

# The Effects of Spatial, Social, Political and Economic Activities on Ethnic Segregation in Gambella City, Ethiopia

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**Abstract:** Gambella city has been one of Ethiopia's poorest regions' capitals since its inception. The city looks to be physically, economically, socially, and politically disadvantaged in comparison to other Ethiopian regional capitals. The city failed to accommodate the diverse population residing therein due to disparity among residents. In this regard, the main aim of this paper is to identify the types of segregation that exist among residents due to changes in spatial setting, social, political, and economic functions as ethnic enclave settlement is the only well-known form of settlement for Gambella City. Land use inventory data (2016), focus group discussions, and key informant interviews were used in this study. A Geographic Information System (GIS) and RStudio (2021) were used as tools to analyze the data. As a result, all of the components had a p-value of 2.2e-16, where the economic and geographical factors contributed more to residential segregation than the social and political features. Therefore, introducing new planning models that consider communal housing development with economic value and big business centers, people-centered planning with a special focus on communal gathering institutions, design that is aesthetic, tourist-attractive, and luxuriant, Cultural and sports institutions and practices can desegregate Gambella City to become a livable city and accommodate its diversity.

**Keywords:** Gambella city, RStudio, communal, Segregation, Planning,

## Introduction

Many researchers describe segregation in various ways, depending on the nation and field. In any metropolitan center, it takes the shape of income, economics, ethnicity or race, religion, and gender. In this regard, residential segregation is the geographical concentration of one ethnic or socioeconomic grouping in cities (HAO P., 2015). It is also considered as the geographical separation of whites' residential zones from those of ethnic minorities (Landrine and Corral 2009). Urban planners and architectural researchers consider residential segregation as the systematic separation of residents into one area in the city (Fainstein, S., 2010). In the same speech, HAO P. (2015) considered residential segregation in the form of ethnic segregation, which is the most visible system in European and North American cities. Residential segregation is at its zenith in the US for African Americans (Iceland and Sharp, 2013). In Africa, residential and ethnic segregation are discussed and linked to the arrival of Europeans during the colonial period. Ethiopia is one of the most populated countries in Sub-Saharan Africa, and although not having been colonized, the pattern of ethnic segregation seen in other countries is projected to continue.

In particular, the Gambella region, one of the under-growing districts that were acknowledged as the regional state following the collapse of Dergi in 1991, made Gambella City the capital city of the region. The city has a historical perspective as a European colonial enclave that served as a meeting point for various merchants from across the world. However, due to a lack of attention and weak concentration from Ethiopian and Sudanese governments throughout the colonial era, the city was unable to fully realize its potential. Gambella City is regarded today as Ethiopia's poorest and most destitute city; its society lives in a traditional way of life and its facilities are underdeveloped. Its settlement pattern is geo-located into five "kebeles" (lowest local administration) following Ethiopia's legal and official urban metropolitan structure and constitutional framework, which designates kebele as the lowest administrative system. Where each kebele is occupied by a concentration of people speaking the same local language, they are clustered in a large number as one ethnic group either voluntarily or involuntarily in each kebele.

Over the previous four to five decades, the town's real settlements have had ethnically based settlements that do not match the nominally intended metropolitan settlement pattern and growth. As a consequence, spatial subdivision and much segregation in all its perspectives are observed. Despite the fact that there is a growing and extensive literature on ethnic segregation, the absence of any research in this image necessitates a thorough investigation into social, geographical, economic, and political issues with the goal of answering the following question: how do domain elements such as social, geographical, economic, and political activities influence the level of segregation in Gambella City? Is the change in features of the close or bordering ethnic line settlement, which

contributes to revealed ethnic segregation, more important in determining the amount of segregation in Gambella City, or the influence of other external variables? Is there any possibility to curb this form of ethnic segregation through policies and planning? To address newly discovered ethnic segregations in Gambella City, it was necessary to first understand the extent of segregation along ethnic lines and settlement patterns in Gambella City based on numerous socioeconomic and geopolitical variables. The analytic issue of this article stemmed from the geographical estimates of the vicinity of nearby effects based on ethnic line plus the residual of other exogenous elements as the result of multi-regression analysis output. In the findings, it is suggested that spatial and economic factors outweigh social and political factors in the extent of segregation in Gambella City. The last section considers general conclusions and policy suggestions to curb ethnic segregation.

### **Segregation in the context of Ethiopia**

Numerous times, ethnical isolation has been delved into as a sociological miracle in metropolises across the world, and it's presently being probed. Ethnic isolation is defined by Wessel and Sholt (2010) as the spatial separation of ethnic groups within the same megalopolis. The insulation of new populations from locals is a common incarnation of ethnical isolation. In another environment in the civic terrain, isolation is considered the lack of commerce in space and the denial of services and access to structure (Feitosa, F. 2016). Caldiera( 2012) also stated that the symbols and meanings of isolation vary vastly depending on the terrain and physical region of every country. Some important factors in relationships with isolation are income, race, and status position that have a direct influence on domestic development.

