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Full Length Research Paper

The substantial potentials for establishment of biosphere reserve in the Afar Region, Ethiopia

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The Afar region is endowed with rich and diverse natural and cultural resources that have outstanding universal values from the perspective of culture and biodiversity conservation and it plays significant role in maintaining the arid and semi-arid part of the country. Moreover, there are considerable ecological and socio-economic opportunities in the region to enhance sustainable development as well as long-term research. Several literature resources that include academic publications, and policy and strategy documents were examined to explore and document the existing potentials of the Afar Region for the establishment of biosphere reserve. From the review, it was concluded that the Afar Region is endowed with rich and diverse natural and cultural resources that have outstanding universal values from the perspective of conservation of biodiversity and culture, sustainable development, and scientific research and monitoring. Thus, the region has significant areas that well fulfill the basic functions and criteria for designation of Biosphere Reserve but not yet represented in similar scheme of conservation area. It is therefore recommended to address the existing gaps and establish biosphere reserves in the region following the basic principles and criteria for designation of such schemes of conservation areas.

Key words: Biosphere reserve, criteria, function, conservation, sustainable development.

INTRODUCTION

The Afar triangle, situated in the Great Rift Valley is named after the Afar people, which are the prominent inhabitants of the region. The Afars are politically dispersed in Ethiopia, Eritrea, and Djibouti. In Ethiopia, they now inhabit the north eastern lowland, which is now delineated as Afar National Regional State (ANRS, 2000; Gebretensae, 2004; BOPRD, 2008).

Like other pastoralist in Africa, the Afar people largely adhere to clan-based natural resource management system in which the local communities are empowered to

manage the natural resources for communal benefits. Pastoral territories are composed of several different elements, including grass, shrubs and trees, surface and sub-surface water, different types of salt deposits, wild animals and other useful resources (IUCN, 1989; Gebretensae, 2004). In the Afar Society, the utilization of important natural resources such as wet and dry season grazing lands, water and trees has rules (ANRS, 2000; Gebretensae, 2004; Scott, 2019; FDRE, 2022).

The Afar region has a rich cultural heritage that ranges

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from a fascinating history to traditions of cohesive and well-organized social systems. It is a location for spectacular and historic landforms, characterized by volcanic activities, which consists of volcanic cones, lakes, rivers, hot springs and calderas with active vents (Cavalazzi et al., 2019; Otálora et al., 2022).

The findings from the internationally known archaeological and paleontological sites of the region not only reflect the culture of the first tool-making hominid but also indicate that the region was inhabited since ancient time of human history (WoldeGabriel et al., 2000; Alemseged et al., 2005; Alemseged et al., 2006; ARCCH, 2016). The historical and social settings of the Afar society, which are linked to their culture, exhibit an important interchange of human values. On the other hand, these values play significant role in the management of natural resources and hence ensure biodiversity conservation. Thus, the values embodied in the Afars' integrated culture have an outstanding universal value in ensuring wise use of the environment (Gebretensae, 2004; Balehegn et al., 2019; Balehegn, 2020). In general, these globally substantial values make the region a significant Biosphere Reserve where humans, biodiversity and their ecology as well as sustainable development are evident. Despite this fact, the region is not yet represented in similar scheme of conservation area of Ethiopia. Therefore, this review aims to explore and document the existing potentials of the Afar Region for the establishment of biosphere reserve.

LITERATURE SOURCES AND STUDY SCHEME

This review used several resources that include academic publications, and policy and strategy documents related to the Afar Region and Biosphere Reserve. The Biosphere Reserves – the Seville Strategy and the Statutory Framework of the World Network (The United Nations Educational, Scientific and Cultural Organization - UNESCO, 1996), the Biosphere Reserve Nomination Form (UNESCO, 2013a), the Periodic Review for Biosphere Reserve (UNESCO, 2013b), the new Roadmap for the Man and the Biosphere (MAB) Programme and its World Network of Biosphere Reserves (UNESCO, 2017), and the Technical Guidelines for Biosphere Reserves (UNESCO, 2021) are the main documents that were assessed for this study. Moreover, a total of 64 published articles and books have been examined for the review. In the case of sources that are not available in local libraries and archives, Google Scholar (<http://scholar.google.com>), Science Gate (<https://www.sciencegate.app>) and Science Direct (<https://www.sciencedirect.com>) as well as the UNESCO Man and Biosphere Programme (MAB) website (<https://en.unesco.org/mab>) were the academic search engines and websites used as options. Keywords such as criteria, Biosphere Reserve, Afar region, Afar values were used to search the literatures. In general, the study used the steps and procedures shown in Figure 2.

STUDY AREA

This review mainly deals with the existing potentials of the Afar region for designation of biosphere reserve. The Afar region is situated in the north eastern part of Ethiopia and has an area of about 94,760 km² (Figure 1). This area of the regional state accounts for 8.4% of the area of the country, Ethiopia (BOPRD, 2008; Biru et al., 2010).

The Afar National Regional State is found at the core area of the northern Great Rift Valley System of Ethiopia. The altitude of the region ranges from 120 m below sea level at the Danakil depression (where one of the highest temperatures on Earth has been recorded) to about 1600 m above sea level in the hilly escarpments of the western and southern edges. The highest peak, mount Mussa-Alle is just 2063 m above sea level (ARCCH, 2016). The region's temperatures and rainfall vary depending on the altitude and habitat. The temperature of Afar varies from 25°C during the rainy season (September-March) to 48°C during the dry season (March-September) (Gibson, 1967; Biza, 2014; Ilsley-Kemp, 2018; Fenta et al., 2019). The Afar Regional State has a population of 1,812,002 according to the Central Statistical Agency of Ethiopia's projections for 2017 (the most recent official census was in 2007), of which 1,466,000 (or around 90% of the population) are pastoralists. The others are agro-pastoralists, a relatively new lifestyle supported by the government in collaboration with partners in an effort to lessen pastoralists' reliance on raising animals (BOPRD, 2008; Scott, 2019). The herding and husbandry of domesticated animals, especially in the case of Afar Pastoralists, goats, sheep, cattle, and camels, is central to their culture and means of subsistence (Scott, 2019; Balehegn et al., 2019; Balehegn, 2020; FDRE, 2022; Burka et al., 2023).

RESULTS AND DISCUSSION

This study which invites further analytical research will be specifically geared to examining the rich and diverse natural and cultural resources of the Afar Region that have outstanding universal values from the perspective of conservation of biodiversity and culture, sustainable development, and scientific research and monitoring. Thus, it is limited to assessing the areas in the region from the perspective of requirements for designation of biosphere reserve and the basic principles and criteria in this regard are discussed in the following.

Existing conducive conditions for the three main functions of biosphere reserve

Biosphere reserves have three basic functions which are mutually complementary and equally important. These are: (1) conservation of biodiversity and functioning ecosystems including the cultural diversity; (2) sustainable development; and (3) logistic support which means mainly research, monitoring and education (UNESCO, 2013a; UNESCO, 2021). In some cases of African context, 'participation' is considered as the fourth function (Amer et al., 2015).

In assessing the functionality of a biosphere reserve in the Afar region, reports of various studies reveal that the Afar region is endowed with rich and diverse natural and

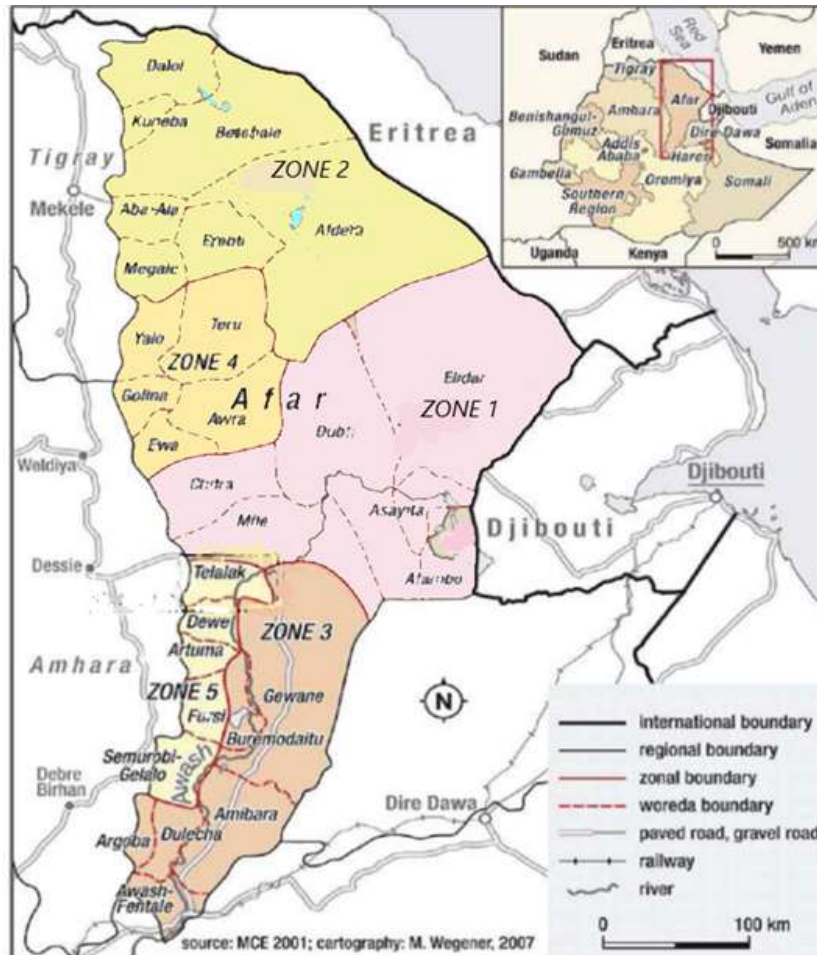


Figure 1. Administrative location of the Afar Regional State.
Source: Adopted from Biru et al. (2010).

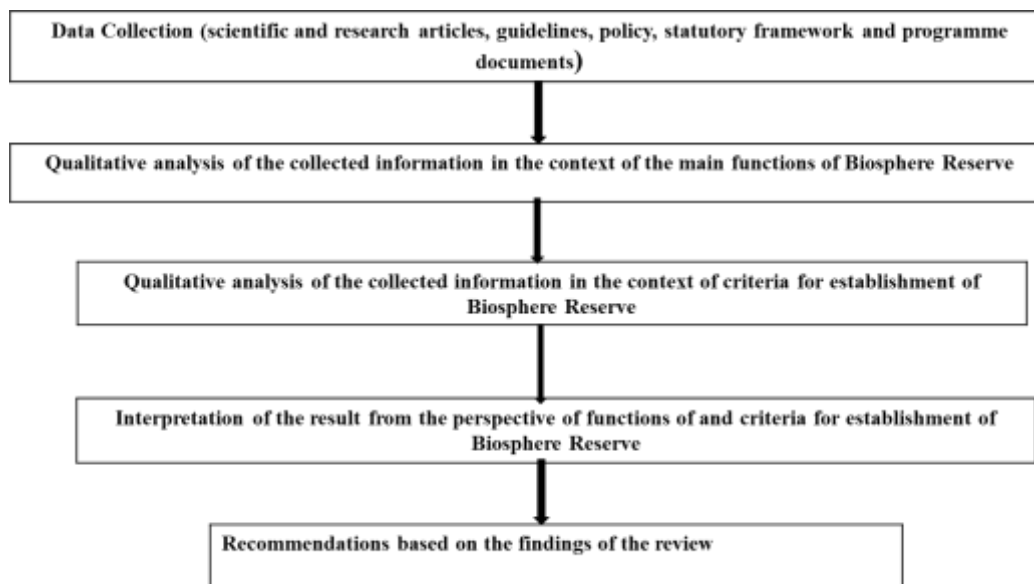


Figure 2. Scheme of research procedures.

cultural resources that have outstanding universal value from the perspective of conservation of biodiversity and culture, sustainable development and scientific research and monitoring (ANRS, 2000; Gebretensae, 2004; Tesfay and Tafere, 2004; BOPRD, 2008; Newsome and Dowling, 2010; ARCCH, 2016; Scott, 2019; Otálora et al., 2022). Generally, the conducive conditions for the three main functions of biosphere reserve from the perspective of the Afar region are presented and discussed subsequently.

