Original Article

The Origin, Significance and Physical Condition of the Great Medieval Defensive Dry Stone Walls of Dawuro/Kati Halala Keela, Southwest Ethiopia

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Abstract

The medieval Dawuro[2] kingdom in south-western Ethiopia was able to build defensive dry stone walls and dig defensive ditches from the 16th to the 18th century. The motivation for these activities might have been the need to protect the territory against the neighboring arch-enemies, the Ahmed Gragn's war and the Oromo population expansion or pastoralist pressure. This paper basically assessed the construction process, the scientific value and the physical structure of the Great Dry Stone Walls of the medieval Dawuro kingdom in the upper Omo Valley. The data was collected in 2011 through fieldwork, in-depth interviews, focus group discussions, and document analysis. The walls are locally called the Kati Halala Keela. They are dry stone walls constructed without using any joining materials. The walls counted three to seven rows and the kingdom was watched over by seven main gateways. Some sources estimated the length of a single wall from 150 km to 200 km length. The sum total of the seven rows to be about more than 1,000 km. Its average height and width is about 2.6 m and 3.5 m, respectively.

Key words: *Dawuro walls, dry stone walls, Kati Halala Keela, medieval Omo Valley achievements*

Introduction

Walls have fascinated archaeologists and historians working on the early and late periods of African history (Aremu, 2007, p. 1). They explained not only about the settlements enclosed but also about why, when, and how the walls

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[2] In the literature, the names "Dauro", "Dawro", "Dawaro", "Dawuro" and "Kullo" have been used by different authors to refer to the zone and the people/society. But the zone administration officials, the native writers and some linguists (e.g., Hirut Woldemariam) use the spelling "Dawuro"; see *Dawro People Profile* on the *Joshua Project Website*, the history section of Dawuro zone, prepared by Mitiku Mekuria.

were built and considered as the symbols of both military and political power (Haour, 2005, p. 555). Usually the history of wall building is associated with defensive roles from arch-enemies. For example, the Great Zimbabwe Wall was built between 1100 and 1450 A.D. as enclosure to the commercial and political center (www.dreams-travel.com/); Koso Defense Mud Wall in Nigeria was built between 1000 and 1500 A.D. to control trade centers (Aremu, 2007, p. 7). The intermittent warfare, the raiding of slaves by the state, the trans-Atlantic or trans-Saharan trade might have forced the society in West Africa to build the Segou Walls between the 18th and the 19th century (MacDonald, 2012, p. 343). In western Kenya, the defensive earthworks enclosures known as Gunda-buche were built to protect against human enemies as well as domestic animals from wild animals (Odede, 2009, p. 47). In Ethiopia, the Jegol Wall of Harer City was built in 16th century for defensive purposes.

Medieval southern Ethiopian states had extraordinarily well-maintained roads and defensive walls with carefully guarded gates (Haberland, 1975, p. 17). The Gonga Kingdom of Anfillo in southern Ethiopia built monumental earthworks, ramparts, trenches, ditches and earth walls in 16th century. They encircled the royal residences, settlements, compounds, and enclosed the entire kingdom to protect the havoc wrought by the Oromo in the Gibe basin. Moreover, all known Gonga states were fortified in one way or the other. For instance, the fortifications of Ennarya, the Kingdom of Kafa, the fortified entrenchments of Yem, Bosha and Sheka Kingdoms (González-Ruibal and Fariña, forthcoming) were some of fortified kingdoms. Another remarkable Omotic Walls are the Great Defensive Dry Stone Walls of Dawuro and the Ijajo Wall/Ijajo Keela[3] of Wolayita (Ethiopian Electric Power Corporation, 2009, p. 147). The Omotic peoples build dry stone walls. Among the most impressive Ometo fortifications were the dry stone walls of the Kingdom of Dawuro (Hailu Zeleke 2007 cit. in González-Ruibal and Fariña, forthcoming).

However, the walls of the medieval Dawuro kingdom, which might

[3] In the history of Wolayita, Ijajo was not the king/*kawo* but the provincial ruler who was able to build the wall in the 18th century. The *Ijajo Wall is* estimated to be about 67 km long, 1.5 to 2.5 m in height, and 1.0 to 2.5 m in width.

have been built between the 16th and 18th century, are not mentioned in the documented historical sources. Archaeological assessment has not yet been carried out (Hailu, 2007, p. 406; Seid 2007, p. 26). Thus, they were concealed from the outside world. Their historical, economic, scientific and cultural values are hidden from tourists, researchers and policy makers. However, the site was given official recognition and registered as heritage site on 11 July 2008.

The past cultural, historical, social and political achievements of southern Ethiopian ethnic groups are not well researched due to lack of a written language, less foreign contact and lack of written records. From the historical point of view, this medieval historical contribution of the Dawuro society to Ethiopian civilization was either deliberately overlooked or unintentional ignored in the diversified nation-state structure.

Historically, most attention was given to northern Ethiopia where the earliest states are located. However, the state formation of southern Ethiopia is of great interest but received much less attention. Our knowledge of the polities of Omotic peoples is not satisfactory (González-Ruibal and Fariña, forthcoming).