Domestic isolation by income is more common in advanced nations across the world but appears to be less common in developing countries, mostly in Africa (Fry & Taylor, 2012). This implies that the majority of African families do not earn a different type of income. Isolation, according to Anderson et al.( 2003), is caused by tycoon, race, or social class. Lower access to health, income, education, and overall well-being of individuals are issues of isolation in relation to poverty-stricken areas (Van Ham et al. 2012). According to Fry and Taylor (2012), ancient agreement patterns, original casing programs, zoning laws, real estate practices, and migration trends, as well as the characteristics of the original self-denial and pool and labor forces, are all factors that may create domestic isolation.

African experimenters, Aliyu, Kasim, Martin, Diah, and Ali( 2012), mentioned domestic isolation is important because of intangible position factors such as artistic identity, native inclination, and safety, socioeconomic background of the individual, security enterprises, violence frequency, religious leaning, ethnical background, and indigenous boat. This means internal isolation in cities might develop due to social prejudice, profitable system failure, or religious dogmatism. On the other hand, numerous African metropolises considered domestic isolation occurred as a result of distrust and misconceptions among different people with different traditions, customs, and ethno-religious led to conflict and religious violence (Aliyu et al. (2012), Gambo & Omirin (2012), Dung-Gwom & Rikko(2009), Uchendu(2010), Brimicombe(2007), and Poole & Doherty(1996). This implied the presence of violent clashes, which resulted in domestic isolation among residents of the same megacity. According to Spoisito (2013), ethnical enclaves are considered one form of agreement that contributes to the isolation of residents in which individualities are physically closed yet separated by obstacles and security enterprises.

Some important factors which contributed to the conformation of ethnical isolation in metropolises are considered as they are the socioeconomic status of the existent, family, and their racial background (Edewor, 2011). This also supports the idea of Petrescuprahova(2008) that classified the causes of isolation in metropolises substantially observed in spatial form, the demand of a person on where to live, and individual aggregate socioeconomic characteristics.

Methodologically, the dimension of isolation and difficulty concentrated on how to quantify and estimate the influence of isolation on socioeconomic conditioning. Ethnic isolation in civic life is a problem for megacity routes, frameworks, and social scientists. As stated by Tammaru et al. and Van Ham et al. (2016), the socioeconomic difference is seen as a sign of inequality that segregates residents in all metropolises. On the other hand, according to Andersons et al. (2017), the degree of ethical attention allows beginners to enter the requested system for them to check and repel the form of isolation in their new agreement area. In Malaysia, according to Ramli and Jamaludin (2012), two key artistic differences led to implicit decomposition, either language or religion. However, the lack of proper data tracking and spatial delineation because of unclear planning practices in place for Gambella city influenced the utilization of a new method of multiregression estimations of the well-known trends of measurement of segregation like dissimilarity, clustering, exposure, and centrality index of measurement that are primarily used by the researchers on segregation. The aim of using this new form of estimation is to find out if new findings should be displayed without using the census trace or block-based data for measuring segregation that is usually used in the developed world and community-based data mainly utilized in Chinese cities to identify the level of residential segregation. Government policies as a means of integration and reducing forms of segregation in cities by introducing a developmental state that considered housing development and access to land to curb the previous monarchy's land use system and housing shortage still failed to address the issue of segregation in Ethiopian cities and needs further investigation. As pinpointed by Matsumoto and Crook (2021), even though public land ownership and integrated housing development programs were introduced to change the impact of the previous regime on residents. These policies still failed to curb the issue of segregation in Ethiopian cities across the country as well as among the regions. The government's institutional

malpractice and the weak market system failed to meet the demand and control the challenges in Ethiopia's land management and shortage of housing. This seems to match the practice observed in Chinese cities by Zhao (2013) on hau and dual land systems.

A recent trend observed in contemporary metropolises of Ethiopia and the kind of segregation observed by ethnical origin, which wasn't in place numerous times ago, has pushed people to ask the question. How does change in the socio-spatial and political economy affect ethnic segregation in Gambella, Ethiopia? This practice is now challenging the Ethiopian urban system and its setting. Particularly in those metropolises established with a special purpose. Metropolises like Dire Dawa, Addis Ababa, Harer, Gonder, and Gambella were established with specialization in focus to accommodate people from different backgrounds. However, they're facing ethnoreligious and race-related conflicts as well as isolation consequently. According to Dereje (2010 and 2011), the Anywaa and Nuer communities are disorganized significantly politically in Gambella regional state. Ethiopia Inside (2019) stated Dire Dawa, the second charter city of Ethiopia, is inhabited by a diversity of residents with a popular culture that emerged with multicultural cohabitation and multiple incidents of violence in the city. The violence seems to emerge from a historical perspective contested by the Oromo and the Somali regional states (Midega, 2021). This implied segregation within the two major ethnic groups and the other ethnicities residing in Dire Dawa was eminent.