One of the three purposes of biosphere reserves is the conservation of biodiversity. Without the ecosystems that support human lifestyles, communities, and economies, it is hard to exist. Like the case of African countries (IUCN, 1989), for the Afar people, biodiversity is not an abstract or theoretical issue; it is critical for their life at grass root level. The presence of biodiversity not only provides ecosystem resilience to cope with the periodic environmental stress in the region, but also delivers a living matter on which the society depends. In general, the Afar community of Ethiopia, natural resources are readily used as a matter of survival and conservation of biodiversity is closely linked to the cultural integrity of the community (Gebretensae, 2004; Tesfay and Tafere, 2004; Scott, 2019; Balehegn, 2020).

Moreover, representing the arid and semi-arid ecosystems of the country, the region is rich in biodiversity and it is a location for considerable number of endangered species that are of international conservation concern. The fact that about 9 conservation areas of different categories (namely: Yangudi-Rasa National Park, Awash National Park (partly), Halleydeghe, Gewane and Mille-Sordo Wildlife Reserves, Bilen-Hartele, Telallk-Dewe, Chifra and Dulecha Controlled Hunting Areas) have been set aside in the region (Hillman, 1993b, Gizaw and Gebretensae, 2019) not only indicates the wildlife potential of the area but also depicts the integration of the ecosystem in general and the diversity in each conservation area in particular. In addition to its significance as an important bird area (EWNHS, 1996; Birdlife International, 2022), the region is home to various wild species of mammals ranging from antelopes to equids and populations of carnivores and primates (Hillman, 1993a; Kingdon, 1997; Moehlman et al., 2013; Rubenstein et al., 2016; IUCN SSC Antelope Specialist Group, 2016, 2018; Gebretensae and Kebede, 2022; Gebretensae and Messele, 2022).

The Awash valley of the Afar region harbours so many remains of extinct and existing flora and fauna dating from roughly five million years ago to the present (Johanson and Coppens, 1976; Hill and Ward, 1988; Kimbel et al., 1994; ARCCH, 2016; Niespolo et al., 2021). Thus, the site is a location for unique and rare resources which are of outstanding universal value from the perspective of science, anthropology, paleontology and archaeology, and hence it is so imperative to devise sound conservation systems for the globally significant

resources.

Besides, the Afar society has unique historical and social settings linked to their intact cultural values and these values play significant role in the management of natural resources and hence ensure biodiversity conservation. Thus, the values embodied in the Afar community integrated culture have paramount importance in ensuring conservation of the ecosystem and bio-cultural diversity (ANRS, 2000; Gebretensae, 2004) and this is consistent with the national and international documents (UNESCO-MAB National Committee, 2011; UNESCO, 2013a, 2017 and 2021) which clearly state that one of the three main purposes of biosphere reserves is conservation of biological and cultural diversity.

With regard to sustainable development, there are considerable conducive situations on the ground to ensure sustainability of development activities and improvement of livelihood of local communities. As discussed subsequently, and also recognized by Tesfay and Tafere (2004), Balehegn et al. (2019) and Balehegn (2020), the contribution of the Afar traditional institution to sustainable development is considered as one of the best practices that has to be scaled up to other areas of the country and this is in line with the principles of biosphere reserve establishment which takes into consideration that Biosphere Reserves are learning places for sustainable development (Ruoss, 2013; UNESCO, 2021).

The Afars are semi-nomadic pastoralists, who depend on the rangelands to raise camels, cattle, sheep and goats. Most of the people of Afar region (90%) subsist on pastoralism focusing on activities related to seasonal variation in availability of feed and fodder for their livestock on which their livelihood depends. Their system of adaptation is highly responsive to seasonal variation in rainfall and range. Hence, they may move from one rangeland to another according to the season, in search of grass and water (ANRS, 2000; Gebretensae, 2004; Scott, 2019; Burka et al., 2023). These days, there is a transformation of life style to agropastoralism, which is also promoted by government and NGOs (BOPRD, 2008; Nanasa, 2021).

The region has a number of permanent rivers that embrace over eight perennial rivers that flow to different basins. All rivers are situated in the Awash basin and large and small-scale irrigated farms have been developed along this basin (ANRS, 2000; ARCCH, 2016; Nanasa, 2021). Thus, there is a need to integrate the emerging development activities with the existing traditional and contemporary conservation systems, including proper wetland management and restoration schemes (Nanasa, 2021).

The Afar region is endowed with cultural and natural resources that have local and global significance. These resources include the most important groupings of paleo-anthropological sites, extra-ordinary scenic landscapes, and unique and diverse wildlife (Johanson and Coppens,

1976; Alemseged et al., 2005; Haile-Selassie et al., 2012; ARCCH, 2016; Niespolo et al., 2021). Another emerging attraction which is also feasible in the context of Afar region is geo-tourism (Newsome and Dowling, 2010). Thus, these attractions combined with the fascinating and intact culture of Afar community are believed to create huge opportunity in developing sustainable tourism in the region and this adds significant value to the well-being of the people and hence boosts active participation of the local community as experienced in other countries of Africa (Amer et al., 2015; Pool-Stanvliet et al., 2018) as well as in the existing biosphere reserves of Ethiopia (UNESCO-MAB National Committee, 2011; Tadese et al., 2021; Choudhary et al., 2021). In addition to its natural beauty, the region has abundant potassium and salt mineral resources, located in areas that represent the historic salt trade in the Afar depression as well as the modern and ancient salt trail that passes through diverse regional ecozones (ARCCH, 2016; Woldekiros, 2019).

Considering the third function (logistic support) of biosphere reserve, the Afar region is generally part of the country that attracts the attention of intellectuals of all levels globally. It is a region that has played crucial role from the perspective of having scientific understanding in various fields. In the field of archaeology and paleontology, tremendous number of findings that have changed the knowledge and understanding of prehistory of humans were discovered and is still under discovery. In the Afar triangle, a lot of studies that have made a lot of impact in the research of human origins and evolution have been conducted and based on the findings of the studies, over 400 publications were made in internationally recognized scientific journals (Johanson and Coppens, 1976; Hill and Ward, 1988; Kimbel et al., 1994; Alemseged et al., 2005; Haile-Selassie et al., 2012; ARCCH, 2016; Niespolo et al., 2021). The research that has been undertaken in the middle-Awash basin for the last 40 years on both species of baboons (Hamadryas and Olive baboons) and their hybrid is considered as historic event in the field (Kummer and Kurt, 1963; Wrangham, 1980; Sigg et al., 1982; Anderson, 1983; Abegglen, 1984; Swedell, 2006). In general, the relatively intact and unique cultural set-up of the Afar community has attracted various researchers in the field of anthropology (Yaynshet and Kelemewerek, 2004; Gebre-Egziabher, 2014; Guesh and Debela, 2019).

With the mandate of undertaking technology generation, adaptation, multiplication and demonstration in lowland areas of the country under irrigation and marginal rainfall conditions, the Werer Agricultural Research Center has been conducting various research activities in the field of crops, livestock, natural resources, technology multiplication, socio-economics extension and agrometeorology for the past six decades (Workie et al., 2019). Moreover, the hydrology and Geology of the Awash basin have been studied by local and global researchers since 1970s (FAO, 1965; Gasse et al., 1978;

Ketema et al., 2016; Mitiku et al., 2022). Since the recent past, the number and proximity of high-level academic institutions and research centres is increasing and thus there are conducive conditions towards exploring scientific ways and undertaking monitoring towards sustainable development.

The facts discussed earlier show that there are favorable conditions to explore and demonstrate approaches to conservation and sustainable development as well as research and monitoring and thus areas in the region fulfill the aforementioned main functions of biosphere reserve and this is consistent with Article 3 of the Statutory Framework of the WNBR (UNESCO, 2013a, 2017, 2021; Amer et al., 2015).

Criteria for designation as biosphere reserve

Generally, the natural and cultural properties as well as ecological aspects of the Afar region that have paramount importance in the context of designation of biosphere reserve are presented and discussed in the following.

Representativeness of the ecological systems for major bio-geographic regions

The study area represents the vast area of the northern part of the Great Rift Valley in Ethiopia and starts at the point where the valley widens out into the Afar depression. Geologically, the recent episode of sea floors spreading has created the Afar crust with a multiplicity of extensional faults which has split apart the Danakil and Aisha horsts, and has witnessed the faulting of the main Ethiopian rift and Afar margins. Generally, geomorphology of the Afar region includes escarpments, basement of escarpments and the plain areas (Gibson, 1967; Ilesley-Kemp, 2018; Niespolo et al., 2021).

The Afar region, which is characterized by volcanic activities, consists of different types of landforms. These forms include volcanic cones, lakes, rivers, hot springs and calderas with active vents. The creation of volcanic cones and calderas, along with several eruptions has contributed to the superlative natural phenomena and general appearance of the areas surrounding them. For example, evaporates that covered the Danakil depression have different coloration depending on the type of mineral erupted during the passive volcanic activities (Cavalazzi et al., 2019; Otálora et al., 2022). One of the hottest places on earth, the Dallol depression boasts a distinctive natural setting and geological characteristics, such as depression 120 m below sea level. The Ertale volcano, which has one of the few active lava lakes in the world, the salt lakes, hot springs, hill Dallol, and its salty gorges are some of the other attractions (ARCCH, 2016; Woldekiros, 2019).

Temperatures vary from 25°C in higher elevations to 48°C in lower elevations. Rainfall is bi-modal throughout the region with a mean annual rainfall below 500 mm in the semi-arid western escarpments and decreasing to 150 mm in the arid zones to the east (Biza, 2014; Fenta et al., 2019). The Afar region is a location for the hottest place on Earth, the Dallol. Based on year-round averages (for one year), Dallol's average is the highest (Schrader, 2019).

The hydrological status of Afar region is mainly influenced by surface water resources, which include rivers, springs, ponds and lakes. It has a number of permanent rivers that embrace Awash, Mille, Kesem-Kebena, Awura, Gulina, Dewie, Borkena, Telalak, as well as numerous temporary rivers that flow to different basins. Furthermore, the area also has a number of lakes, such as Lake Asale, Lake Afdera, Lake Abe, and Lake Gemeria. Mille and Logia Rivers traverse the region are the tributaries of the Awash River (ANRS, 2000; ARCCH, 2016). The Awash River is the second longest river in the country (about 1200 km) and it ends in the heart of the Afar depression in Lake Abe at an elevation of 250 m asl, from which there is no surface outlet (Halcrow, 1989; ANRS, 2000; Gebretensae, 2004).

According to FAO (1965), the soil types in the study area are generally grouped into three: Ancient alluvial and collegial, recent alluvial and volcanic material soils. These soil types were classified based on the parent material from which they were derived. In general, the vegetation types of the area range from grassland, open grassland, shrubland, woodland, wooded grassland at the lower altitudes to thicket riverine forest around the wetlands (FAO, 1965; Friis et al., 2010; Meuer and Moreaux, 2017). The grassland areas are dominated by *Chrysopogon plumulosus*, *Bothriochia radicans*, *Hypharrena hirta* and *Themeda triandra*. The woodlands are mainly characterized by Acacia species (*Acacia tortilis*, *Acacia oerfata*, *Acacia senegal*, *Acacia melifera*, *Acacia nilotica*, etc.), *Grewia* species (*Grewia bicolor*, *Grewia tenax*, *Grewia villosa*, and *Grewia erythraea*), *Commiphora* species and *Ficus* species. In some instances, *Balanites aegyptiaca* and the *Dobera glabra* replace the *Acacia* cover.

The aforementioned habitats are renowned for their varied ungulate populations including Beisa oryx (*Oryx beisa*), Soemmerring's gazelle (*Nanger soemmerringi*) and the Dorcas gazelle (*Gazella Dorcas*), Salt's dikdik (*Madaqua salitiana*), Greater kudu (*Tragelaphus strepsiceros*), Lesser kudu (*Tragelaphus imberbis*), Defassa waterbuck (*Kobus ellipsiprymnus defasssa*) and Common bushbuck (*Tragelaphus scriptus*) (Gebretensae, 2004; Meuer and Moreaux, 2017; IUCN SSC Antelope Specialist Group, 2016 and 2018). The existence of larger carnivores such as Lion (*Panthera leo*), Leopard (*Panthera pardus*), Spotted hyena (*Crocuta crocuta*), Striped hyena (*Hyaena hyaena*) and various species of jackals in the area. (Gebretensae and Kebede, 2022; Gebretensae and Messele, 2022) indicates that there is a

relatively healthy prey-predator relationship. Moreover, the distribution of the threatened antelopes such as Soemmerring's gazelle and the Dorcas gazelle in Ethiopia is restricted to the Afar region. Besides, the region is represented by three broad important bird areas (EWNHS, 1996; Birdlife International, 2022).