Among the Omotic states, *Dawuro* had been a well-centralized powerful independent kingdom till the end of 19th century. The construction of the colossal medieval defensive dry stone walls of Dawuro is strong evidence for this (Pillia, 2009, p. 82; Seid, 2007, p. 27). Haberland (1977, p. 3) considered Dawuro as one of the bigger "Omotic" states. Its southern, eastern, and northern strategic border positions were enclosed by three to seven parallel rows of vigorous defensive dry stone walls. The walls start from somewhere in the area where Gofa, South Omo Zone, Konta Special Woreda and Kafa Zone come in contact in the south and extends up to some places in Jimma Zone. On the basis of currently available evidence, the walls enclose Dawuro along Gofa, K'ucha, Wolayita, Kambaata-T'imbaaro, Hadiyya and Jimma. In addition, some sources claim that the system of walls extends beyond the borders of Dawuro up to Kafa and as far as South Omo where the Aari, Bume and Omo Galab pastoralists dominate the areas (Seid, 2007, p. 27). On the western borders, from Gofa through Konta to the Gojeb River, the kingdom was

defended by a series of defensive ditches (about 3 m deep and 5 m wide).

The construction of the walls might have begun in the first half of the 16th century and completed probably in the second half of the 18th century during the reign of King Halala (Elias 1999, p. 120; Hailu 2007, p. 407). The walls have been locally called "*Kati Halala Keela*" for King (*kati*) Halala, who finalized the construction started by his predecessors long ago.

As observed by the author, the walls are currently endangered by both natural and man-made factors. The natural factors that endanger its survival are weather, erosion, land sliding, natural growing trees, wild animals, wild fire, and others. The man-made factors that pose a threat or menace to the very existence of this heritage are local people's pressure due to grazing and farming activities and developmental projects, like road and dam constructions. The destruction of the cultural heritage can obliterate the cultural memories that have a great power in the reinvention of the cultural heritage. Thus, the historical artifacts serve to ratify the historical past, or a re-invention of that past, and to affirm cultural roots connecting the present members of the society with their ancestors. The concern of this paper is neither the archaeological aspects of the walls nor the historical analysis of the kingdom but it describes the physical conditions/aspects of the walls.

Objectives

The main objectives of the study are to describe the genesis of the construction process of the walls and the defensive strategies of the medieval Dawuro kingdom, to explain the pouring forces for the construction of the walls, to elucidate the physical structure and the purposes of the walls, and to identify the causes of endangerment of the walls and promotion ventures.

Methods

Description of the Study Area

The name "Dawuro" is employed for the people and their land (zone) that is found in the Southern Nations Nationalities and Peoples' Region (SNNPR). It is located between 6^0 36' to $7^0$21' north latitudes and $36^0$68' to 37^0 52' east

longitudes. It covers an area of 5,000 km ^{2} (see Fig. 1). Tarcha is the capital town of Dawuro zone. Tarcha is located about 500 km from Addis Ababa via Jimma and about 335 km from Hawassa via Wolayita Soddo. Formerly the area was referred as Kullo Konta Awraja under Kafa Kifle Hager. But, the society itself prefers to be called the Dawuro, which means "heroic people". Their language is *Dawurotsuwa* which belongs to the Omotic family. According to the 2007 Ethiopian Population and Housing Census, the population of the Dawuro nationality was projected to be 846,199 in 2014.