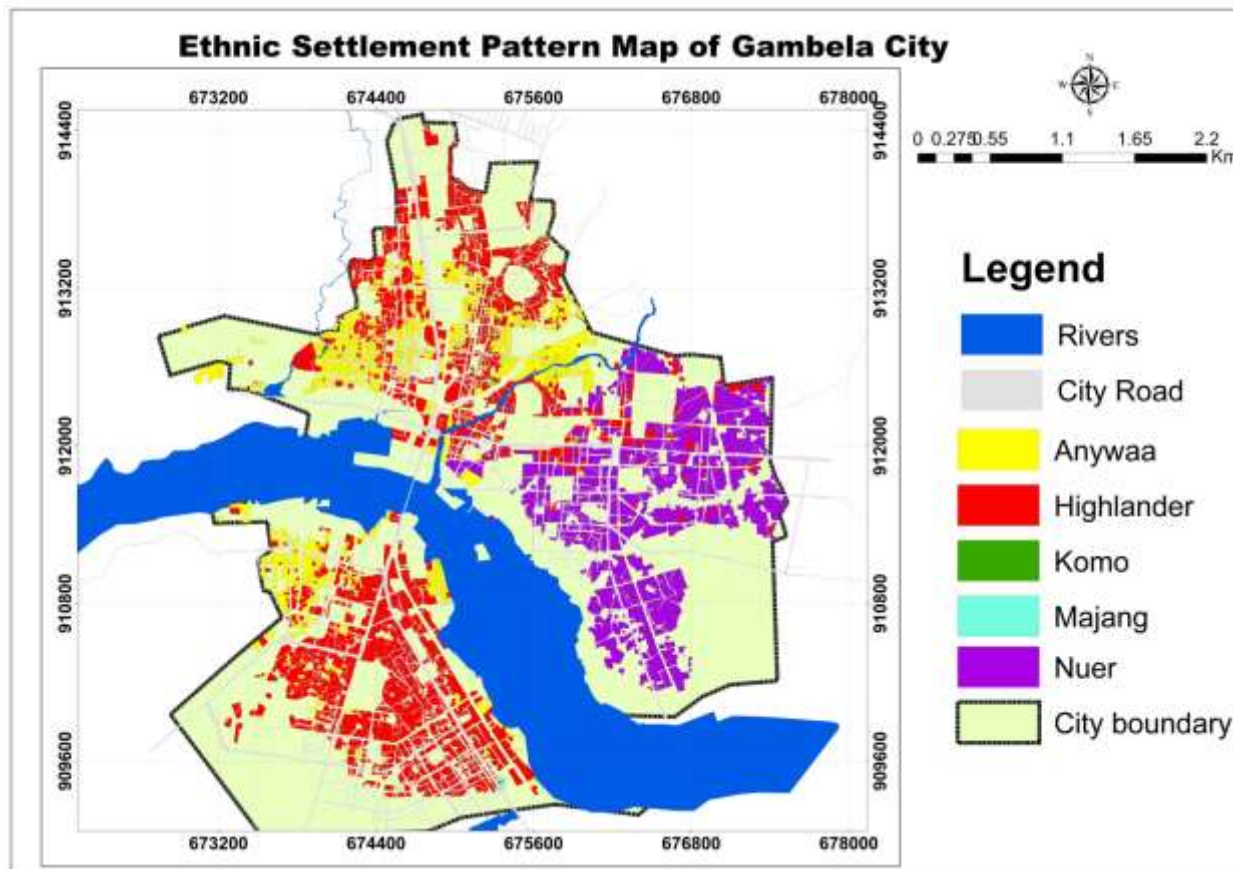
Gambella city is among the regional state capitals that accommodate different ethnic groups from the different corridors of Ethiopia because of its specialization in trade. Numerous times ago, these groups abided and lived in harmony with each other's. As mentioned by Dereje (2010), the way of life in Gambella was characterized by cooperation, interethnic marriage, and trade. But, from the time war broke out between North Sudan and South Sudan and the TPLF against the Dergi era, the favorable terrain in Gambella started to dwindle and deteriorate. As a result, the city started facing isolation by color, race, citizenship, and economics, which were the most important questions at the time. All of this is more clearly stated in the EPRDF's preface to Ethnical Federalism, which allows Gambella's indigenous groups to know each other and gives the state a sense of power it has not had since the time of appropriation (1902). The EPRDF introduced a policy that seemed workable and beneficial to the region, particularly to all indigenous (Anywaa, Nuer, Majang, Komo, and Opo) groups, as it produced the Gambella regional state. However, the political system failed to utilize this opportunity like other Ethiopian cities that benefited from ethnic federalism. Rivery is prevalent among ethnic groups in Gambella, particularly among the largest ethnic groups, Nuer, Anywaa, and Highlanders. like that of Dire Dawa, the charter city contested by Oromo and Somali (Mestir Saw, cited in Ethiopia Insight, 2021). That applies to Gambella city, between Nuer and Anywaa, prone to different clashes.

As a result, ethnic federalism failed to pronounce the Ethiopians' citizenship as it segregated highlanders residing in Gambella city with weak political claims and authority. The largest ethnic group utilized state authority as a means of segregating other Ethiopians residing in the region. Therefore, to be clear on the kind of segregation that exists in Gambella city, studying the effects of social, spatial, economic, and political factors resulted in understanding the extent of residential segregation now in focus, which is the main focus of this study. Since then, no scholar has ever conducted research in this particular area in Gambella regional state.