The points explained earlier clearly show that the Afar region, which is not represented by the existing Biosphere Reserves of the country, is a location for the hottest place on earth and plays substantial and irreplaceable role in maintaining the arid and semi-arid part of the country. Thus, the region has significance representation in the ecological system of Ethiopia and establishment of biosphere reserve in the Afar region fulfills the criteria indicated under article 4 (1) of the Statutory Framework of the World Network for Biosphere Reserve (WNBR) (UNESCO, 2013a, 2013b, 2021).

Significance for conservation of biodiversity and intact culture

As explained earlier, the important event that explains the great natural beauty of the Afar region is its role as an integral component in the arid and semi-arid ecosystem representing the lowest altitude of the Great Rift Valley. The region is a location for hundreds of species of wild mammals and birds and network of protected areas of different categories have been established (even though most of them remain on paper only) in the region to conserve the existing wildlife potential. The area is not only the lone stronghold habitat in harbouring the highest population of the vulnerable Gazelles (*N. soemmerringii*) and *G. dorcas*) and the endangered Beisa oryx (*O. beisa beisa*), which has become extinct in other parts of Africa including Uganda (Kingdon, 1997), but also it is the only place of safety for the critically endangered and endangered equids: the African wild ass (*Equus africanus*) and the Grevy's zebra (*Equus grevyi*) (Moehlman et al., 2013; Rubenstein et al., 2016).

Since the recent past, Beisa Oryx (*O. beisa beisa*) has been considered to be endangered species under criteria A2ad and C1 of IUCN red listing (IUCN SSC Antelope Specialist Group, 2018). The status of these highly threatened species of wild animals has become in recent years the focus of global conservation efforts.

Furthermore, the region is home to the pastoralists who have been living together in harmony and in tolerance with their environment as the Afars are trans-humant pastoralists who depend on rangelands to raise camels, cattle, sheep and goats (Gebretensae, 2004; Scott, 2019). They are situated in the arid and semi-arid environment of which some areas are harsh to life. Therefore, the Afar people have accumulated a lot of indigenous knowledge of their ecology and their natural environment and the knowledge which has been transmitted from one generation to the next is tied to their cultural value (Tesfay and Tafere, 2004; Balehegn et al.,

2019; Scott, 2019). For example, the Afar pastoralists are adapted to their environment through practicing various traditional mechanisms, which help strengthen their cultural integrity and they make use the arid areas where climatic variability is large and their living system has relatively been preserved intact for a long period of time (ANRS, 2000; Balehegn, 2020). Generally, the pastoralist communities have been practicing traditional mechanisms for centuries in order to manage and sustainably utilize the resources in the ecosystem (ANRS, 2000; ARCCH, 2016). Therefore, the afore-mentioned biodiversity and cultural values, combined with its location for renowned archaeological and paleontological sites (WoldeGabriel et al., 2000; Alemseged et al., 2006; ARCCH, 2016; Niespolo et al., 2021) make the region a significant Biosphere Reserve where humans, culture and biodiversity are evident. In other words, there is ample reason to designate many areas of the region as a Biosphere Reserve under UNESCO's man and biosphere programme and in accordance with article 4 (2) of the Statutory Framework of the WNBR (UNESCO, 2013a, 2013b, 2021).

Opportunities to explore and demonstrate approaches to sustainable development

The Afars have strong and cohesive social institutions and their social organization is more influential than the religion in the social, cultural and economic activities of the Afar people (ANRS, 2000; Gebtensae, 2004). They have three traditional institutions that deal with their daily livelihood (Tefay and Tafere, 2004; Scott, 2019; Balehegn et al., 2019). These institutions include: (1) the Edo or range scouting where traditional rangeland scouts are sent on a mission to assess environmental conditions, including weather, range and associated resources; (2) the Dagu, a traditional secured and reputable network, through which the necessary information is shared among users; and (3) the Adda or the traditional Afar governance system, which analyses the existing situation based on the information in hand before community decisions are made. Utilizations of natural resources such as trees, water and rangelands have rules. These rules are implemented according to the regulations set by the Afar traditional authority vested upon elders and customary laws (ANRS, 2000; Tefay and Tafere, 2004; Scott, 2019; Guesh and Debela, 2019). Thus, it is believed that the integration of the norms, practices and traditional organizations with the contemporary approaches provides the opportunities to enhance economic development that is socio-culturally and environmentally sustainable as indicated in previous studies (Gebre-Egziabher, 2014; Engdasew, 2022).

Thus, the Afar traditional institution's contribution to sustainable development is in line with the guiding principles for the establishment of biosphere reserves,

which recognizes that biosphere reserves serve as learning environments for sustainable development (Ruoss, 2013; UNESCO, 2017 and 2021) and this can be regarded as one of the best practices that need to be expanded to other regions of the nation (Balehegn, 2020). Furthermore, community cultural development initiatives which include various programs and action that aim at promoting both tangible and intangible cultural heritages and customary practices can be realized in the process of establishing and implementing the functions of biosphere reserve and this in turn can enhance active participation of the local community and other stakeholders and fostering network of cooperation at all levels (UNESCO, 2013b).

One of the traditional institutions in the Afar community is exclusively constituted by young men (Tefay and Tafere, 2004; Balehegn et al., 2019; Scott, 2019; Balehegn, 2020), and this appears to create a conducive condition to the sustainability of the social and economic development of the region since participation of the youth and women is a vital component in the establishment of Biosphere Reserve and implementation its of functions (UNESCO, 2013a, b). According to Tefay and Tafere (2004), Scott (2019) and Balehegn et al. (2019), the Dagu system, is a traditional secured and reputable network, through which the necessary information on Afar community's livelihood and associated development activities is shared. Thus, this system is considered as an opportunity to ease the communication in solving the obstacles that may encounter in the management of biosphere reserves in general and in designing associated development projects in particular (UNESCO, 2021).

Afars, through their traditional institutions, practice dispute resolution mechanisms (Tefay and Tafere, 2004; Gebre-Egziabher, 2014; Guesh and Debela, 2019) and usually make the safest decisions that are socially and environmentally feasible from the perspective of social and environmental sustainability. For the Afar community, who live in a relatively harsh environment, the issue of climate change and biodiversity conservation is a critical one. The Afar pastoralists traditionally predict weather and climate variation through the observation of diverse bio-physical entities including livestock, insects, birds, trees and wildlife (Scott, 2019; Balehegn et al., 2019).

Generally, even though the Afar community is relatively vulnerable to climate change, there are community responses and best practices that can be scaled up to enhance resilience to climate change and some of them can also be adopted from other pastoral areas outside of Afar. These best practices would be useful in agriculture, water, rangeland, energy, health sector, education, institutional capacity building, infrastructure, management of natural resources and flood protection (ANRS, 2000; Fenta et al., 2019).

In the context of tourism development, the cultural and natural resources of the Afar have local and global

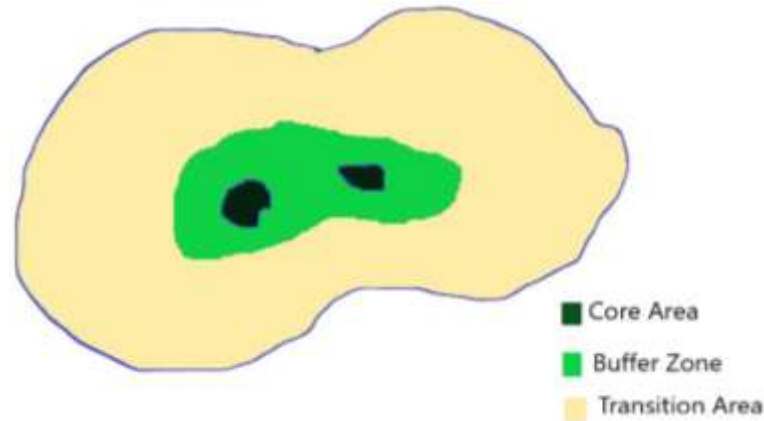


Figure 3. Biosphere reserve zonation.

significance. The Afar region is one of the locations for the most important groupings of paleo-anthropological sites on the world. It is also a location for extra-ordinary scenic landscapes such as Dallol, Erta Ale, Afdera Lake, and Alalo Baad Fel. As explained earlier, the region also harbours unique and diverse wildlife (ANRS, 2000). Another emerging attraction which is also feasible in the context of Afar region is Geo-tourism, a form of natural area tourism that specifically focuses on landscape and geology (Newsome and Dowling, 2010). Therefore, these attractions combined with the fascinating and intact culture of Afars, are believed to create huge opportunity in developing sustainable tourism taking into account the existing comparative advantages of the region and also taking into consideration the best practices from south western Ethiopia (Choudhary et al., 2021) and other countries of Africa (Charnley, 2005) in this regard.

In general, the details discussed earlier depict that establishment of the biosphere reserve in the region provides ample opportunities to explore and demonstrate approaches to sustainable development, through which balance between nature conservation and socio-economic development is created by engaging the local communities and using a knowledge-based approach (Ruoss, 2013; Amer et al., 2015; UNESCO, 2021).

Existence of appropriate size and options for zonation and addressing the functions of biosphere reserve

As indicated earlier, the Afar region comprises diverse landscapes as well as cultural and natural resources. It is also understood that there are favourable conditions to contribute to the conservation of landscapes, ecosystems, species and genetic resources. There are also opportunities to encourage economic and human developments which are socially, culturally, and environmentally sustainable and these aspects are in coherent with the main global goals of sustainable

development (UNESCO, 2013a; Ruoss, 2013; United Nations, 2022). There are also considerable efforts in using research, monitoring, education and information exchange to build the capacity of the community and make informed decision.

In order to undertake the complementary activities of biodiversity conservation and sustainable use of natural resources, the three interrelated zones, known as the core area, the buffer zone, and a transition area (Figure 3) are important components in the establishment and management of biosphere reserves (UNESCO, 2013a, b, 2021).

In the case of Afar region, there is conducive environment to designate the three zones. The zonation of the biosphere reserves to be designated, will be selected based on existing and planned land uses, contemporary and traditional ecological knowledge as well as scientific research works. Designation of the three zones in the region with significant size can be undertaken taking into consideration the following different options.

Establishment of a biosphere reserves without considering the previously designated protected areas as core zone:

As explained earlier, the region is endowed with relatively intact natural habitats that include open grasslands, rivers, riverine forests, lakes and associated wetlands of which the majority are found outside of protected areas and these natural habitats harbour considerable number of threatened species of wild animals that include Wild ass (*E. africanus*), Beisa oryx (*O. beissa*), Summering's Gazelle (*N. soemmerringi*), Dorcas gazelle (*G. dorcas*) and large carnivores, including African lion (*Panthera leo*) and Cheetah (*Acinonyx jubatus*). Therefore, this option gives the opportunity to protect the threatened species in the core area while practicing cooperative activities such as environmental education, research, recreation and ecotourism in the buffer zone and the transition area will include sites where ranges, settlements and other land

use activities are managed and developed in a sustainable way for which different stakeholders and local communities cooperate in accordance with the Statutory Framework of the WNBR (UNESCO, 1996).

Establishment of a biosphere reserves by considering the previously designated but lacking active management protected areas as core zone: In the Afar region, there are 9 conservation areas of different categories (Gizaw and Gebretensae, 2019), of which only two National Parks (Awash and Yangudi-Rasa) and one proposed National Park (part of the Halleydeghe Wildlife Reserve) have active management. The four Controlled Hunting Areas (Bilen-Hartele, Telalak-Dewe, Chifra and Dulecha) are mainly ran by concessionaires based on a contract agreement (EWCA, 2020) and thus there is no regular active management practice. The remainders (Wildlife Reserves) have no management, but exist on paper only (Jacobs and Schloeder, 2001). Thus, this gives the preference to consider the protected areas (PAs) without active management as core area while setting aside the areas around PAs as buffer zone and transition area.