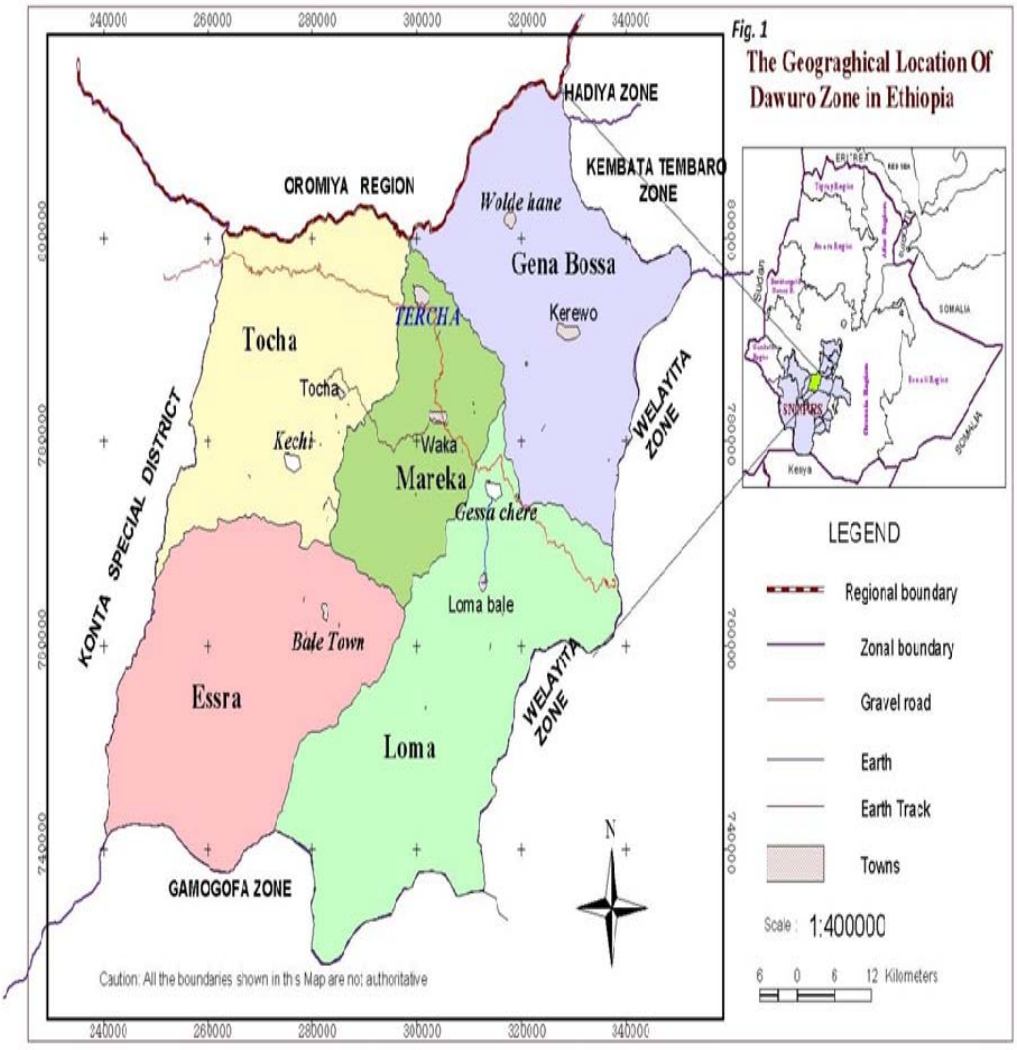

Figure 1: Administrative map of Dawuro

Data Collection and Sampling Techniques

A qualitative research approach was employed for its convenience to find detail information on the topic (Johnson and Christensen, 2004, p. 180). To collect reliable data, fieldwork took place in selected sites from December 2010 to February 2011. During the fieldwork, pictures and video images of the walls were captured. In the meantime, selected key informants were interviewed. Shortage of written sources forced the researcher to employ convenience sampling and purposive sampling. Accordingly, the subjects of the study were selected assuming "who knows what". The aged groups of the society (elders who have good knowledge of the oral traditions and the local politics), traditional religious men, concerned local politicians and professionals (teachers, lawyers and heritage management experts) were included in the study. Thus, 47 interviewees were purposefully selected from the five *woreda*s. However, the majority was chosen from settlements surrounding the walls. In addition, two focus group discussions were conducted with local people. With regard to the document analysis, the researcher used records, reports, letters, magazines, diaries, pictures, documentary films, bulletins, theses, dissertations, and published books.

The walls and defensive ditches lie in more than 45 peasant associations of the border areas of the zone. From these, eight peasant associations were selected as specific study area for fieldwork. In order to estimate the average height and width of the walls, 20 sites were also selected and measured (see Table 1).

Table 1: Sites analyzed in the study

woreda	*kebele*	site	coordinates		meters A.S.L.	Height /m	upper width/m
			East	North			
Loma	Zima Waruma	Keriker	32⁰ 45`99``	7⁰ 63`27``	1,174	2.5	2.10
``		Daramisa	32⁰ 52`81``	7⁰ 63`03``	1,081	2.95	4.50
``		Dhachiya	32⁰46`38``	7⁰64`79``	987	1.80	2.30
``		Bokiya	32⁰49`89``	7⁰61`69``	984	2.80	5.40
``		Chollee	32⁰48`07``	7⁰61`98``	1,003	2.70	3.50
``	``	Golali Zoze	32⁰39`57``	7⁰62`13``	1,060	2.00	4.50
``	``	Dushi	32⁰38`24`	7⁰62`16`	1,083	2.60	2.77
``	Addisu Boderi	Addisu Boderi	31⁰05`49``	7⁰58`66``	1,037	2.00	4.00
``	``	Denba	31⁰07`75``	7⁰58`26``	953	3.00	3.25
``	Zima Waruma	Tsongiya	31⁰90`51``	7⁰61`94``	960	2.70	3.00
``	Subo Tulama	Shirgimi	31⁰31`40``	7⁰60`30``	842	1.80	4.50
``	``	``	31⁰32`04``	7⁰60`58``	836	2.40	1.72
Gena	Dachiya Danaba	Deneba	32⁰76`79``	7⁰83`48``	1,222	1.90	2.90
``	``	``	32⁰27`30``	7⁰83`94``	1,300	2.50	5.20
``	Buri	Ola Melaa	31⁰44`21``	7⁰74`82``	950	1.75	5.00
``	Baza Shota	Walala Plain	31⁰03`15``	8⁰08`52``	1,240	2.40	3.30
``	``	Anno Mista	31⁰03`16``	8⁰09`53``	1,165	2.15	1.80
``	``	Dara Mista	31⁰64`14``	8⁰09`67`	1100	3.80	1.62
``	Dachiya Denba	Woshuwa	37⁰25`44``	7⁰00`15``	960	2.60	3.20
Loma	Yelu	Yelu	37⁰25`11``	6⁰53`50``	960	3.20	5.70

Result and Discussion

The Genesis of the Dry Stone Wall Buildings in the Omo Valley

In southern Ethiopia, the people of Konso are known for having dry stone wall terraces which function by providing cultivable surfaces on steep slopes, counteract erosion, assist drainage and ventilation, and encourage the formation of cultivable deep soil (Demeulenaere, 2002, p. 81 and Amborn, 1989, p. 73).