### **Data and Study Area**

Gambella is a major regiopolis city in Ethiopia that serves as the capital of the Gambella region state (EDRI and GGGI, 2015). It is situated where the Baro River and its tributary, the Jabjabe Stream, meet. With coordinates of 8°15'N 34°35'E and an elevation of 526 meters above sea level, the city is located approximately 766 kilometers southwest of Addis Abeba. The "Baro" River is Ethiopia's largest and only navigable river. The city is 3 kilometers south of Ayer Tena, a locality where highlanders are concentrated toward Gambella airport road along Anywaa zone main road to Abobo town. The city is 3 kilometers north of Don Bosco, the current Nuer mender along Itang road to Demidolo, 1.7 kilometers west of Gambella Agriculture Research Center with a special locality named Komo village on its way to Pinykewu kebele, and 2 kilometers east of Dipo (Gambella City Development Plan Proclamation No. 18/2000).

Figure 1 Ethnic enclave settlement pattern in Gambella City



Source: Own source (2021)

According to the National Population and Housing Census projection (2018), the town's population was estimated to be 65,091. Males accounted for 30,044 (46%) and females for 35,047 (54%) of the total. According to the land inventory of the housing unit used that was correctly documented, there were 16,129 households in this town, with an average of four people per home. The Protestant faith was practiced by 57.04 percent of the population, while 30.39 percent practiced Ethiopian Orthodox Christianity, 9% practiced Islam, and 4.08 percent practiced Catholicism (CSA, 2015/16). The master plan area in Gambella Town is 1727.6 hectares. However, the current structural plan, which has not yet been implemented, has extended the town limit for an additional 5 km in all directions. Therefore, the study will not include it, even though illegal settlers appear to inhabit it. To highlight the city's important issues in general, an ethnic enclave settlement (see figure 1) has become a major issue for people and is impeding the city's overall development functions.

### Information and analysis

The study utilizes a method that measures the effect of segregation in Gambella based on the residential social, spatial, economic, and political function (SSEP) of each resident. Based on this perspective, this study utilized a multi-regression estimator that measures the effect of SSEP in the city in comparison to the most commonly utilized measurement of segregation by many scholars.

This estimator doesn't only measure residential segregation; it views segregation in cities as complicated and dynamic, depending on how each resident uses the urban area in their neighborhood from a variety of perspectives. This technique can be used to assess numerous issues linked to segregation in any urban region. The Gambella municipality, in collaboration with the Minister of Urban Development, Housing, and Construction, conducted a survey of all Gambella City homes based on the Gambella Land Use Inventory (LUI) in 2016, which served as the basis for the data for this study. This land inventory includes residential records for each property, information about who owns the homes, other personal characteristics, and the kebele where each inhabitant is located. A low-density area is one where members of the same ethnic group do not outnumber those of other ethnic groups in the same neighborhood. In this study, a high-density area is defined as a neighborhood with a high concentration of people from the same ethnic background speaking the same language. A medium-density area is defined as a mix of all the related components of all ethnic groups residing in the area. Anywaa, Nuer, or Highlanders who dwell in large concentrations in one kebele are considered to be a notable ethnic group, as are Anywaa, Anywaa, or Highlanders. These areas are known as ethnic enclaves for these groups (see figure 1 above).



Using these data records, quantitative information on housing and other necessities was evaluated, resulting in the map shown above. Qualitative data was obtained from field trips to the city's local administrative district, the Kebeles, school administrators, and senior citizens. Every kebele was specifically chosen through talks in groups, observations, casual contacts, and interviews with key respondents, including the appointed school administrator as a backup to information on hand and observation carried out. Geographic information systems (GIS) and RStudio (2021) were used as analysis tools in this study of the data. A multiple linear regression model was used to calculate the overall effects on the consolidation of ethnic and settlement areas. It was also used to illustrate how a change in the percentage of social, geographic, economic, and political causes would affect the level of segregation. This study's main goal is to assess the degree of segregation in Gambella City by looking at the effects of socioeconomic and spatial-political variables on the ethnic makeup of communities within the vicinity of Gambella Town.

Settlements connected all of the segregations, each of which was calculated, tested, and forecasted based on evolving socioeconomic and geopolitical paradigms. When the P-value technique was employed for scientific decision-making, 0.05 was used to signify the degree of significance; if the P-value from the discovery is less than 0.05, the factor for analysis is significant. The model fit demonstrated a significant value with a p-value of 2.2e-16, or less than 1% level of significance. The land use inventory may not accurately reflect the real situation and practices on the ground; therefore, there are still certain restrictions in effect. Identical naming may occur in particular because neighbors cannot all be members of the same ethnic group, and historical concerns may push for the use of names from other ethnic groups. The finest example is how the Orthodox Church and Protestant Christians use Christian names to convince native people to adopt them as a means of introducing civilization to Gambella. Additionally, the study's weaknesses include the lack of sufficient geo-data collection; weak tracing as a result of bad planning methods; a shortage of skilled human resources; and inadequate technological tools.

### **Findings**

The findings of the study on the extent of segregation across ethnic and settlement areas used the elasticity of change from a percentage increase in the unit of one of these parameters to explore the level of segregation among inhabitants in Gambella City persuaded by geographical, social, political, and economic variances. We assessed the explanatory variables that generate ethnic segregation across the four key categories. In this manner, we generate the inclusive residual value, which consists of four components derived from the explanatory variables evaluated against ethnic segregations in that specific area, using the estimating coefficients plus their intercept value. With the residual values of the four elements (social, geographical, economic, and political), a multiple linear regression model is used to estimate their overall impacts in amalgamation with ethnic and settlement sites (i.e., kebeles). As a result, the step-by-step analysis and presentation of the estimation result are demonstrated below according to factors associated with ethnic segregation in Gambella City.

