of curriculum in Ethiopia: Historical, philosophical, psychological and sociological perspectives. Annual International Educational Conference of Bahir Dar University, Ethiopia. https://www.researchgate.net/publication/312294330_Foundation_of_Curriculum_in_Ethiopia_a_Historical_Philosophical_Psychological_and_Sociological_Perspectives
33. Sirna, Z. T. (2012). Ethiopia: When the Gadaa democracy rules in a federal state bridging indigenous institutions of governance to modern democracy [University of Tromsø]. <https://doi.org/10.13140/RG.2.2.10793.01122>
34. Sirna, Z. T. (2018). A Future gaze: Gadaa oriented constitutional structure for Oromia. *Gadaa Journal*, 1(1), 9–25.
35. Ta'a, T. (2016). The Gadaa System and some of its institutions among the Booranaa: A historical perspective. *Ejossah*, XII(2), 82–97. [file:///C:/Users/User/Downloads/159459-Article Text-414220-1-10-20170731 \(1\).pdf](file:///C:/Users/User/Downloads/159459-Article%20Text-414220-1-10-20170731%20(1).pdf)
36. Wan, H. (1980). The educational thought of Confucius. https://ecommons.luc.edu/cgi/viewcontent.cgi?referer=https://scholar.google.co.uk/&httpsredir=1&article=2874&context=luc_diss
37. World Bank. (1998). Indigenous knowledge definitions, concepts and applications. [https://chm.cbd.int/api/v2013/documents/4A27922D-31BC-EEFF-7940-DB40D6DB706B/attachments/Hoda Yacoub - IK Report \(1\).pdf](https://chm.cbd.int/api/v2013/documents/4A27922D-31BC-EEFF-7940-DB40D6DB706B/attachments/Hoda%20Yacoub%20-%20IK%20Report%20(1).pdf)
38. World Bank. (2004). *Indigenous knowledge: Local pathways to global development*. In Knowledge and Learning Group, Africa Region, World Bank (World Bank, 2004). <http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.112.7736&rep=rep1&type=pdf>
39. Yigzaw, M., & Boudreau, M.-C. (2010). Indigenous knowledge creation practices: The case of Ethiopia. 18th European Conference on Information Systems, ECIS 2010, 1–12. <http://aisel.aisnet.org/ecis2010/62>