Similarly, according to oral tradition, a long time ago, the people who lived near the Omo river valley have also practiced terracing and digging trenches to protect soil fertility. Besides, terraces helped to protect crops from wild animals such as pigs. During fieldwork, the researcher observed a lot of early terraced plots in the lowland areas of Loma and Gena Bosa districts of Dawuro zone. The terraces found in the farm plots and in the forests are about 1 m high and 0.5 m thick. In these localities, there were small basalt stones on most of the farm lands. The informants confirmed that in order to get fertile soil and to make the land amenable for cultivation, farmers usually remove the stones out of the farmlands and arrange them in straight rows that form terraces. Specifically, such terrace construction requires a huge of labor (Watson, 2009, p. 1). This suggests that the long-standing tradition of terracing and re-terracing of farm plots has laid a bench-mark skill for building dry stone walls. The researcher strongly believes that the long and giant Dawuro dry stone walls advanced than indigenous practices of terracing. The engineering, designing and planning of the walls also show that well-skilled and trained human power took part in the whole construction process (Hailu, 2007, p. 409).

Two hypotheses exist regarding the construction of the walls. The first hypothesis states that it might have begun during the first half of the 16th century. According to Wondimu and Mulugeta (2011, p. 118), Dawuro unified as one single kingdom even before the 16th century. It is believed that in those times different clan chiefs started building their territory. The credited clan chiefs are *Kati* Ma'o of the Susungiya clan, *Kati* Ubana of the Zutuma clan, *Kati* Dina Moha of the Zalinisya clan and *Kati* Na'o Bayidu of the

Kawuka clan.

Some sources state that the construction of the walls might have started during the turbulent period in the Ethiopian history marked by Ahmed Gragn's war and the Oromo population expansion of the 16th century. Besides, the wars of the Christian highland kingdom, the disastrous effects of those wars and the great population movement directly or indirectly affected the entire socio-political ideology of Ethiopia (Taddesse, 1972, p. 301). There is also a myth strengthening the idea that the walls might have been started during "Gragn's war" (locally called *Adale Olaa)*. These events, supplemented by enduring assaults from the neighboring states, might have forced the Dawuro kings to fortify the entire territory in this period.

Another incident might be the pressure of pastoralists such as Ari, Bume, Mursi and Geleb from around Lake Turkana and the lower Omo valley. Hence, these pastoralist groups sometimes pushed towards the upper Omo basin up to the Gojeb River searching for free grazing land and water, which in turn led them to cross the Dawuro territory. The mobility of these groups resulted in raids during times of scarcity of resources and might have initiated conflict with the Dawuro kingdom as a typical conflict between the herders and cultivators. Another occasion that strengthens our hunch is that the Goldiya pastoralists undertook frequent cattle raids during dry seasons in the areas of the Boka, Churuchura, Ada Bacho and Buba Yilga peasant associations of Dawuro zone. Moreover, the construction of the defensive ditches and the walls on the right side of the Omo and Gojeb rivers might have been intended to block the flow of these pastoralists into the area.

The *second hypothesis* focused on the assumption that the whole construction commenced and completed during the reign of *Kati* Halala in the second half of the 18th century (c. 1749-1774). This hypothesis argued that *Kati* Halala established an effective traditional administrative structure (i.e. *Kati* (King) → *Woraba* → *Erasha* → *Guuda* → *Daana* → *Huuduga* → *D'uga)* in which power was shared among regions and sub-regions (Elias et al., 1999, p. 130; Data, 1997, p. 13; Seid 2007, p. 41). The power of the government was schematically distributed to seven administrative regions that helped him to easily mobilize the people in the whole territory for the construction of

the walls. It seems that each region under *a Woraba* was ordered to build the walls in its own territory. Later on, the independently built walls were joined with one another thereby forming complete and unified defense walls. Oral traditions confirm that the construction took more than 20 years and made *Kati* Halala popular among his people.

Moreover, Dawuro elders even today state that during medieval times if a given state becomes a victim of another by war, the captives were killed by cutting their sexual organs. The resources were apprehended, women and children were enslaved/taken away, and/or the state's independence would be dispossessed and becomes tributary. According to oral tradition, cutting the male sex organ of the defeated had special meaning and won numerous awards (e.g., *dubiya*, a large plot of farm land with peasants, fattened ox, cavalry horse and spear) from the King of the triumphant.

Apart from this, according to oral tradition, there was a high demand for war captives either for slave trade or other customary purposes. Long ago, until recent time, there has been a harmful traditional practice in some Dawuro neighbor states. The tradition was that a man gets a girl he looked for only when he was able to bring a certain number of male sex organs to be considered as a hero. For this reason, there were continuously attacks on Dawuro. Again, the bridegroom must have a large number of cattle to be offered to the bride's family. Consequently, to raise the number their cattle population, they raid the settlers of Dawuro, especially those along the border areas. The wars devastated the state and extremely affected each individual in the territory. The sufferings of such atrocities might have initiated King Halala and his entire people to build the walls.

Generally, the oral traditions stated that after the recognition of the main security problem of the kingdom, the Dawuro kings held a public assembly. In this public assembly, the society promised to build the defensive walls and trenches. In the history of Dawuro, this public promise (oath) is known as "*nuu awuwa laphunuwa mayizaa"* ("the oath of our seven forefathers"). Accordingly, it became the hallmark decision for generations to accomplish the construction of the walls. Furthermore, the informants associate with *the society's unity and loyalty*. They always consider themselves as

independent (a hero people), free, patriotic and jealousy of their identity as Simone Weil (2002, p. 79) explained "True liberty is not defined by a relationship between desire and satisfaction but by the relationship between thought and action."