### **The Extend of Ethnic Segregation in Gambella City**

Findings describe ethnic segregation primarily as a result of the expansion of unlike social, political, economic, and spatial activities in Ethiopia's urban centers. Changes in social, political, economic, and spatial related functions fragmented Gambella city residents. Ethnic residential concentration (Anywaa, Highlanders, Nuer, Komo, Opo, and Majang), and the residents' preferences in choosing where to reside (Kebeles), were all applicably considered for Gambella city segregation analysis. We estimate the extent of ethnic segregation selectively from various variables considered by defining the degree of ethnic segregation as indicated in table 1 below. According to this table, we observed that all the explanatory variables are significantly different at the 1 percent level. Furthermore, the locational preference, as residents reside in space, the spatial division on the ground, was used to define the segregation in space. Kebele was utilized to show where the concentrations of one ethnic group are and that they are spatially inhibited. The settlement by kebele was used as a means of estimating ethnic concentration in one kebele. Using Kebele-01 as the reference category to estimate others, the level of segregation in kebele 02 is described as representing 2.21 percent, 1.7 percent for kebele 03, and kebele 04 and 05, consisting of 1.6 and 3.7 percent, respectively. This means all the kebeles displayed the presence of segregation that has a negative significant value. As all kebele consist of a percentage that is low, that means homogeneity hinders and easily defines the level of segregation by kebele. The negative sign denoted ethnic segregation; it hampered other minority groups as a result of major ethnic strongholds on the weakest. It also represents weak ties among kebele residents that need careful handling and further discussion and study. However, the disparity in Kebele 05 is 4 percent. This is either because Anywaa, Highlanders, Majang, plus a few Nuer and Opo were in some localities in weak numbers. The following description and discussion qualify the situation accordingly in Gambella City.

### **Social effect on ethnic segregation in Gambella city**

An increase in social change increased segregation among the ethnic groups by 0.8 percent in Gambella city. This implies the social-related factors aligned with this study reveal a low status of segregation compared to the other three variables (spatial, economic, and political). However, its effects may not be so easy and simple. This low status may be because the homogeneity of residents in the

same settlement area decreased the level of social segregation. According to observation and results, the school allocation in major parts of the city is influenced by the concentration of dominant ethnicities. This allocation hindered access for all ethnic minority residents to feel at home and for their kids to utilize their mother language to learn. Social segregation manifestation in schools is shown in Figure 2 below, which reveals New Land High School students carrying chairs from their home to sit on during class while other schools have enough. Along with the practices in Rasgobena Junior and Primary schools, negligence is observed in class rooms, with the absence of chairs and school building rehabilitation. Even though this school is among the oldest in Gambella, it also has enough space to build new additional blocks, which leads to no renovation, renewal, or maintenance in the learning classes. Instead of maintaining or renovating Rasgobena, what we observed is additional building from Plan International and renovation that was underway in Jabjabe primary school, where highlanders and Anywaa students are concentrated. This implies that the educational institution responsible for schools seems don't see all the schools equally. Not only that, the governing body for schools doesn't consider the population and location demand, which should conclude that the school allocation and resource distribution failed to meet school planning techniques.

Figure 2 deprived school with school facilities in Gambella City



Source: Own observation (2020, 2021 & 2022)

### Spatial effect on ethnic segregation in Gambella City

Along with social factors, a spatially related function was utilized to determine the level of ethnic segregation in Gambella City. According to estimates, there is a 21.9 percent disparity in Gambella's residents due to spatial ethnic-based settlement in practice. Mistrust, high gangster practices, flash flood conflict, and land ownership issues were pivotal to this kind of ethnic segregation. This means, the spatial concentration of one ethnic group pushed the same ethnic group away from others, resulting in an increase in gangs' practices, murders, and related crimes, as the activities done by each group in each enclave failed to be revealed and known by the other ethnic group in the other enclave which is dangerous to citizens now and in the near future. They need special intervention. Because every enclave appears to be closed to other ethnicities, many pockets in Gambella are inaccessible to outsiders of other ethnicities. Another important concern of spatially related effects is murder and robbery, which don't seem to be new to many cities around the world. However, what has been observed in Gambella City differs from others because the city is still an emerging city, underdeveloped, and its functions are still low, and its criminal practices are difficult to state when compared to other large cities. For example, the burning of murdered dead bodies, transportation of bodies from place to place, throwing off the dead into the Baro River, and killing by unidentified killers. All these never happened many years ago in Gambella city as the ethnic base increased,

the spatial separation increased and problems in the city increased. The below figures 3 and 4 demonstrate the residential area evacuated by owners as fear and safety concerns increased.