Establishment of biosphere reserves by considering the previously designated and possessing active management protected areas as core zone: This option gives the opportunity to consider the protected areas (PAs) with active management indicated earlier as core area while setting aside the areas around PAs as buffer zone and transition area.

Establishment of international transboundary biosphere reserves: This option gives the opportunity to designate a trans-boundary biosphere reserve along the border with Djibouti by setting aside Lake Abbe (one of the important birds Areas) and its surroundings as core area and creating buffer and development zones around it. It is also possible to take into consideration the common habitats of African wild ass both in Ethiopia and Eritrea as core area. This approach is expected to boost bilateral cooperation between the bordering countries (Moreaux et al., 2017).

Establishment of biosphere reserves taking into consideration mixed important resources that require long-term protection: This option deals with consideration of areas which are locations for paleo-archaeological sites and at same time inhabited by the threatened species of wildlife as core areas.

CONCLUSION AND RECOMMENDATIONS

The Afar region is endowed with rich and diverse natural and cultural resources that have outstanding universal value from the perspective of conservation of biodiversity

and culture, sustainable development and scientific research and monitoring. In general, the details discussed earlier reveal that the region plays substantial and irreplaceable role in maintaining the arid and semi-arid part of the country and in conservation of biodiversity and outstanding cultural values. Furthermore, establishment of the Biosphere Reserve in the region provides ample opportunities to explore and demonstrate approaches to sustainable development and to make use all three zonation schemes. Thus, the region has significant areas that well fulfill the basic functions and criteria for designation of Biosphere Reserve. However, the fact that there is no such conservation area system in the region indicates that the potential areas in the Afar areas are fully neglected. It is therefore recommended to address this gap and establish biosphere reserves in the region, following the basic principles and criteria for designation of such schemes of conservation areas and considering the possible options indicated earlier.

CONFLICT OF INTERESTS

The authors have not declared any conflict of interests.

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Full Length Research Paper

The security-development nexus in Ethiopia since 1991: The case of eastern Wallagga zone

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In Ethiopia, security and development are often in conflict with each other, as certain development policies may harm human security and vice versa. This article aims to examine the security and development nexus in Eastern Wallagga Zone, an area that has faced various challenges related to conflict, displacement, and lack of basic infrastructures. Qualitative research design is used. Key person interviews, focus group discussions, and non-participant observations were used to collect data from primary sources and wide range of materials, such as books, academic articles, government reports, newspaper articles, and online databases were used as secondary sources. The findings show that security and development are closely linked and conflict can have a significant impact on development outcomes. Since the area is affected by conflict, development efforts were disrupted or delayed, and the human and economic costs of conflict were significant. Hence, it is important for development programs to be sensitive to the local context and to engage with local communities to ensure that their needs are met and that they are involved in the decision-making process. In other words, development programs can also play a role in promoting peace and reducing conflict by fostering dialogue and reconciliation, building trust and social cohesion, and addressing the root causes of conflict in the study area. The study recommends a holistic approach that prioritizes conflict prevention, peacebuilding, inclusivity, resilience, and cooperation, that might be possible to promote peace, stability, and prosperity and promote sustainable development and reduce the risk of insecurity the area.

Key words: Conflict, development, Eastern Wallagga, peace, security.

INTRODUCTION

Historically, security and development were viewed as separate fields with distinct objectives. Security focused on safeguarding a state's sovereignty from external

threats, while development aimed at promoting economic growth and poverty reduction. However, since the 1990s, there has been a growing recognition of the

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interdependence between security and development. This shift is attributed to factors such as the end of the Cold War, the emergence of new security threats, and a change in the dominant approach to security.

According to scholars, the traditional understanding of security before the 1990s was centered on state security and military power, neglecting non-military aspects like economic, social, and environmental security. This narrow approach failed to address other forms of security and marginalized certain groups and forms of knowledge. Scholars argue for a broader definition of security that includes economic, environmental, and human dimensions, as well as addressing underlying causes of insecurity like poverty and inequality (Buzan, 1991; Booth, 1991; Chandler, 2014; Williams, 2003).

In the 1990s, the concept of security expanded to include the well-being of individuals and communities, in addition to state protection. This shift towards human security recognizes that threats can come from poverty, inequality, disease, environmental degradation, and human rights abuses. The UNDP (1994) played a key role in developing the concept, emphasizing the safety, well-being, and dignity of individuals, communities, and nations. Kaldor (1999) further emphasized the need to protect people from various threats and address underlying causes, rather than just focusing on territory or symptoms of insecurity. Human security involves protecting individuals from political violence, economic deprivation, environmental degradation, and promoting social justice and sustainable development.

Integrating security and development faces challenges due to the complexity of the concepts and the diverse perspectives within each field. Security and development encompass various types of threats, levels of concerns, and developmental issues. Critics express concerns about merging these complex concepts, citing potential confusion and incoherence in policies. However, there is a growing recognition that an integrated approach is necessary to address poverty, conflict, and environmental degradation. Collaboration and coordination among governments, international organizations, civil society, and the private sector are crucial (Boonstra and Shapovalova, 2012; Tschirgi, 2005; International Peace Academy, 2006). This was also emphasized in the 2005 World Summit Outcome document adopted by the United Nations General Assembly, which highlights the collective responsibility to protect populations from atrocities (UNODC, 2018).

To address the complexity and potential policy confusion, the OECD (2019) suggests four methods for connecting human security and development: integrating human security into development policies, measuring human security through indicators, recognizing their theoretical interdependence, and promoting shared understanding through dialogue. Integrating human security into development policies in Ethiopia is challenging due to complex security and development

issues (Tadesse, 2016; Mamo and Tadesse, 2014). Obstacles include the country's political and socio-economic context, which lacks democratic institutions and a centralized power structure (Asnake and Abebe, 2017). Corruption, weak governance, and limited resources further complicate efforts to promote human security (Assefa and Woldemariam, 2019).

Ethiopia's policy statements reveal a discrepancy between state security, human security, and development. Major plans and policies prioritize economic growth over other aspects of human security (Belachew, 2014). This securitization of the economy links economic growth to national security. However, this emphasis on economic growth may come at the expense of addressing critical human security issues (Teshome, 2021). The ongoing internal conflict in regions like Oromia and Tigray has not always prioritized human security and may have worsened it.

The implementation of human security and development involves constructed discourses that serve specific interests and power dynamics. Scholars emphasize the need for policymakers to critically analyze these discourses to understand underlying assumptions and power dynamics (Belachew, 2014; Teshome, 2021). Implementing the human security and development nexus at the local level faces challenges due to the complexity and diversity of local contexts.

Study area

The research was conducted in Eastern Wallagga Zone, one of the nineteen zones in the Oromia National Regional State. This administrative area is named after the former province of Wallagga and is bounded on the south-west by Illubabor, on the west by the Didessa River, on the north and north-West by the Benshangul Gumuz and Amhara National Regional States, on the east by West Showa and Horro Guduru Wallagga, and on the southeast by the Jimma Zones, according to the Central Statistical Agency (CSA, 2007).

The Eastern Wallagga Zone has a population of 1,213,503 people residing in an area of 12,579.77 square km, with 606,379 men and 607,124 women. The population density is 96.46, and 7.72% of the population lives in urban areas, while 28% are agro-pastoralists. There are 255,534 households in the zone, with an average of 4.75 people per household and 246,680 housing units. The two largest ethnic groups in the zone are the Oromo and Amhara, accounting for 87.74 and 10.89% of the population, respectively, while other groups make up 1.37%. Afan Oromo is the predominant language, spoken by 88.13% of the population, followed by Amharic with 10.85%, and other languages with 1.02%. According to the Eastern Wallagga Zone Administration Bulletin of 2020, the majority of the population, 48.42%, practices Protestantism, followed by

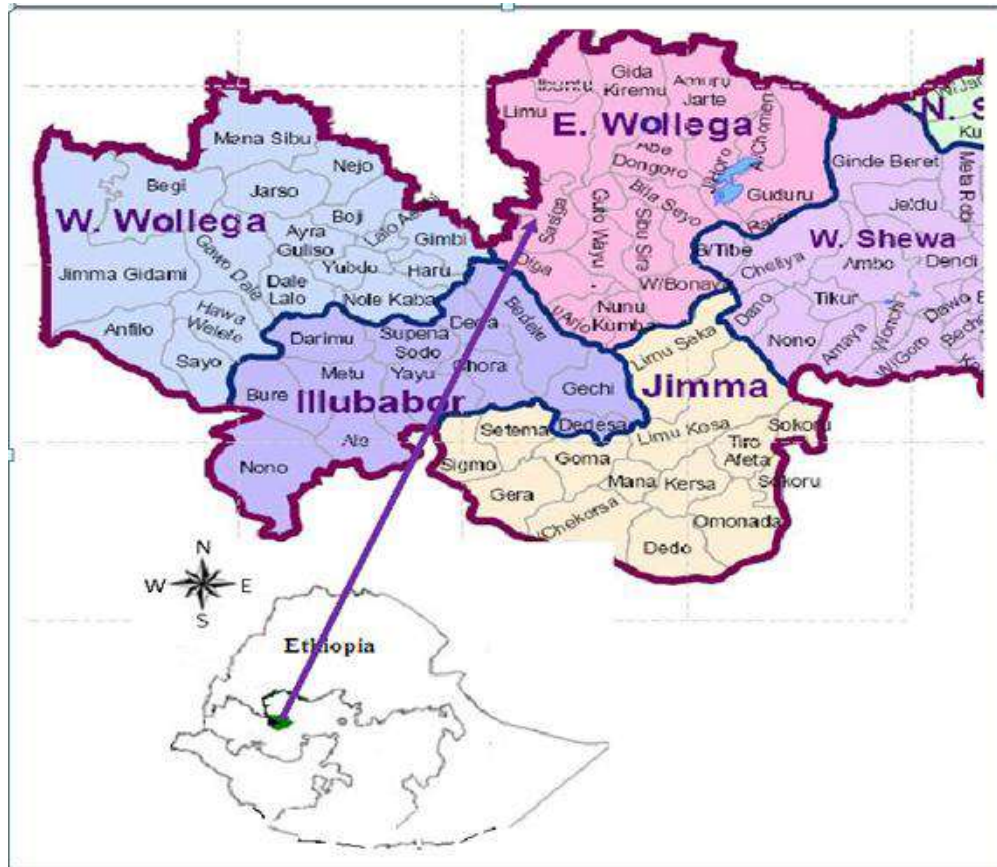


Figure 1. The Location map of the study area.
Source: Adopted from Google Map (2022).

Ethiopian Orthodox Christianity with 37.04%, and Islam with 12.09%. Figure 1 shows the Location map of the study area.

RESEARCH METHODS

Research design

According to Leedey (1997), research design refers to a study plan that outlines the framework for gathering data. Creswell (2015) describes qualitative research as an approach that is concerned with understanding the meaning and experiences of individuals and groups. In this study, qualitative research design mainly descriptive design is used. Qualitative research design is well-suited for exploring the implementation of human security and development initiatives at the ground level, as it allows the researcher to understand the perspectives and experiences of individuals and communities in their natural setting.

Study participants and Sampling techniques

Purposive sampling techniques were employed in this study, wherein participants were selected based on specific criteria relevant to the research objectives. The researcher utilized maximum variation sampling, aiming to include participants with diverse characteristics and experiences. Given that the study

focuses on the implementation of security measures and development projects in the Eastern Wallagga zone, maximum variation sampling was applied to select participants from various communities with varying socio-economic backgrounds.

A total of 18 key informant interviews were conducted with religious leaders, elders, and community members. Key informants are individuals with extensive knowledge and experience related to the research topic, capable of providing valuable insights and perspectives. One criterion for selecting key informants was the duration of their stay in the study area (Braun and Clarke, 2019). Community members who had resided in the study area for an extended period were deemed likely to possess a deeper understanding of the local context, culture, and history. They may also have established relationships with other community members and have a better understanding of community dynamics and power structures. Other criteria, such as their knowledge, expertise, and status within the community, were considered. For example, a community leader or an individual with specialized knowledge related to the research topic was valuable key informant, even if they have not lived in the study area for a long period. Additionally, four focus group discussions (FGDs) were conducted, in which participants were elders, local chief, and internally displaced community member, youths, and women.