The Significances of the Walls

Buildings may be conserved for historical interests and attractiveness. Moreover, they are the typical products of their time (Howard, 2003, p. 218). More specifically, conserving the defensive walls of Dawuro has the following multifold values. Politically, they protected the territorial integrity, preserved the political map of the medieval Dawuro, protected the people from dominations coming from neighboring states, serves as a signal of the existence of a high degree of political and social cohesion, prevented border disputes and served as psychological barrier to outsiders. *Economically,* they have protected all natural resources from exploitation by any outsider; reduce soil erosion and serve as a potential tourist destination. Socio-culturally, they symbolize "the oaths" of generations defending Dawuro, and serve as a source of pride and self-inspiration, serve as a spirit of cohesion, considered as the identity marker, it preserved the society's cultural assets, and witness the patriotic achievements of Dawuro. Historically, they help to reconstruct the history of Dawuro, are the testimony for the "medieval civilization in the Omo Valley" and a peculiar achievement in terms of its territorial protection (see Fig. 2a and 2b). Scientifically, they can help to investigate the indigenous architecture in dry stone building technology and could be a potential area for scientific researches.

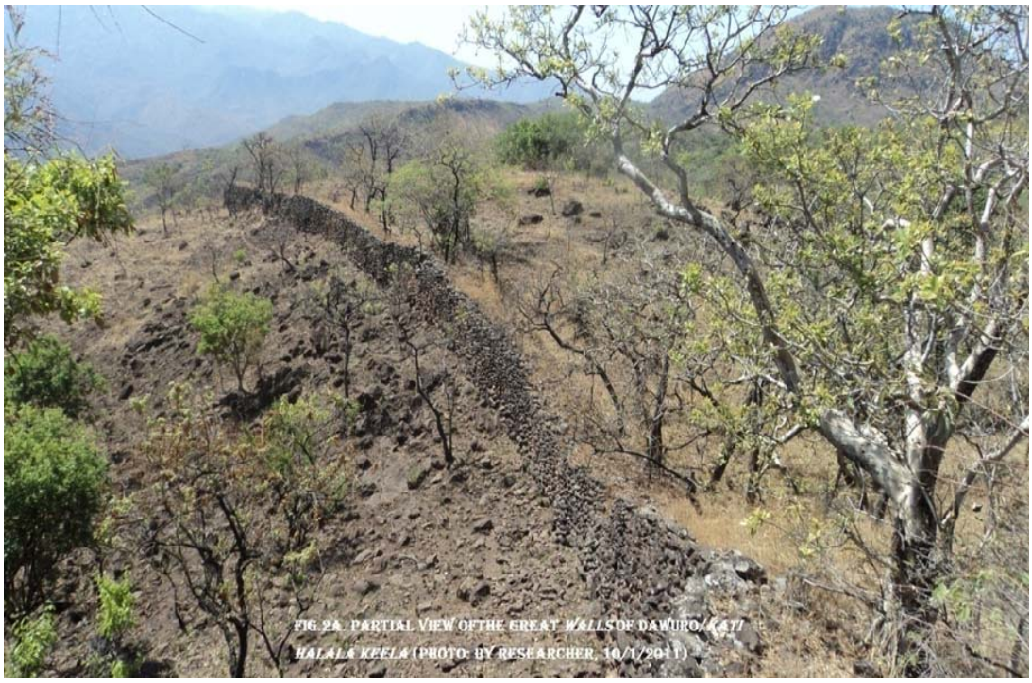

Figure 2a: Partial view of the Kati Halala walls (photo by the researcher)

Figure 2b: Partial view of the *Kati Halala* walls from front side (photo by the researcher)

The Physical Conditions of the Walls

On the basis of field observations, constructing the walls were built on difficult landscapes of hills, mountains, gorges and steep cliffs searching for appropriate sites that could pledge the military defensive strategies. There are three to seven parallel rows of walls in the directions where an intensive attack is expected. For instance, the data obtained from GPS shows that in the Zima Waruma Peasant Association, the 1st wall is located on the 960 m A.S.L., 6° 53' 50.5" N and 37° 25' 11.1" E. The 2nd wall is located on the 1011 m A.S.L., 6° 53' 57.8" N and 37° 25' 13.3" E. The 3rd wall is located on 1053 m A.S.L., 6° 54' 17.7" N and 37° 25' 16.6" E, and the 4th wall is located on 1,071 m A.S.L., 6° 54' 27.4" N and 37° 25' 18.4" E.

The mountains, cliffs, ridges, gorges, steep hills of Omo and Gojeb rivers in the border are employed as extra natural defenses. On these few areas the walls were not built, but the natural fences were left as defensive grounds.

The height, upper width and thickness of the walls vary according to the landscape as well as the direction from where threats are expected. The upper width and the heights of the walls are proportional that give regular thickness to the walls. When the height increases in the plains, the upper width also increases vis-à-vis the steep hill area. During the fieldwork, in 20 selected sites, the height, width, and thickness of the walls were measured. Accordingly, the height of the walls ranges from 1.8 m in steep hills and ill-constructed areas to 3.8 m in the plains and well-constructed areas. The average height is about 2.6 m. The length of the upper width of the walls extends from 1.6 meters in the steep hills and poorly constructed parts to 5.70 m in the plain and well-constructed areas. The average upper width is about 3.5 m (see Table 1).