Figure 3 quitted residential area in Gambella city



**Source:** own observation (2021/2022)

Another rigor effect of spatial segregation is the land issue in Gambella city. Gambella city land value increases as it is utilized as a means of obtaining money and paying dowry. Figure 4 below illustrates the malpractices and illegal functions on urban land. Ethnicity in Gambella city seems to control the land management system. The municipality acts as a follower, which means its main duty is mostly to legalize occupied land by giving title. The Gambella municipality failed to manage its territory. That is why the misuse of land in many suburbs and the high illegal practice of land use are strongly magnified as those with strong muscles in line with their ethnic group control the land and sell it to those with money. They claimed junk of bare forest space as theirs by symbolizing (figure 4) that prevented others from accessing it.

Figure 4 Illegal appropriation of land near the periphery of Gambella City.





observation (2021)

Source: Own

#### **Economic effect on ethnic segregation in Gambella city**

The commutative effects of economic activity in Gambella City amount to 25.2 percent of the segregation that is underway. This pinpointed the economic factor as the most outstanding factor of the four estimations that are utilized to define the extent of ethnic segregation in Gambella city. In this way, we can say that economic function has a significant impact on the segregation of residents. As indicated, highlanders control the economic sector in the city. The figures below reveal how unorganized the system of trading is in Gambella City. Most businessmen are working in an unorganized marketing system that is not secure, lacks a proper market center that can accommodate business functions, and is absent on market days that can bring people exposure. In the absence of all of these, petty trade and illegal trade practices defined the market system in Gambella city. Furthermore, a flow of huge amounts of money from the pockets of individuals to the pockets of individuals is observed that hinders the city's revenue system. In the same figure, we observed the disparity between traders who are indigenous and highlanders. The practice in the main square revealed the general truth about those petty traders. Observing both, we find indigenous traders' involvement in selling consumption-related goods and highlanders' traders' selling clothes, electronics, and building materials. Not only that, but the highlanders' traders are being mistreated by a group of organized indigenous boys who collect ten birrs from each trader every day without receiving the legalized receive. They need to secure bare space for them to sell their goods. This implies that even on the street, sellers are being segregated by an organized group of indigenous people, forcing them to pay even though they are not legalized.



Figure 5 Gambella City common market center



Source: Own Observation 2021/2022

### Political effect on ethnic segregation

Segregation in the form of politics took 14.5% compared to the other three explanatory variables. The citizenship, political influence, and political status of the individual residents were utilized as means of identifying their contribution to disparity among residents, and they defined political segregation. According to the description in table 1 below, the extent of ethnic segregation due to the above-mentioned factors (the economic, spatial, political, and social), the political factor took the lowest development as the major form of the settlement is ethnic based with weak political strength in the neighborhood. This could be because the majority of residential areas share a common ground with people of similar ethnic backgrounds who are admired and enthusiastic about supporting their ethnically related party. On the other hand, a majority of residents cannot participate to their full extent because of a weak political system that has segregated others since the incorporation of the city. Another important concern is the downfall of Dergi, the political system in the Gambella region that failed to pronounce the plurality and diversity of residents and peoples of the Gambella regional state. The party system was very narrow-minded. The GPLF, which was the Anywaa ethnic majority and was in control of the state during the transition period, refused to incorporate other ethnicities by segregating not to jeopardize the party membership. As a result, political parties that are ethnically affiliated in Gambella Regional State emerged. For example, the Gambella People's Liberation Front (GPLF), Gambella People's Democratic Party, Congress, Anywaa people's Democratic Party,

Nuer People's Democratic Party, and Majang people's Democratic Party, all these parties were formed during the EPRDF-led government that was dominated by one ethnic group. This has a negative connotation for the Gambella political system that is still underway now. Even though Dr. Abiy Ahmed's reform in Ethiopia, with the principle of incorporating all political parties using "Medemer," is in place as a means to shape the previous parasitism of the Ethiopian political system that failed to respond to the demand of the emerging region, the new reform has yet to address the political structure in Gambella regional state, as EPRDF trends and practices are still in place in the Gambella political system. This is best illustrated by the Ethiopian federal and regional elections that allowed five political parties to compete in the region. But three out of five parties were ethnically affiliated parties. The observation (2021), in figure 5 below, showed the candidates that competed during six Ethiopian national elections. Only the ruling party (Prosperity Party), with slight differences, and EZEMA, tended to be a little more mixed in candidates. However, still, the two-party internal compositions have indirect domination of a few ethnicities (Nuer and Anywaa) that hinder the minority and highlander ethnic groups. Instead of the party merit and loyalty of each resident and member, ethnic affiliation selection is still observed in practice. Therefore, the political system influenced by ethnic affiliation seems dominant and has contributed to the disparities within Gambella City's political system that lead to weak social ties and a weak party system. As long as segregation exists, particularly among highlanders who control the region's economic sector, segregation is present.