Methods of data collection

Three qualitative data collection methods were employed in the study: key person interviews, focus group discussions, and non-

participant observation. These methods were utilized to gather primary data. Additionally, to support the primary data, various secondary sources such as books, academic articles, government reports, newspaper articles, and online databases were consulted. This diverse range of sources facilitated a comprehensive examination of the implementation of the human security-development nexus in the zone and provided a variety of perspectives and data sources for analysis. All interviews and focus group discussions were conducted between December 21, 2022, and January 20, 2023.

In addition, the researcher utilized non-participant observation as a data collection method. Non-participant observation proved valuable in rural areas where community members tend to be more reserved in their interactions with outsiders or during interviews. By observing behavior and interactions in a natural setting, the researcher gained insights into community dynamics, power structures, and other aspects of the social context that might not be readily discernible through other data collection methods.

Method of data analysis

Data analysis is a critical aspect of research because it helps connect findings to higher-level concepts. According to Creswell (2015), the initial step in qualitative data analysis involves organizing all the data collected from the field into a computer file. Subsequently, the information gathered from interviews and audio recordings is transcribed into written form. The data is then categorized, and the need for additional information is assessed. This approach ensures the credibility of results by balancing the data collected with the researcher's understanding and interpretation. In this study, a case study analysis was employed as a qualitative data analysis method. This involved analyzing the situational context of the case, identifying the primary actors and factors that influenced the outcome, and assessing the impact of the case on the broader issue of how the human security and development nexus has been implemented in the Eastern Wallagga Zone since 1991.

RESULTS AND DISCUSSION

This section of the study presents the results, which reflect the viewpoints and opinions of the interviewees and participants in focus group discussions. These results are discussed in conjunction with the findings of relevant studies that were mentioned in the literature review section. The outcomes are categorized into three distinct groups: security practices, development practices, and the implementation of their interconnection at the grassroots level in Eastern Wallagga.

Security practices in the eastern Wallagga zone since 1991

Since the overthrow of the Dergue regime in 1991, there have been significant changes in the country's security and development landscape. Despite this, the challenges of balancing human security and development priorities have remained a persistent issue. According to the interviews conducted with community members, East Wallagga has faced a number of security challenges

since 1991, including political instability, inter-communal conflict, and organized crime. They specify that "one of the major security challenges in the zone has been political instability, which has taken various forms over the years. For example, in the early 1990s, the region experienced a civil war that resulted in the displacement of thousands of people and the loss of numerous lives. Since then, political instability has continued to be a sporadic occurrence, with occasional clashes between different political groups and ethnic groups". The political instability that has persisted in Eastern Wallagga since 2018 has indeed contributed to community insecurities in the zone. This instability has been characterized by conflicts between different political factions and parties, as well as tensions between different ethnic groups.

Based on the information from FGD participants the political tensions have often spilled over into inter-communal conflicts, particularly in areas where there are significant ethnic divides. For example, Human Rights Watch (2019) report indicates that in the aftermath of the 2018 elections, there were violence and displacement of communities because of ethnic based clashes between Oromo and Amhara communities. Moreover, the political instability has also had economic consequences, with disruptions to trade and investment contributing to economic insecurity and poverty in the region. For instance, the roadblocks to Nekemte Town have led to the closure of businesses and markets, which has affected livelihoods and access to basic goods and services in the northeast part of the zone.

Inter-communal conflict has also been a significant source of insecurity in Eastern Wallagga since 1991. This has often been fueled by competition over resources such as land, water, and pasture, as well as ethnic and cultural differences. In some cases, inter-communal conflict has led to the displacement of entire communities and has contributed to a cycle of violence and revenge attacks in the zone. The interviewed community member remind that "one of the most significant inter-communal conflicts in the zone occurred in 1993, when violence erupted between the Oromo and Amhara communities over land ownership and political representation. The conflict resulted in the displacement of thousands of people and the loss of numerous lives". Johansson (2009) confirmed that since then, inter-communal conflicts have continued to occur in the zone, often triggered by disputes over resources or political power. Inter-communal conflicts have significant impacts on human security. It can lead to the displacement of communities, loss of livelihoods, and physical harm to individuals. Moreover, these conflicts can also contribute to a cycle of violence and revenge attacks, which further undermine security and stability in the zone. Interviews suggest that inter-communal conflicts can have wide-ranging and long-lasting impacts on human security, with implications for physical health, economic well-being, and social cohesion. There are evidences by numerous

studies and reports indicating inter-communal conflicts significant impacts on human security. For example, a report by the World Health Organization (WHO) found that inter-communal conflicts lead to a range of physical and mental health problems, including injuries, malnutrition, and psychological trauma (WHO, 2017). Moreover, the report noted that inter-communal conflicts also disrupt access to healthcare and other essential services, which can exacerbate the health impacts of the conflict. These disruptions have been seen in the study area. Similarly, United Nations Development Programme (UNDP) found that inter-communal conflicts have significant economic consequences, particularly for vulnerable populations such as women and children (UNDP, 2018). The study noted that inter-communal conflicts lead to the destruction of property, displacement of communities, and loss of livelihoods, which can contribute to poverty and social exclusion.

Organized crime, particularly related to human trafficking and smuggling, has also been a growing security concern in the Eastern Wallagga. According to the interviewees, "the porous borders with neighboring regional states have made Eastern Wallagga a transit point for migrants and refugees, many of whom fall prey to human traffickers and smugglers. This has led to instances of kidnapping, extortion, and other forms of violence against vulnerable populations." There is evidence to suggest that these issues have been a concern in Ethiopia and the Horn of Africa region more broadly since at least the 1990s. For example, a report by the United Nations Office on Drugs and Crime (UNODC) notes that human trafficking and smuggling have been a significant security concern in the Horn of Africa region since the 1990s, with Ethiopia serving as a transit country for migrants and refugees (UNODC, 2018). The report notes that these activities are often linked to other forms of organized crime, such as drug trafficking and money laundering. Overall, the security challenges in East Wallagga since 1991 have been complex and multifaceted, with political, social, and economic factors all playing a role.

Development practices in the eastern Wallagga zone since 1991

Since 1991, the Eastern Wallagga zone has witnessed various development practices aimed at promoting economic growth and enhancing social welfare. These initiatives encompass agricultural development programs, health and education initiatives, infrastructure development, and other efforts geared towards improving economic opportunities and the quality of life for local communities. Focus group discussion participants reported that 'development in the Eastern Wallagga zone since 1991 has been implemented through various programs and initiatives with the goal of promoting

economic growth and enhancing social welfare. They mentioned some of the key ways in which development has been implemented in the area. The Ethiopian government has executed various development programs in the Eastern Wallagga zone, encompassing agricultural development programs, health and education initiatives, and infrastructure development projects. Additionally, non-governmental organizations (NGOs) have also been actively involved in implementing development programs in the Eastern Wallagga zone. Likewise, the private sector has played a role in driving development in the area. For example, private companies have invested in agricultural value chains such as coffee, corn, and sesame production to promote economic growth and create employment opportunities. However, there are several challenges that have hindered the success and sustainability of development initiatives in the Eastern Wallagga zone since 1991. Interview respondents have identified various challenges that have impeded the success and sustainability of development initiatives in the Eastern Wallagga zone since 1991. The area has poor infrastructure, particularly in remote areas, which has limited access to basic services and economic opportunities. Governance challenges, including corruption and inadequate land tenure systems, have also hindered development efforts. Environmental degradation due to unsustainable agricultural practices, deforestation, and overgrazing has further exacerbated the situation. The zone has also experienced conflicts and insecurity, which have impeded the implementation and sustainability of development initiatives.

These challenges have been identified and discussed in different studies. The zone has poor infrastructure, particularly in remote areas, which hinders access to basic services and limits economic opportunities. Alemu et al. (2019) noted that poor infrastructure, especially in transportation and communication hinders the effectiveness of health and education programs in the zone. Degefu and Adnew (2021) noted that governance challenges, such as corruption and inadequate land tenure systems, have hindered the success and sustainability of development initiatives in the region. The study found that land tenure insecurity hinders investment and contributes to environmental degradation in the Eastern Wallagga zone. Teshome et al. (2018) confirms that the zone has experienced environmental degradation due to unsustainable agricultural practices, deforestation, and overgrazing, which hinders the sustainability of development programs.

The security and development nexus practices at the ground in eastern Wallagga since 1991

The security and development nexus has been an important consideration in development practices at the local level in the eastern Wallagga zone since 1991.

Development efforts have been aimed to promote economic growth and improving social welfare, while also addressing security challenges in the zone. The interconnection between security and development has been recognized as an important consideration in development practices. In the context of the Eastern Wallagga zone, security and development practices have been closely linked. The FGD participants raise that “development initiatives aimed at promoting economic growth and improving social welfare has been implemented alongside efforts to address security challenges in the zone.” The focus group discussion revealed that the Eastern Wallagga zone has been historically marginalized and underdeveloped, leading to a lack of access to essential services such as education, healthcare, and clean water. This lack of infrastructure has also hindered economic development in the region, limiting prospects for growth and employment. Participants attributed the historical marginalization and underdevelopment in the Eastern Wallagga zone to various factors, including systemic discrimination, political instability, and limited infrastructure.

According to interviewees and focus group discussions, development policies can have negative impacts on human security, and security concerns can impede development practices. One participant in a focus group discussion stated that there is a complex interplay between human security and development in the Eastern Wallagga zone, and that development policies can have adverse effects on human security. Another interviewee noted that development policies and practices can lead to negative consequences for human security, resulting in economic insecurity, social unrest, and physical harm in the zone. In addition, development practices that prioritize economic growth over social welfare have exacerbated inequality, leading to insecurity and conflicts in the zone. These perspectives are supported by academic studies. For instance, Tessema et al. (2019) found that poverty and unemployment contribute to economic insecurity in the region, while Dessalegn and Zeleke (2018) identified inter-communal conflicts as causing physical harm and displacement of communities. Teshome et al. (2018) also pointed out that unsustainable agricultural practices and deforestation contribute to environmental degradation, exacerbating economic insecurity and social unrest.

Researcher's non-participant observation has confirmed that the Eastern Wallagga zone is at high risk of violence or conflict, which has led to delays or cancellations of development projects due to security concerns. This has resulted in missed opportunities for economic growth and social development. Additionally, security measures in the zone are often harsh and inhumane. Checkpoints and curfews are prevalent, limiting people's freedom of movement and access to basic services, which further undermines human security. Some studies, such as Walch (2020) and Abdi and

Abdullahi (2018), suggest that such measures can contribute to economic insecurity and limit access to basic services, while others, such as Berman and Matanock (2015), propose that they can improve security and stability in conflict-affected areas. Ultimately, the effectiveness of checkpoints and curfews as a security measure depends on the manner of their implementation and the broader context in which they are used.

During a focus group discussion (FGD), it was noted that the limited infrastructure in the zone is linked to security concerns. Basic infrastructure, such as roads, bridges, electricity, water supply, and communication networks, were either absent or very limited in the zone. Participants emphasized that the absence or inadequacy of these basic necessities resulted in various forms of insecurity, including economic, physical, and social insecurity. For instance, the lack of access to basic infrastructure such as roads limited individuals' and communities' ability to engage in economic activities and access markets, resulting in reduced income, livelihood opportunities, and ultimately leading to poverty and food insecurity in the zone. In supporting these perspectives, Tessema et al. (2019) found that poverty and unemployment are major contributors to economic insecurity in rural areas of Ethiopia. Lack of access to basic necessities such as food, shelter, and healthcare can lead to economic insecurity and make it difficult for people to meet their basic needs. Koggie et al. (2019) also discovered that the absence of basic necessities such as food, water, and healthcare can lead to social unrest and even violent conflict, as people compete for scarce resources. Similarly, Gudina et al. (2019) identified that the lack of access to basic necessities such as fuel and energy can result in unsustainable environmental practices, which can contribute to environmental degradation and exacerbate economic and social insecurity.