Even though the total length of the walls has not been scientifically measured, some sources put their hotheaded estimations. Pillia (2009:82) pointed out, starting at Gibe River and continuing to the Omo gorge, that the *Halala Keela* or defensive wall is over 150 km in length. Similarly, referring Dawuro elders, Hailu Zeleke (2009, p. 404) claimed that the total length of the wall of Halala is about 170 km. On other hand, *Ethiopian Herald* (October

13, 2013) and the letter sent to Dawuro Zone in 2008 from Gibe III project indicated that the length of the wall is about 175 km. However, the Ministry of Ethiopian Culture and Tourism (2010, p. 1) explicitly reported that the walls are three to seven rows whereas the length of a single row of the walls is estimated to be more than 200 km and the sum total of all the walls is about more than 1,000 km.

The dry stone walls are essentially separate but interlocking walls, tied at irregular intervals by longer rough or tie stones, and the middle is filled with small pieces of stones. The big and heavy basalt stones are laid at basement. Building up course by course, each new stones bridging the joint between the two lie beneath it. Most are pinned behind with smaller stones so that they stand solidly. No mortar or cement is used for bonding the dry stones walls. Appropriately dressed flat stones lie on the top and copestones stand upright along it. Small piece of stones are hammered down between the capstones, setting everything solidly in place. Carefully dressed, sharp and flat stones are placed towards the front sides on the upper part of the walls facing the enemy. Indeed, it is designed to easily crash the enemy who tries to break/cross the walls. Hence, to make the walls strong enough and long lasting, the thickness and the height of the walls were well-proportionate. The height is projected on the bases of the capacity of a cavalry horse to jump over the walls. There are also killing fields in between the walls, ranging from 300 to 1000 meters.

Another remarkable aspect that there is a system where the security of the territory was kept at the seven main Gateways. Besides, the Gates were used to control the flow of trade activities, the movements of people to and from the neighboring kingdoms (see Fig. 3). The Gateways do not have doors to be opened and closed rather they are watched by soldiers day and night. The main Gateways are discussed as follows (Seid, 2007, p. 27). The first Gate is Daara Mis'a (Daara Gate) and is located in northern part of Dawuro near the confluence Gibe and Gojeb rivers. This Gate protected intruders from Hadiya and some parts of Jimma. The Gate is situated between the top of the first row of the defense wall and below two rows of walls. Two watching towers and ten fortresses (five on the right and five on the left) were

built on both sides of the Gate (see Fig. 4). In between the exit and entrance door, there are three steps of seats carved from rocks. The Gate keepers seat on them to check the inflow and outflow of the people both for protecting security and collecting tributes. The second Gate is Aba Garga Mis'a (Aba Garga Gate) and located in the northwestern part Dawuro to control attacks from Jimma areas bordering this Gate and Konta. The third Gate is Ella Mis'a (Ella Gate)[4]. This Gate protected the territory from aggression and cattle burglars especially from Kafa. The fourth Gate is Qala Mis'a (Qala Gate). This Gate is located in the southwestern part on the border of Konta and Gofa. The fifth Gate is Yeli Mis'a (Yeli Gate). This is located in the southern part along the border of *Gofa* and *Malo*. The *sixth Gate* is *Zima Waruma Mis'a* (*Zima Waruma* Gate). This Gate is found in the eastern part on the way to *Wolayita*. The *seventh Gate* is *Zaba Garada/ Barakenna Mis'a (Zaba Garada Gate).* This Gate is found in the northeastern part of Dawuro on the borders