**Figure 5 Political parties with one ethnic concentration during 6 Ethiopian National elections in Gambella City elections in Gambella City**



Source: Own observation (2021)

**Table 5: Extent of Ethnic Segregation in Gambella City**

Residuals:

Min 1Q Median 3Q Max

-28.8148 -2.4805 0.8183 3.2414 26.9640

Dependent Variable: Degree of Ethnic Segregation				
Coefficients:		Std. Error	t value	Pr(> t )
Variables	Estimate			
(Intercept)	85.352480	0.258288	330.454	< 2e-16 ***
Socially	0.089073	0.004314	20.648	< 2e-16 ***
Spatially	0.219736	0.004597	47.802	< 2e-16 ***
Economically	0.252523	0.006177	40.879	< 2e-16 ***



Politically	0.145671	0.005013	29.060	< 2e-16 ***
factor(Ethnic)Highlander	-0.235775	0.162262	-1.453	0.1463
factor(Ethnic)Komo	-1.199203	1.241592	-0.966	0.3341
factor(Ethnic)Majang	-3.507084	1.816349	-1.931	0.0535 .
factor(Ethnic)Nuer	-0.498601	0.274412	-1.817	0.0693 .
factor(Ethnic)Open_Space	-51.639870	0.399905	-129.130	< 2e-16 ***
factor(Ethnic)Opo	-0.067240	1.518489	-0.044	0.9647
factor(Kebele)Kb_02	-2.219136	0.295712	-7.504	6.91e-14 ***
factor(Kebele)Kb_03	-1.715661	0.247709	-6.926	4.70e-12 ***
factor(Kebele)Kb_04	-1.650934	0.255243	-6.468	1.06e-10 ***
factor(Kebele)Kb_05	-3.560517	0.245366	-14.511	< 2e-16 ***

Signif. codes: 0 '\*\*\*' 0.001 '\*\*' 0.01 '\*' 0.05 '.' 0.1 ' ' 1

Residual standard error: 4.768 on 7254 degrees of freedom

Multiple R-squared: 0.97, Adjusted R-squared: 0.9699

F-statistic: 1.675e+04 on 14 and 7254 DF, p-value: < 2.2e-16

Source: RStudio 4.1.1 Analysis from 2020 G/Town's Geo-Survey Data

## Discussions

The paper covered ethnic segregation that is influenced by location preference according to changes in sociospatial, economic, and political systems in Gambella City. The effect of socio-spatial, economic, and political factors revealed above demonstrated the level of ethnic segregation in Gambella city. The discussions on segregation they based on the findings in each category and the intensity of each factor.

The residential segregation observed in Gambella City is heavily influenced by economic function segregation caused by the city's economic activities. Pieces of evidence from observations show that the change in economic activities increased the degree of segregation because access to a market outlet and employment were mostly concentrated in one ethnic enclave settlement area in Gambella city. If employment in the business sector and markets were distributed equally in all enclaves, it could lower the revealed disparity observed in the economic sector in Gambella city. However, the concentration of business sectors in the hands of a few individuals, resulting in a magnified market monopoly, resulted in many consequences. The agglomeration effect on the economy pushed for the separation of residents in every enclave settlement space. This unbalanced economic growth between the highlanders and local indigenous traders disfigured the Gambella market system, as the market monopoly outweighed. In Gambella, the economic functions seem abnormal and the marketing system is paralyzed as it benefits only a few individuals. Malpractices, corruption, and acts of business owners above the rule of law that defined market prices, all these result in mistrust that increases disparity among residents.

The second most importance findings were a spatial distinction that has a significant cause for worry in relation to the degree of racial segregation. The inequality among residents rose as a result of the ethnically-based spatial settlement. Ethnicity serves as a marker for the evolution of settlement in Gambella City. Due to the ethnic nature of the settlement, the spatial issues caused by the shift in the way space functions have led to confrontations amongst inhabitants over flash floods conflict, land ownership issues, and an increase in disparity among residents, all have much influence in the form of spatial segregation among ethnic groups. Because every enclave has something to play on it spatial space; disparity in space has much resulted in relocation and succession among people. Resident in ethnic enclave regarded enclave as their safe heaven. Due to a strong preference for quiet settings, the majority of city residents and business districts are looking for new locations. Figure 3 below depicts the actual practice of eviction in Kebele 01 and Kebele 04, showing residents who have lofted out their residents of fear for their safety. Not only the above mentioned, ethnic groupings are confined in places with homogeneous populations and unique cultural traditions, spatial isolation also has a substantial impact on ethnic separation. Since the geographical separation in Gambella city has a different effect on the urban environment, it needs to be addressed. As a city grows, the concerns related to spatial issues become more serious. If Gambella is to be a livable city for its residents, it is crucial to take into account the actual environment seen during this study as a geographical element has significantly influenced the economic segregation of residents.

Political-related functions in many developed or developing countries include Ethiopia as a country in sub-Saharan African countries, still facing the same trends of political disparity as others. This can be in policies, laws, and directives that are designed to hinder some groups within the city or the country. According to the finding under the consideration of politics, that increased the degree of segregation across settlement areas in Gambella City. Citizens' concern for Gambella residents has significantly contributed to the



city's ethnic segregation. In particular, the Indigenous pronounced highlanders as migrants to Gambella while they are Ethiopian. In the same manner, Anywaa called Nuer as South Sudanese citizens, and they called themselves the real Ethiopian citizens compared to other ethnicities in Gambella city. Such attitudes and thinking lead to competition amongst ethnic groups residing in Gambella city.