The researcher's observation also indicates that the absence of basic infrastructure, such as electricity and water supply, has already led to physical insecurity by compromising the health and safety of the local community. Without access to clean water, individuals are at risk of waterborne diseases, and without electricity, they may encounter accidents or injuries due to poor lighting or the use of unsafe energy sources. Additionally, the lack of communication networks has resulted in social insecurity by restricting people's ability to connect with others and access external resources, leading to social isolation, reduced access to healthcare and education, and limited opportunities for civic engagement and participation. There is substantial evidence supporting this perspective. For example, a study conducted in rural communities in Ethiopia found that the lack of access to clean water and sanitation facilities contributed to a higher incidence of water-borne diseases such as cholera and typhoid fever, as well as malnutrition and stunted growth in children (Molla et al., 2019). These health

problems can limit people's ability to work, attend school, and engage in social activities, ultimately leading to economic insecurity and social isolation.

According to community members interviewed, economic growth in the Eastern Wallagga zone has progressed significantly in recent years, but human security is deteriorating due to various factors such as the displacement of local communities, environmental degradation, and conflicts over resources. This highlights a significant challenge in the relationship between human security and development. While economic growth can provide opportunities and improve living standards, it is crucial to ensure that human security and well-being are not compromised in the process. The community leader suggested that the deterioration of human security in the area could be attributed to several factors. While some studies, such as Berman and Matanock (2015) and Abdi and Abdullahi (2018), propose that economic growth and human security have a conversely related relationship in the Eastern Wallagga zone, others, such as Oxfam International (2018) and Tessema et al. (2019), suggest that economic growth and security measures can improve human security. However, the effectiveness of such measures depends on their implementation and the broader context in which they are applied.

Furthermore, the interviewed persons highlighted that eastern Wallagga zone is affected by conflict, which disrupts or delays development efforts and imposes extensive human and economic costs. Conversely, development plays a crucial role in reducing the risk of conflict and promoting peace and stability. The conflict and insecurity in the area have disrupted development efforts, damaged or destroyed essential infrastructure and social services, and displaced people, causing a loss of livelihoods and a decline in economic opportunities. While development can provide opportunities for conflict resolution and peacebuilding in the Eastern Wallagga zone, it is crucial to recognize that this relationship is complex and context-specific. The views expressed by the community members that development can provide opportunities for conflict resolution and peacebuilding are supported by some research findings, such as Mampilly (2011) and United Nations Development Programme (2017), but contradicted by others, such as Duffield (2014) and the International Crisis Group (2019).

According to the interviewees, implementing development plans requires effective security measures to prevent conflict and promote stability. These measures include disarming and demobilizing combatants, promoting human rights and implementing the rule of law, and addressing the underlying grievances that fuel conflict. Collaboration between various actors, such as national and local governments, civil society organizations, and international actors, is essential for effective security measures. The interviewees also emphasized that addressing the root causes of conflict is critical in creating an environment of trust and security

that facilitates development efforts. Job creation and poverty reduction programs can also help address the underlying economic grievances that often fuel conflict. Establishing effective and accountable security institutions can prevent violence, deter criminal activity, and provide a sense of security to local communities. Regarding the importance of addressing the root causes of conflict, some research findings, such as the United Nations Development Programme (2016) and Collier (2007), support this approach. However, other sources, such as Keen (2008) and International Crisis Group (2019), have cautioned that addressing the root causes of conflict may be challenging in practice, as they may be complex and deeply entrenched.

The researcher has observed that implementing development and security measures in the Wallagga zones is hindered by obstacles related to governance, limited infrastructure, conflict and instability, and socioeconomic factors. Weak governance, corruption, and lack of political will are specifically identified as hindrances to the implementation of such measures in Eastern Wallagga. These challenges are supported by various studies, such as the UNDP's 2018 report, which identified weak governance as a critical factor affecting development and security in Ethiopia, including in the Wallagga zones. Additionally, Human Rights Watch (HRW's) 2020 report, highlighted limited infrastructure, including the lack of basic amenities like water, sanitation, and healthcare facilities, as a significant obstacle to development and security in Ethiopia, particularly in rural areas like Wallagga. The Institute of Security Studies (ISS) also noted in its study that periodic outbreaks of violence and inter-communal conflict contributed to displacement and insecurity in the Wallagga zone. Furthermore, studies have identified socioeconomic factors such as poverty, unemployment, and inequality as underlying factors that hinder the implementation of development and security measures in Ethiopia, including in the Wallagga zone.

Conclusion

In conclusion, the implementation of the human security-development nexus is indeed a multifaceted concept that requires a comprehensive understanding of the social, economic, and political dynamics at play in a given context. In the case of Eastern Wallagga since 1991, it is essential to take into account the historical, cultural, and socio-economic factors that have shaped the region's development trajectory and its security landscape. To effectively implement the human security-development nexus in Eastern Wallagga, it is crucial to address the challenges and obstacles that hinder the realization of this concept. These challenges include weak governance, limited infrastructure, conflict, and instability, as well as socioeconomic factors such as poverty, unemployment,

and inequality. To overcome these challenges, it is necessary to develop policies and programs that are context-specific, responsive to local needs, and inclusive of all stakeholders, including marginalized groups. Hence, successful implementation of the human security-development nexus in Eastern Wallagga requires a holistic approach that takes into account the region's unique historical, cultural, and socio-economic context. Addressing the challenges and obstacles that hinder the realization of this concept requires the development of policies and programs that are responsive, inclusive, and context-specific.

Recommendation

The study recommends several points based on its findings. Addressing weak governance and corruption is crucial to effectively implement the human security-development nexus in Eastern Wallagga. This can be achieved by promoting transparency, accountability, and citizen participation in decision-making processes. Additionally, the limited infrastructure, particularly in rural areas, is a significant obstacle to development. As such, it is essential to invest in basic amenities such as water, sanitation, education, and healthcare facilities, which are critical to promoting human security and well-being. It is also necessary to address conflict and instability, as periodic outbreaks of violence and inter-communal conflict contribute to displacement and insecurity in Eastern Wallagga. Addressing the root causes of conflict and promoting peacebuilding efforts can create a conducive environment for development. Similarly, socio-economic factors such as poverty, unemployment, and inequality are underlying factors that hinder the implementation of the human security-development nexus. To address these factors, it is necessary to develop policies and programs that promote inclusive and sustainable development. Furthermore, developing context-specific policies and programs that are responsive to local needs and inclusive of all stakeholders, including marginalized groups, is also crucial for the effective implementation of the human security-development nexus. Fostering partnerships and collaboration between various stakeholders, including government, civil society, and the private sector, can help leverage resources and expertise to achieve shared goals. Finally, promoting education and capacity-building is critical to promoting human security and development in Eastern Wallagga.

CONFLICT OF INTERESTS

The authors have not declared any conflict of interests.

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Full Length Research Paper

Internationalization of Post-1991 political reform-induced ethnic conflicts, cross-border contraband trade and human trafficking in eastern Ethiopia

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The political changes in Ethiopia after 1991 created a context for the dynamics of ethnic conflicts, changes in local contraband trade to cross-border trade, and women trafficking, affecting social norms and leading to intersectional impacts on women and girls in eastern Ethiopia. Previous studies have primarily focused on dimensions of ethnic conflicts within a specific geographical location (territory) and their links to social exclusion, particularly examining the intersectional consequences of conflicts on gender inequality. The study assessed the dynamics of conflicts and political changes in post-1991 Ethiopia, and analyse the intersectional and transborder effects of these processes on women and girls, in Ethiopia, Djibouti and Somalia. The study used a document review, and key informant interviews with local elders, clan leaders, government officials, NGO workers and selected cases of women. The study found that the 1991 political changes in Ethiopia that was based on ethnic-federalism exacerbated inter-ethnic conflicts among the Somali, Afar and Oromo people in Ethiopia. Furthermore, the inter-ethnic conflicts expanded along the regions of Djibouti and Samalia bordering Ethiopia. The changing elite interests and social norms, and the expansion of contraband trade, gradually included trafficking in women and girls as lucrative source of incomes. Thus, the creation of human trafficking roots intertwined with inter-ethnic conflicts beyond the borders of Ethiopia. The study concluded that identity, social norms, conflicts and political changes in Ethiopia have brought intersectional consequences on women and girls. Thus, a rights and gender-based plus need assessment, a cross-border data and intervention is needed to understand the dynamics and address the intersectional impacts of conflicts and political changes on women and girls in East Africa.

Key words: Conflict dynamics, political change, contraband trade, women trafficking, social norms, Ethiopia, east Africa.

INTRODUCTION

Ethiopia's political landscape immensely transformed after the 1991 political transition in the country, which gave rise

to the current Ethiopian Federations (Beyene et al., 2020). The 1995 Constitution of the Federal Democratic Republic

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of Ethiopia (FDRE) (Abbink, 1993, 2000) built the foundations for the current socio-political administrative structure based on linguistic, ethnic and emerging 'New' identities of the peoples of Ethiopia (Debelo, 2012). This new political and administrative structure triggered boundary conflicts, and shook the historical and socio-economic ties of diverse ethnic groups in the country. The new reality challenged the long-lived cross-cultural relations of marriage, language, religion, and resources (Adugna, 2011; Kefale, 2013b; Sertse et al., 2021; Belay et al., 2013). This new structure and ethnic-language-based boundary challenged the interconnected and mobile, the largely pastoralist and agropastoralist livelihoods of the Afar, Oromo and Somali peoples (Adjei, 2018; Lober and Worm, 2015), and triggered diverse forms of resource and politically motivated conflicts (Beyene, 2008). In addition, customary and religious-based institution that shaped the relationships among the people was spoiled by the new ethnic-based identity politics and related elite interests in the regions, covering beyond the Ethiopian borders (Beyene et al., 2020; Kefale, 2013a). The new post-1991 political dynamics linked ethnicity, territory (resources), and administrative boundary, and crafted animosity among people, and this provided a fodder for the divisive media and narratives of the new emerging "Ethnonationalists" that feed the boundary narratives and benefits associated with it. Politically, the move for control of "territory", communal resources and privileges factors into more conflicts (Kefale, 2013b; Hussein et al., 2015; Beyene et al., 2020; Debelo, 2012; Belay et al., 2013; Kefale, 2013a). Besides the claims and counterclaims of the new boundaries, the dynamics challenged the pastoralist livelihoods, which were resilient and relatively accommodative in the past (Beyene et al., 2020; Mulugeta and Hagmann, 2008; Hendricks, 2017; Lober and Worm, 2015).

The trend also coincided with the growing demographic transition, and the expansion of mobile internet connections with opportunities for expanding new forms of narratives and counternarratives in the regions. The population growth (human and livestock) necessitated the expansion of grazing and farm lands, more people migrating from highlands and settling unlike the existing culture of open-grazing by pastoralists, and created more conflict incidence in the areas (Debelo, 2012; Everett, 2014; Lober and Worm, 2015; Rahmato, 2011; Beyene et al., 2020). Thus, the causes and consequences, and the actors in the dynamic conflicts unfolded. Studies show that ethnic-based political system/transition (Debelo, 2012), competition over territorial control and fear of losing the user-rights, and climate-change induced resource scarcity (water and pasture), all exacerbating the (extent of) conflicts (Adano and Daudi, 2012). The new trend in conflict that emerged in post-1991 conflict was the commercialized livestock raiding involving contrabands trade (Mulugeta and Hagmann, 2008; Kefale, 2013b), which gradually transformed into trafficking in persons, specifically women and girls (Lorentzen et al., 2019).

Besides, the interventions of formal institutions and government authorities in curbing these new trends of conflicts and consequences were ineffective (Beyene, 2017).

As the ineffective interventions prevailed, social media and interest-based elites that benefit from trafficking in persons and contraband-based livestock raiding and trading further entrenched narratives of victimization, and promoted the need for more conflicts and control of territories beyond their respective borders, thus to expand benefits (Abbink, 1993, 2000; Beyene, 2013; 2017; Lorentzen et al., 2019). This process further diminished the power of the formal laws in the areas and informal groups prevailed in the benefit networks and compelling decisions (Beyene, 2017; Lorentzen et al., 2019). Because of the dynamics and the ineffective interventions, solutions were not sustainable (Beyene et al., 2020).