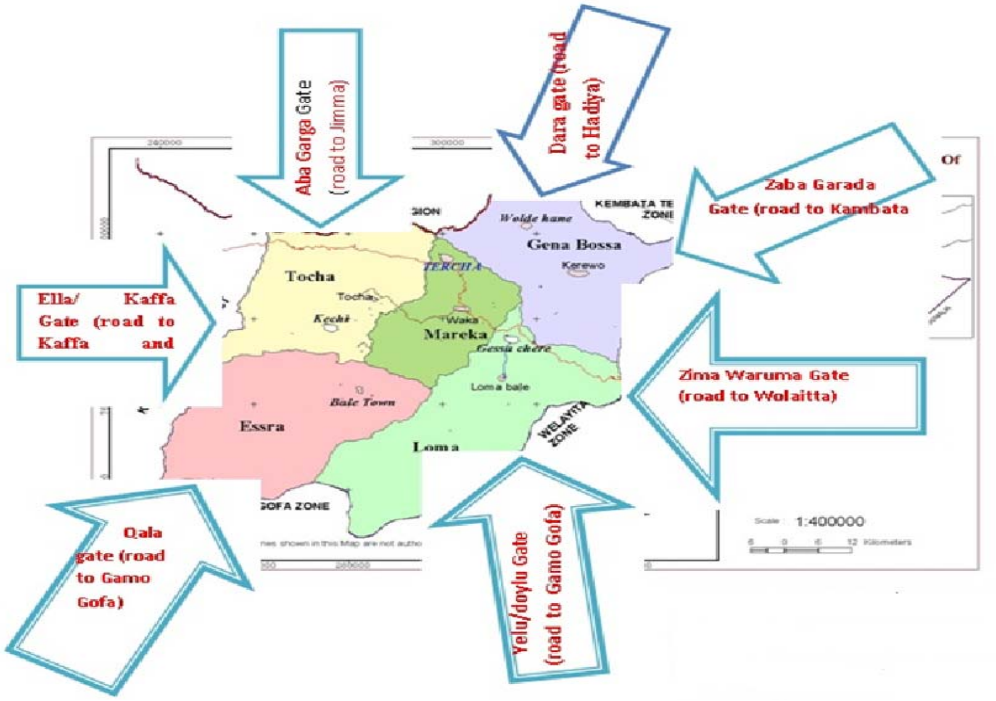

Figure 3: The seven main gateways along the territory of Dawuro (writer's illustration)

[4] One among the seven main gateways of the Dawuro kingdom located between Dawuro and Kafa. Although the people of Dawuro call it the gateway to Kafa it is not to be understood as one of the gates of the Kafa kingdom.

of *T`ambaro* and *Wolayita.*

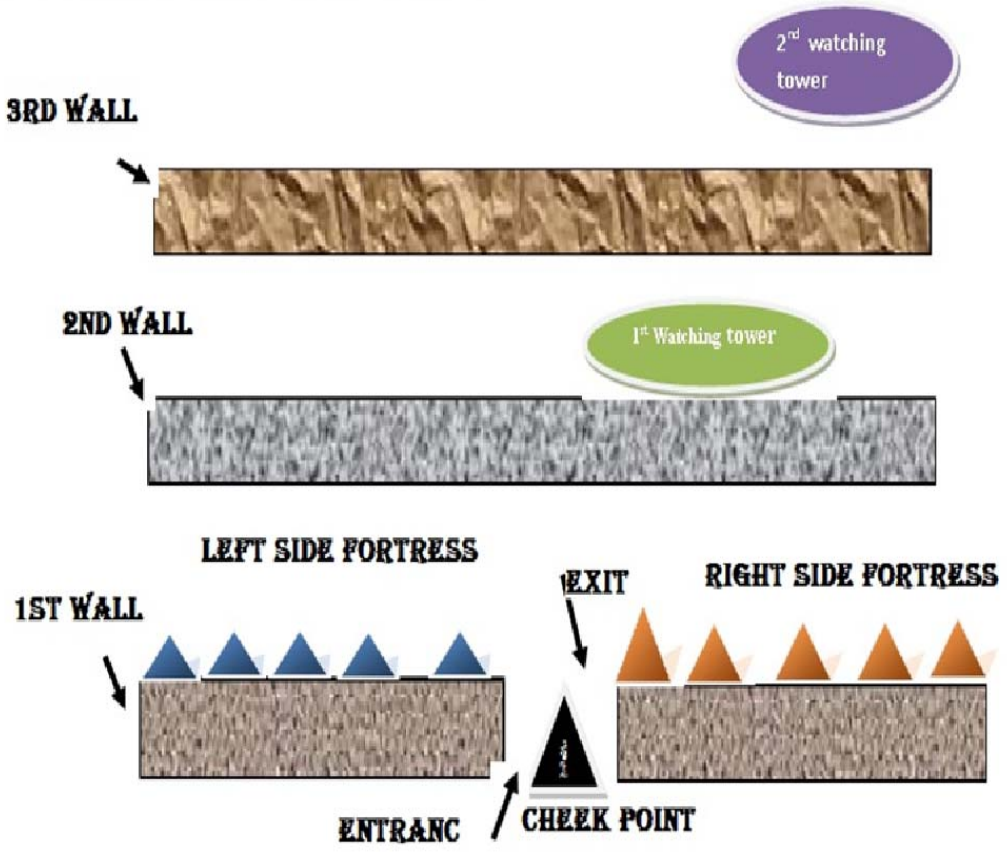

Figure 4: The complex security controlling system at Dara Gate (researchers' illustration based on field observation)

Analysis of the Status and Level of Endangerments

The causes of endangerments on the heritage (i.e. the walls) are broadly classified into natural hazards and human activities. The human activities that have been causing damage on the walls are carried out by local people and development projects.

Natural hazards: According to the field observation, some of the natural factors affecting the heritage are the following. (a) *Weathering*: the variation of temperature and rainfall throughout the ages caused a disturbance of the structure, joints, curve positions, and the architecture (see Fig. 5). (b) Land

sliding and bank erosion: During the rainy seasons, the landslides and small water drainages crack and breakdown the walls. (c) *Wind erosion*: When strong winds cause trees to tip over, the roots of the trees displace the structure of the walls (the walls underneath and near trees). (d) *Naturally growing trees*: There are numerous naturally growing big trees on the walls and their surroundings. They disturb the structure of the walls twice: first in their growing stage and second when they dry due to aging/high temperature and are burnt down by wild fires (see Fig. 6). Fifth, wild animals: In order to get food, they must move and cross from one row of the walls to the other and walk on it.