The Anywaa claims the originality and ownership of Gambella as the right citizen. Even though the problem should be about who comes first and the followers that may be the matter in the context of citizenship. Because all indigenous peoples have close ties to those in South Sudan, annexation during the colonial period without regard for Gambellian, which divided the major ethnic groups, can be a problem. The issue of citizenship in the Gambella region in general, particularly for elites residing in Gambella, is a burning issue, as the majority failed to recognize the Ethiopian constitution statement on citizenship. The best backup is from Hagos and Winczorek's (2018), that stated the Anywaa, who came first within the region, did not accept the Nuer citizenship as Ethiopian, they considered them as others. Anywaa utilized being first served in Ethiopian territory as a drum, threatening, and sound to keep Nuer away from Ethiopian citizens, calling them foreigners. This seems to be true and accepted by Nuer because amongst Nuer, some defined themselves as Ethiopian Nuer, which segregated other Nuer with weak claims to territorialism and prevented them from benefiting (Lie & Borchgrevink, 2012). Concurrently, Dereje & Hoehne (2008), the Nuer sub-clan, the major ethnicity in South Sudan, are in some instances denied access to services. The denial of citizenship is one amongst those contributing to segregating residents, resulting in violent conflict among ethnic groups in Gambella city.

The last finding represents social segregation that is considered poor access to schools and the concentration of one ethnicity in schools that is deemed the interest of other ethnicities. The resource distribution is not equal and the same in all enclaves. Weak inter-ethnic group marriages are very significant in Gambella city. What is commonly observed is intra-ethnic marriage. In this context, we can conclude that there is significant social disparity, as all of these are absent among Gambella residents.

Therefore, the investigation utilizes the multilinear regression model, from a broad perspective, that shows the shift in economic activity has a significant influence on the divergence observed amongst ethnic groups. The destruction of the situation and way of life in any city was caused by the spatial-related functions, which also aided in dividing the various ethnic groups. Political and social issues assumed the smallest form because everyone in Gambella City seemed to be affected by them. As a result, the social texture observed in Gambella City is greatly influenced by the effects of the geographical, economic, and sociopolitical spheres, with the economic and spatial functions playing a prominent part in the unresolved issues that need to be addressed by concerned policymakers.

## **Conclusion**

In Gambella city both the positive and negative effects of segregation are seen in the spatial, socioeconomic, and political aspects of metropolitan areas around the world. In this sense, the effects of the segregation that existed in Gambella City, Ethiopia, took the form of linked economic, spatial, political, and social effects. The discrepancy is seen and the type of discrimination present, as determined by the findings, appears to have a divergent impact that requires planning intervention because, if done properly, planning can play a crucial role.

Therefore, the limited access to the market center and the low employment capacity of households form the segregation practiced in Gambella City. This significantly influenced the economic situation in the city as major economic activities were concentrated in the hands of a few people. The ethnic segregation affected the well-being of inhabitants in each enclave, governed by spatial inequality in the form of resident mistrust and the controversy of land ownership, as well as an increase in gang activity, murders, and flash conflicts between ethnic groups. Moreover, there is minimal disparity in political and social related factors, but a significant gap in the education sector between residents and Kebeles was observed. One major concern that highlights a gap in socially relevant characteristics is the dearth of interethnic marriages among ethnicities. The political barrier between residents and the larger political system, which is driven by the citizenship issue among residents, is the most urgent concern for segregation in the political system in Gambella City.

In general, the findings of the four factors associated with the revealed level of ethnic segregation in Gambella City cover the following topics: The economic status of individual residents and activities typically has a significant impact on the level of ethnic segregation in Gambella City, followed by spatial segregation, given the dramatic variations between individuals, kebeles, and ethnic groupings. The current economic structure and established company practices need to be updated using human-centered planning in order to handle the problem. By implementing a policy that makes use of the existing land area, Kevin Lynch's five city performance dimensions, changing the traditional land use planning system can lower the amount of segregation. Approaches based on a design that pays particular attention to people's attitudes and settlements with a developing feeling of luxury from policy that encourages tourism for the development of the Baro River, which might bring in a huge amount of money by acting as a tourist attraction when using the Baro as a recreation hub for locals that experience a variety of social interactions. At the same time, utilizing it as an agricultural production center for consumable goods.

Gambella City requires the establishment of public institutions that draw and unite a large number of citizens, a spatial setting designed that may provide an integrated form of settlement, and a mix of residents in a diversified form. The political system that has the feeling of commonness to all residents in Gambella City instead focuses on indigenous since the city's ownership is defined by the residents residing in it and not nations and nationalities in the general scope of the region. In a similar vein, an atmosphere that encourages ignorance, neglect, and poor working conditions, particularly in the business sector among indigenous residents, needs to be transformed by creating a new way to adapt to the work culture seen among highlanders. This will encourage indigenous people to participate in business, allowing them to develop the city and pay taxes in a proper manner. Therefore, a sense of ownership, accessibility, and control over resources should be implemented in order to reduce the disclosed type of ethnic segregation in Gambella city. When a resident-centered design policy with a special focus on common housing, public institutions like sports and culture centers, squares, parks, and luxuries areas, Baro rivers as a trout destination that generates income for youths, All of these in place can be transformed and can create a new spirit amongst residents, socially, economically, and politically segregated residents, for the emerging city capital to develop and its livability.

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