Also, the consultations were not inclusive, participatory, demand-driven, taking the broader dimensions of the changes in conflicts in the area (UN-OCHA, 2020; Beyene et al., 2020). Also, the new ethnic-based regional boundaries, and the cross-border ethnic configuration of the Afar (in Djibouti) and the Somali (in Somalia) created a hide-out and a camouflage for traffickers, contraband traders (Lorentzen et al., 2019; Rahmato, 2011), and the opening of the new Train Line between Ethiopia and Djibouti further fuelled the demand to control Ethiopia-Djibouti trade line of the territory (Beyene et al., 2020). Because of the persisting conflicts, the prevention, protection, and recovery efforts, as well as responding to intersectional consequences of the conflict was little or did not bear adequate results (Porter, 2010).

According to Tadesse et al. (2015), besides the dynamics of events and conflicts, the patriarchal societal fabric in Ethiopia excluded the participation of women, indigenous minorities and institutions, and exposed them to intersectional consequences of the process. As known in studies, participatory and inclusive efforts increase the likelihood of success in peace building by 24% (Beyene et al., 2020; Development and Peace, 2017). Besides the participatory and inclusive efforts, an integration of bottom-up, horizontal and top-down approaches prove effective in interventions related to the violation of rights such as trafficking in persons (Beyene, 2008) and expand starting points for entry (Tadesse et al., 2015). Based on the empirical findings above, the study questioned the causes and consequences of conflicts, mechanisms of building inclusive peace, and the linkage of the trends to the changes in post-1991 political landscape of Ethiopia (Kefale, 2013a). Figure 1 show analytical framework designed to interpret the data sets.

The study argues that undermining strong cultural, livelihood, and political ties due to changing contexts has created divisions, doubts, mistrust, and fears among the people living in the border areas of the three regions. The differing political groups, elites, private beneficiaries, social media/activists, and cross-border traffickers benefit from the conflicts (as contrabandists), and compounded by

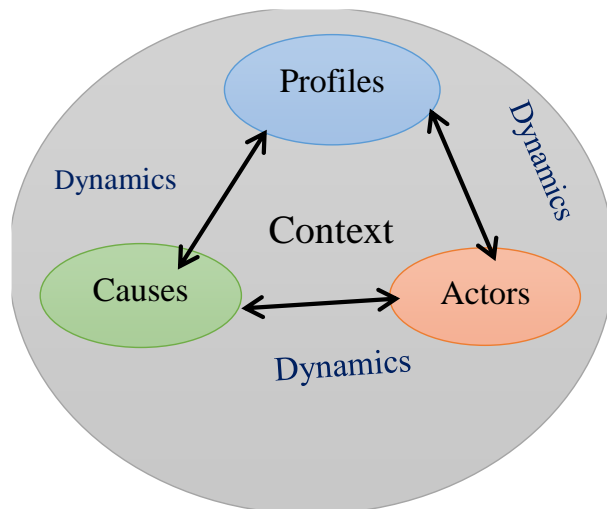


Figure 1. Analytical framework of the study.

ethnicization and politicization of boundaries and ethnicities, this has led to intersectional consequences and impacts on women and girls (Mulugeta and Hagmann, 2008; Hendricks, 2017; Lober and Worm, 2015). Thus, this study analysed the trends as to how ethnic-based conflicts lead to internationalization trafficking networks in Eastern Ethiopia.

MATERIALS AND METHODS

The assessment employed a qualitative approach. It used a state-of-the-art literature review, unpublished document review, focus group discussions, and key informant interviews. The desk review informed the analysis lens (framework inquiries) and secondary data. The KII participants were selected from both the local community and government organizations that have a direct role in managing conflicts and peace building. Representatives of three government sector offices at zonal and district levels, namely Women's and Children's Affairs Offices, Peace and Security Offices, and Disaster Risk Management Offices, were purposively included as KIIs. Moreover, Kebele local administrators were also interviewed as key informants. Additional key informants were also selected from among community members. These included various forms of rulers of customary institutions in each of the 14 districts of the three regions, including elders, clan leaders, and religious leaders. These KII participants were selected based on their socio-political affiliation. In this regard, kebele level formal and informal institution leaders, as well as leaders and experts from district level formal institutions assumed to be relevant to the study themes, have participated as KIIs. A total of 63 KIIs and their profiles were compiled from the selected regions.

The FGD participants included separate groups of adult women and men; adolescent boys and girls; and mixed community groups (elders, clan leaders, and kebele administrators). Also, various aspects of minorities (ethnic, religious, and disability) were included in the field interviews. While selecting the FGD participants, age (adult/young), gender (male/female), disability, and ethnic/religious belongingness were used as a yardstick. Moreover, conflict-induced internally displaced people and returnees have participated. A total of 20 FGDs were conducted with various members of the community

in the regions. The profiles of the FGDs participants and their views were compiled as data sets along the selected variables. The FGD information was analysed using thematic narratives. In order to categorise the narratives into analysable themes, a diversity theory was used. The diverse perspectives based on gender, age, location, etc. were used.

The respondent selection criteria were: (1) representation and inclusion (gender, age, disability, religious or ethnic minority), and (2) institutional (from informal institutions (clan/religious leaders, elders) and formal institutions (district and kebele level leaders). Thematically, the types of institutions (formal/informal), conflict hotspots/tension, types of conflict such as resources (water and pasture) (Belay et al., 2013), boundary, clan (inter/intra) and kebeles with IDPs were selected. The instruments used by the study include thematic unstructured guides. The data analysis was made based on the thematic narration of diverse voices of respondents. The field-note summaries, audio recordings, text transcriptions, and images were transcribed for interpretation and analysis. The texts, themes, and emerging patterns supported the findings, conclusions, and recommendations. The themes and contents were transformed into a qualitative narration of findings and recommendations.

DATA RESULTS AND DISCUSSION

Ethnicity/identity and cross-border interactions in eastern Ethiopia

The study was conducted in Afar, Oromia and Somali regions of Ethiopia. Demographically, the majority of the receptive regions are inhabited by ethnic Afar, Oromo and Somali people, although the regions are homes to other diverse ethnic groups (Beyene et al., 2020). The three regions together make near 40% of the people of Ethiopia, and the eastern part of the country relatively constitute around 15% of the people of Ethiopia (CSA, 2017). The regions have international boundaries with South Sudan, Sudan, Kenya, Somalia, Djibouti and Eritrea; the ethnic groups in these regions have their counterparts in the

neighbouring countries (Dansa and Musa, 2021).

Cross-border interactions among the peoples of the region gave opportunities for both sides of the region living at the border to transact cross-cultural relations like marriage, language, religion, and resource use (Beyene et al., 2020). The close interactions sometimes become sources of contentious interests among the people living in the bordering districts of the two regions, leading to conflicts and instabilities across the borders. The people have longstanding cultural, economic, and political relations, historically, though contested, strong ties between the groups manifested during the 16th Century mass population movements in the Horn of Africa (Baxter, 1978; Lober and Worm, 2015).

The people residing along the borders were competing in their borderlands for water, grazing, and agricultural land (Lober and Worm, 2015). The people from the three ethnic groups were able to respond to emerging and existing conflicts through their customary institutions (Beyene et al., 2020). The traditional practice of making a livelihood along the border was based on cross-border mobility in search for pasture and water. Resources were shared commonly and managed by the local customary authorities – clan leaders and elders (Beyene, 2008). Recent phenomena such as climate change, commercial investment, farmland expansion, and population pressure have increasingly influenced land use patterns and called into question long-established grazing land and water resource capacities, as well as institutional arrangements for resource sharing across borders (Beyene, 2008; Beyene et al., 2020).

Despite the interconnections between the peoples in the borders, however, after Ethiopia's political transitions in 1991, which linked ethnicity, territory (resources), and administrative boundary, strong incidences of violent conflicts began among the people, including of the same ethnic groups. This trend has been a cause of conflict in Ethiopia, especially in southern Ethiopia region (Verjee, 2021). The politically-driven, interest-oriented and benefit-focused conflicts causes often intertwined with narratives and counter-narratives related to ethnicity, territory (resources), and administrative boundary, and thus, "political entrepreneurs" emerged from time to time further creating divisions, counter interpretations and usurpation of dynamic scenarios along the boundaries.

The causes and consequences of conflicts in eastern Ethiopia

The consequences of conflicts on men, women, girls, youth, elderly and disabled people are sometimes supported by formal and informal institutional mechanisms rooted in ethnically-based political narratives and counternarratives. These contexts created the foundations for the expansion of political entrepreneurs, and diverse interest groups from two sides of the borders of Djibouti,

Somalia and Eritrea. Besides, according to the data collected from the regions, the main causes of conflict are dynamic, overlapping, complicated and transect each other. The main causes of the conflict were identified as competition over communal grazing land, and water resources (Belay et al., 2013); informal economic network through cattle raiding and black-market trading, and contraband; political interests to mobilize support and claim authority through using ethnic and clan lineage (political entrepreneurs or political calculus). Beyond the conflict and competition over resources, history (clan-based and revenge-driven conflicts) and the political reform (ethnic based boundaries, the socio-economic and institutional dynamics as structural causes of the conflicts in the area). The perceived boundaries and the post-1991 demarcation among regions and borders become also causes of conflict. The long historical conflict scenario along the boundaries and borders were documented by scholars such as Dansa and Musa (2021) and Sugule and Walker (1998), the post-1991 dynamics in causes of conflict were documented by Beyene (2008; 2009; 2013; 2017) and Kefale (2013a). The desk review, interview and focus group data are presented schematically in Figure 2.

The intensity and complexity of the conflict, according to the key informants and focus group participants, changed and took cross-border scenario in the post-1991 political reform in Ethiopia (Kefale, 2013b). This reform, apart from resource-based local conflict, triggered the emergence of political elites, political entrepreneurs, and an informal economic, political, ethnic and media network beyond Ethiopian borders – mainly in Djibouti and Somalia. The trade routes, the geographical locations and resource availability gave a strategic relevance for conflicts. Settlements over communal grazing land often found to disturb the resource use pattern. These informal networks, according to informants, are based on contraband trade, organized and trained armed groups involved in cattle raiding, black-market trading (including foreign currency transactions), and business elite networks. According to the informants, the dynamics in informal economic networks were enhanced by arms, information technology (mobile and internet penetration into rural pastoralist areas), and narratives and counter narratives fueled by the media (both social and mainstream media outlets) in Ethiopia, Djibouti, and Somalia. The opening of the Djibouti-Addis Ababa railway opened new horizons of competition and control over major trade routes (for trading arms, foreign currency, garments, electronics, cattle, etc.). These new opportunities created more political and business elites (entrepreneurs) benefiting from smuggling bypassing checkpoints, and further expanded conflict sponsors from contrabandists. The community level key informants underlined that the benefit from cattle raids relates also to export of live animals by contrabandists including to neighbouring countries and in return contraband in electronics, small arms, garment, etc. This trans-boundary flow of benefits and the informal export

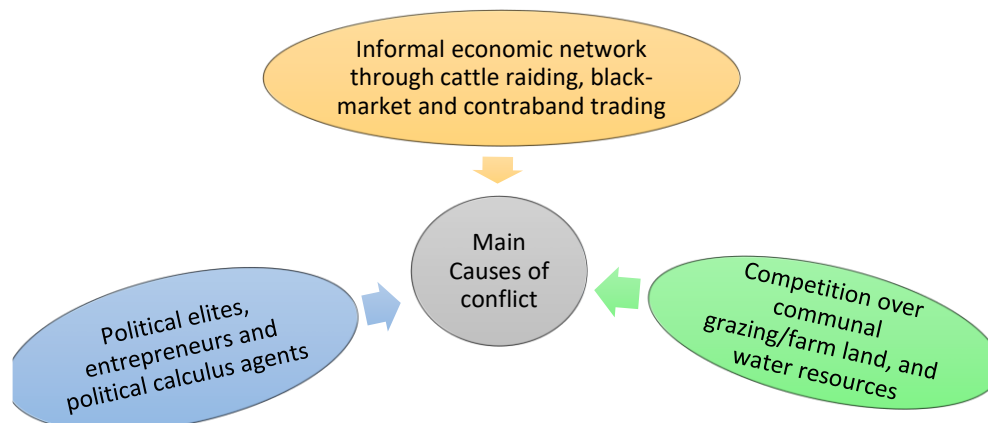


Figure 2. The main causes of conflicts (Summary of Data, 2023).