Figure 5: The walls dismantled by sliding (photo by the researcher)

Figure 6: The wall structure cracked by naturally grown trees (photo by the researcher)

Damage by activities of local people: (1) *Settlement and Resettlement*: Shortage of farming land in the area forced the people to search free land around the walls and for settlement. (2) *Grazing activities*: The inhabitants near the walls graze their cattle in the Omo gorge by crossing the walls. To access free grazing land and to water their cattle the mineral waters such as Sogida, the local people cross the rows of the walls at various places. Hence, both the people and the cattle searching for the shortest pathways demolish the walls at closer distances. (3) *Fuel wood, construction materials, and hunting activities*: The inhabitants around the walls get wood for construction, fuel and agricultural implements from the Omo and Gojeb gorges by crossing several rows of the walls. Due to this, the walls have been disturbed in various parts.

Damage by activities of development projects (Sodo-Chida Road and Gibe III Hydroelectric Dam): According to my field observation, the road dug by human force to connect Dawuro and Wolayita in the early 1960s dismantled the walls in various parts. Moreover, the Ethiopian Road Authority constructed Sodo-Chida the road (1988-1991 E.C.). This road crossed all the seven walls. It was observed that to minimize the labor and capital costs of the construction, the contractor (Salini) simply removed the stones from the nearby walls and used them as raw materials without any attempt for compensation.

Furthermore, the Gibe III hydroelectric power project is located on the Omo River between Dawuro and Wolayita zones. It was begun in 2006 and expected to be completed in 2016. Since the project runs around the walls, its impacts the walls at three levels: the initial stage (building of road routes, camps, clearing of trees and geological excavation), the construction stage (digging the base, bulldozing trees and stones), and the operating stage (submergence by the reservoir). The data obtained from only four of the destructed nine sites, indicate that about 5,726.5 m^3 stones located along the construction sites are removed and used as raw materials to build the roads for the project. Again, the reservoir will extend for about 152 km over the narrow gorge from elevation 670 to 893 m A.S.L. The walls are situated in the west bank of Omo River (1 to 2.5 km away) and the parts of the walls located below 893 m A.S.L. will be exposed to partial submergence.

According to the informants, the absence of continuous impact assessment hid which parts of the walls that would be submerged by the reservoir. Despite this, in 2007 CESI, SPA, Mid-day International Consulting Engineers of Gibe III officially declared to Dawuro Zone Administration that about 5 kilometers of the walls will be flooded by the reservoir. In 2008, for 18 days, Gibe III Interim Archeological Impact Assessment was conducted following only the accessible routes on the upper stream but the parts of the walls located in inaccessible areas of hills, cliffs, mountain ranges, and gorges along the Omo and Gojeb Rivers were overlooked.

The report stated that "about 45 sites were identified for the study out of which 41 are located in the Dawuro zone. Out of these, 8 sites are located between 700 and 920 m A.S.L. and are found between 2 and 2.5 km from the Omo River. These sites are well documented and mapped". However, the parts of the walls found in inaccessible localities near the Omo River will be flooded without any documentation. Nonetheless, the interim report did not indicate whether these 45 sites are selected from the first, second, third or seventh rows of the walls or randomly. More seriously, Dawuro zone administration office and the people are still waiting for the detail information concerning how many kilometers of the walls will be submerged by the Gibe III reservoir, and which rows of the walls are exposed for high risk and less damage. Again, where are the exact locations of the identified endangered parts of the walls? What is its pertinent rescue mechanisms and compensation strategy have been devised and implemented? Therefore, Dawuro people are keen to obtain reliable data about the endangered parts of the walls due to the reservoir as well as the realigned Sodo-Chida road before their total submergence.

Conclusion

The walls can be regarded as precious but fragile gifts from previous generations to the present society (which is obliged to take care) and future generations (who, one would hope, receive that gift undamaged) (URL:http:// www.ct.ceci-br.org). The Great walls of Dawuro reflect the application of dry stone wall building technology, military defense techniques in a traditional society and give insights to understand the history of Dawuro society. Their construction skills were indigenous and developed from terracing and re-terracing practices that was not influenced by foreign tradition. It is one forgotten incredible medieval achievement in the Omo valley. Such physical evidence could "enables us to examine things that were actually made by people in the past and to investigate those people had on their environment" (Connah, 2001, p. 2). This achievement suggests "the blind side of medieval Ethiopian history." It also provokes a number of questions for further study: Do the Omotic peoples made any contributions for Ethiopian civiliza-

tion? Is there any significant past development in the Omo valley? Carrying out further deep historical analysis on the walls could bring a paradigm shift for Ethiopian history in favor of a greater role to be considered for the Omotic -speaking peoples.

Moreover, in their historical memory, the Dawuro people, remembering how their ancestors suffered during the construction, see the walls as the bones and bloods of their ancestors, as sacred places, and walking on them is a taboo. This also indicates that the inheritance of historical heritage is associated with the innate character of identity connoted with sensitivity beyond the material well-being. Therefore, intentional or otherwise, the destruction of the heritages may raise the question of violation of the rights of Dawuro people.

Even though diversity is highly appreciated in the 21st century, unlike the majority of the accessed nationalities, for those small nationalities as the Dawuro, it is not an easy task to enhance the values of their cultural and historical heritage. Hence, documentation, promotion, and preservation of the historical, educational, scientific, artistic and architectural significances of the walls before their menace should be critical concerns of all stakeholders. However, without full coordination between the pertinent parties, the immediate and future circumstances of the walls are still under real threat. Besides, to carry out further detail scientific investigation (i.e., making mapping, carbon dating, measuring the lengths of each wall, and archaeological assessment) institutionalized research project is necessary.

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