Figure 3. Continuum of conflict actors.

arrangement expand cattle raids leading to violent conflicts (Beyene et al., 2020).

A growing political interest, what Beyene et al. (2020) coin as “*political entrepreneurs*” (or “*calculus of politics*”) as related to a growing use of ethnicity and border narratives as political agenda for getting people’s support and agitate the youth and clan members towards violent conflicts. According to community level informants, the elites in the political “*calculus*” incite divisions, weaken adverse groups and empower their interest groups and work towards enclaving strategic areas under their regional or clan control and get hide-outs. The growing political interests often infuse ethnicity and affinity along clan lines as an advantage to organize people, activists and ethno-nationalist narratives. As time-passed and the formal solutions failed (ineffective) to stop business and political elites, gradually, the trafficking in persons, and transitioning illegal migrants to gulf regions become part of the illicit and contraband trade. In this respect, trafficking of women and girls, to bordering countries, increased and trafficked women and girls are used in the informal sex and hospitality industry, labour exploitation and sometimes, trade in body parts.

The causes of conflicts and the emerging trends in cross-border illegal trading, trafficking in persons, and facilitating illegal migration to gulf states is triggered further by persisting draughts, climate and ecological changes, growing transformation of settlements into conflict and contraband trade routes, livestock raiding-induced poverty (Eshete et al., 1993), and growing impacts of these trends in the study areas in spatial, economic, social and related dimensions (Hajat and Tabar, 2023). Also, the ineffective referendums conducted in the areas to demarcate

boundaries among the three regions (Afar, Oromia and Somali) did not solve the boundary disagreements and become source (fodder) for inflammatory and negative narratives by the media, elites and activities.

Actors of peace and conflicts in eastern Ethiopia

The violent conflicts at the border areas have passed through tests of history across diverse geopolitical, ecological, and sociological dynamics shaping the forms and intensity of the conflicts. The actors are diverse, and the conflicts are sometimes invisible and other times predictable, according to key informants. The conflict actors are not visible to law enforcement institutions, hiding in their respective ethnic group and newly established territory, play as many different roles as possible in igniting conflict and making peace. While tracing conflict and peace actors is difficult, the interests attached to the conflicts vary. Actors involve in the conflict with diverse interests, and dynamic processes and tends complicate the continuum of the conflict both across the borders of Ethiopia, and in neighbouring countries.

Figure 3 shows the conflict, actors and peace continuum. The actors of conflict thus include youths, clan leaders, religious leaders, local elites (political and business), media activists, local rich and companies including foreign entities, which paly on both sides (as enablers of peace and drivers of the conflicts depending on the context). They extend different alliances to connect themselves on either side of the conflicting parties to pass messages on them and maximize their interests; these include inter-clan and interethnic marriages, security persons on ethnic

Table 1. Needs-Fears Mapping (NFM) of actors.

Actors	Issues	Interest/Needs	Fears	Means	Options
Customary authorities	Protect resource governance/use pattern	Protect customary rights from threats	Real/perceived loss of rights	Lobby, activism, form narratives	Dialogue process, encourage force.
Pastoralists	Access to water, pasture	Livelihood source and survival means	Livestock loss, migration	Push herds into farms, fighting	Water and grazing zones, corridors
Government authorities	Security, economic growth, social order	Maintain support, popularity, power	Social unrest, regional crisis	Financial, legal, political means	Influence dialogues, communal rights
Contrabandists	Reduce adverse effects of informal businesses	Use disorders, a business options	Security, social order, laws	Plan and finance conflicts, trade	Influence formal businesses, peace
Male youth groups	Increasing participation in conflicts and raids	Identity, resource scarcity, lack job	Limited job, livelihoods	Conflict, activism,	Dialogues, youth employment

Source: Compiled from key Informant Interviews and Focus Group Discussions (2023).

affiliations and political elites as sources of information. The diaspora and the media activists also plan, guide and raise funds, design narratives and discourses to fuel the conflicts. The nature of conflict actors in the targeted districts depends on the level and types of conflicts discussed above. Table 1 presents the Needs-Fears Mapping of the local and broader conflicts in the study area.

Gender and intersectional causes and consequences of conflicts in eastern Ethiopia

The study also assessed the intersectional impacts of conflicts on women and girls in the study areas (Olofsson, 2018). First, conflicts, according to women discussants and key informants, increases, their work burdens in conflict and post-conflict contexts, such as intensity of collecting firewood and water, stress from scarcities to provide children, etc. As conflicts prolong, males' roles to provide basic household necessities deteriorate and fail, and women's role reshapes including to serving as bride-winner of the family. The women and girls also are required to encourage fights in the conflicts, trat and evacuate the wondered, household equipment and livestock, as well as provide food and water for the combatants. In these processes, women and girl face rape, abduction, trauma and physical injury, including death in the cross-fire. Also, girls are forced to marry (early marriage) for dowry to replenish livestock, as source family incomes, including the practice female genital mutilation. In the internally displaced peoples' camps, the key informants, widows, and returnees noted that post-conflict problems of phycological trauma related to the physical violence, loss of property, sexual abuse, loss of family members, and forced displacement and dislocation of family members have been rarely addressed for mainly lack of institutions which are able to provide recovery services. Women and girls who suffered from sexual violence during the conflicts

rarely report their problems because of social taboos and fear of being targeted and identified by the members of the society. The underlying socio-cultural views deprive women and girls of their fundamental human rights and reduce them to 'objects' of family provision, often leaving them unprotected from abuses in both conflict and peaceful times. Women and girls typically receive half of what males and boys receive, according to customary ratings and compensation for damages, in both conflict and peaceful settings.

The Post-1991 political dynamics and conflicts in eastern Ethiopia

Pastoral areas in the bordering areas live in dynamics of protracted conflict. Many agree that the historical marginalization of pastoralist areas from the modern Ethiopian state formation counts somehow to their less participation in the centre politics (Sugule and Walker, 1998; Shide, 2005). The community in these peripheral areas had no option except relying on their own customary systems of, and that of decentralized governance for their security and socio-economic matters (Hussein et al., 2015; Gebre-Egziabher and Berhanu, 2004). In other words, these are places where the Ethiopian state laws and protections of citizen's rights fail to properly fulfil their functions (Sugule and Walker, 1998; Shide, 2005). These, conflict and force are culturally seen as self-defence in the absence of proper policing, and service from the state, and this context is a decreasing incentive to discourage actors from applying institutionalization of violence (Korf, 2004). Tgese trends coincided with the dynamism of changes such as: (1) territories under the control of customary institution are now accessible; (2) formal administration systems increasingly consolidated powers based on land and resources making customary systems less important; and (3) socioeconomic dynamics such as market expansion, land use changes, rights, weekend customary

systems. These trends are not supported by formal and organized transformation, and has become opportunities for political/business elites, entrepreneurs and activist to thrive based on specific zones of benefits. The combined effect of all these factors and challenges has led to continuous deterioration of customary systems, increased tenure insecurity and inaccessibility of larger portions of the main resources- rangeland and water due to population pressure, investment expansion and threat of conflicts (revenge). Thus, local capacities for peace, and protection of rights diminished, and the conflicting interests among actors diminished the prospects for joint peace initiatives. Rather widened gaps, negative narratives and counternarratives that gave opportunity to diverse interest groups. In these contextual transformations, the diverse media and activist groups perpetuate this status quo in the study area (Gagliardone and Stremlau, 2011), and reduced the use of the power of media and philanthropists for peace building (Wilson et al., 2021). According to key informants from government offices, and non-state actors in the study area, the above trends are further complicated by lack of effective early warning, information sharing and feedback mechanisms

Conclusions

The study was aimed at analyzing and providing in-depth information on the causes, nature, and consequences, drivers of conflicts, enablers, and local capacities for peace in the study area. Beyond that, the study was also aimed at examining the dynamics of conflicts and their consequences in the context of expansion from the local level to cross-border levels. In this analysis, the intersection consequences of the expansion of conflicts on trafficking in persons (women and girls) and the facilitation of illegal migration, trading, money transactions and emerging trends of business and political entrepreneurship in post-1991 political reform in Ethiopia (Kefale, 2013a). The study employed a participatory methodological approach and a concurrent triangulation qualitative design. A desk review was employed to collect secondary evidence. Focus group discussion with diverse groups and key informant interview with individuals were conducted to generate primary information. The data collected from a total, 20 focus group discussions and 63 key informant interviews revealed that the main causes conflicts in the study areas relate to competition over resources (Belay et al., 2013), clan-based historical grudges, land and water (farm and herding), contraband trading, livestock raiding and looting. The conflicts, in line with the post-1991 federal political reform (Kefale, 2013b), took historical, social, political, economic, environmental and new cross-border ethnic configurations, as fuelling factors. The media, diaspora, activists and business/ political elites and entrepreneurs curved new forms of benefits, and used ethnicity as hide-outs at home and abroad, yet planning, organizing, and funding confit along regional and

international boundaries of the regions. Sometimes, individual level conflicts easily transform to clan, community and ethnic level conflicts. Thus, the interlinkages of clan, history, administrative boundary, resource-territory-based and political reform-based narratives and activism are causing conflict not only in the study regions but also across the bordering countries.

As concluding remarks, the conflict overtime took diverse forms and manifestation such as involving in resource raiding for contraband trading, creation of economic and business networks across international borders, based on ethnic affiliations, trafficking in persons, facilitating illegal migration and use of political and business narratives aimed at claims over territorial control, trading routes, and expansion of administrative boundary for expanding constituency. In this process, the resource competition-driven conflicts have changed from claims of user right-questions to property right and ownership questions. This has further complicated solutions and enhanced the political and historical questions over control of the process by “political and business entrepreneurs” and shows a clear institutional failure to secure property rights and resolve the problems. The cattle raids and contraband trading, though the manifestations are not uniform across the regions and cross-border actors, engage elites from both sides, and promote the ‘otherness’ narratives and counter narratives relating the affected groups.

As the conflict prolonged and changed in context, the mistrust in both sides of the actors increased. The economic interests and benefits of the business and political elites widened, from mainstream local level interests to cross-border trading and informal economic and business networks. The consequences of the conflicts were intersectional for women, girls, and persons from minority groups, people with disability and those from conflict-prone locations. Women and girls survived diverse forms gender-based violence, physical and psychological harm, sexual and labour exploitation, and trafficking including labour burden and domestic provision (care) responsibilities. In active-conflict locations were the hard hit, and the trauma and the consequences of the conflicts was huge and may require years to recover from and needs more interventions.

Limitations and areas of future research

The limitations of this research included a lack of quantitative (numerical) information and a primary focus on theoretical secondary data. While the research successfully achieved its objectives and the findings and conclusions were based on reliable evidence, it's important to note that the generalizability of these findings is specifically applicable to Eastern Ethiopia.

The proliferation of armed groups, frequent violence and attempt to reclaim land (territory) by force, trafficking in persons, facilitation of illegal migration and money

transaction increasingly complicated the causes of conflicts in the study area. Therefore, broader research on each of the above thematic areas is needed.

The 1991 political reform fuelled the conflicts, bet encouraging ethnic based boundaries, hideouts for criminals and cross-border ethnic linkages, which are further reinforced by failure of state institutions and laws at local levels.

However, the emerging dynamics in Ethiopia, such as the disintegration of the SNNP region, the rise of Amhara nationalism, the conflicts in Northern Ethiopia, etc. shaped conflicts and humanitarian crisis. These new and currently emerging trends need more research in Ethiopia.

In the future, in terms of addressing the problems of ethnic-based and cross-border conflicts and their intersectional impacts, concerned bodies, (1) work to changing the conflict behaviour at local level, (2) create awareness, trust-building and accountability mechanisms, information sharing, early warning and feedback handling platforms, and (3) improve the capacity of existing local institutions and citizens by addressing institutional gaps, disciplining media and activists are required. The study thus concludes that the conflicts in Eastern Ethiopia is internationalized and needs cross-border initiatives focusing on curving trafficking in persons, cross-border illegal trading, circulation of illegal money and arms, and trafficking women/girls for the illicit sex, labour and hospitality industry in Djibouti, Somalia and the broader gulf region.

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CONFLICT OF INTERESTS

The author has not declared any conflict of interests.

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