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The Relationship between Ethnic Enclave Settlements with Development Spectrum in Gambella City Ethiopia

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ABSTRACT

The Gambella enclave serves as a crossroads for trade between Ethiopia and Sudan. Since then, weak development in relation to its enclave settlement has been observed. Keeping these gaps in mind, the paper is motivated by a study of the relationships between ethnic enclave settlement and weak development in city. A hybrid methodology was used in the study, and a sample size of 500 households from the five Kebeles that spatially structured Gambella city was used. Moreover, officials from the city administration, Gambella municipality, and Gambella urban development bureau were among the targets for interview. Data was gathered using a variety of instruments, including surveys, interviews, focus groups, and visual observations. Data from the survey was analyzed using RStudio. In this manner, an ethnic enclave settlement in Gambella city resulted in a significant level of 1 percent connection with four development spectrums, according to structural equation modeling (SEM) outputs that are either positive or negative, where a 72 percent mismatch in development sector because of the ethnic enclave settlement is observed. In order to properly utilize ethnic enclaves as resources for development and prosperity in Gambella, policymakers need comprehensive multicultural city planning that invests in residents' attitudes and thinking. This planning has the potential to curb the observed challenges that hinder development in Gambella City through creating a favorable environment for local and indigenous knowledge, investing in huge public goods, and adopting new trends of entrepreneurship that can be admired by many who want to own the city.

INTRODUCTION

Ethnic enclaves are not new in the context of Africa since the establishment of many cities has a close relationship with colonial rules. However, Ethiopia wasn't one of those colonial governments, but some of its districts, including Eritrea before its referendum and the Gambella enclave, were under the colony for years. Gambella City is the capital of Gambella Regional State and is located at the confluence of the Baro and JabJabe rivers. The location was chosen for its compatibility and for its status as the center of commercial activity between Ethiopia and Sudan (Bell, 1988). Importantly, recognizing the

spatial heterogeneity in Gambella city with homogeneity in each enclave aids in understanding the diversity we have in Gambella. If enclaves are properly utilized, the development of the city can be visualized nationwide. Gambella is a city with indigenous (Nuer Anywaa, Komo, Majang, and Opo) and non-indigenous (Oromo, Tigrian, Amhara, and Keffa) populations, according to the CSA's 2021 projection. The city has a population of 144,648; males consist of 74,660 and females consist of 69,988 (CSA, 2021 projection). These populations are stratified based on level of concentration, as visualized in figure 1 below.

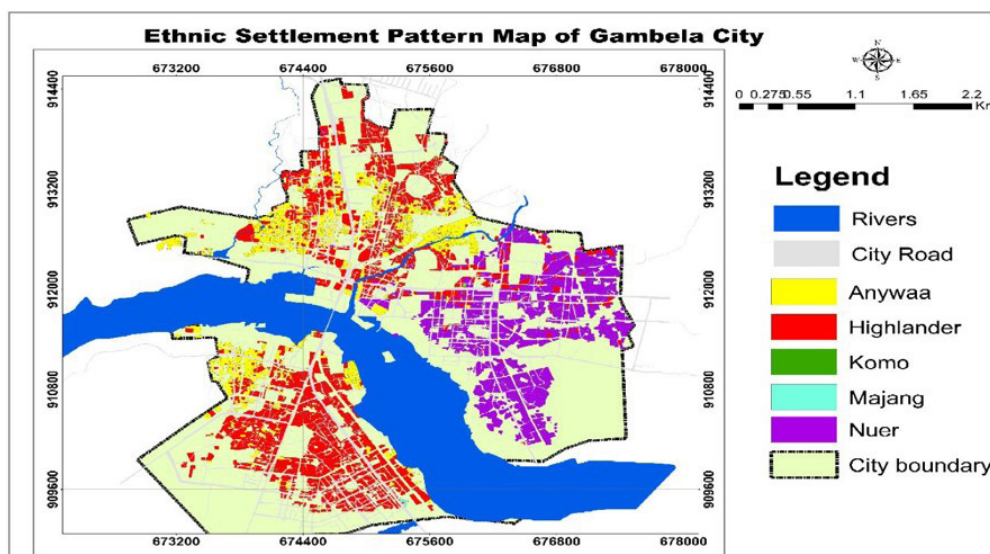


Figure1: Settlement Pattern of Gambella City (2021 own survey)

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Since Ethiopia's establishment, the modern Gambella regional state has been partially integrated into Ethiopia by two subsequent dynasties (Menelik II and Emperor Haile). However, after the imperial authorities were deposed, there was some interest in Gambella. The Dergi era made an effort to provide social infrastructure (education and health care) to the Gambellian people and recognized their settlement being administered by their own natives (Anywaa and Nuer). The Ethiopian People's Revolutionary Democratic Fronts (EPRDF), led by the Tigray Peoples Liberation Fronts (TPLF), successfully overthrew the Dergi regime, resulting in the establishment of the Gambella regional state. The country was divided into nine regional states and two charter cities under the 1995 Constitution, which placed a special emphasis on the geographic environment and racial diversity. The constitution introduced ethnic federalism as the only strategy that would take into account the unique interests and sentiments of all Ethiopians with various dialects, cultures, and ethnicities. The Ethiopian People's Revolutionary Democratic Fronts (EPRDF) strategy seems to be applicable to the Gambella region when compared to earlier Ethiopian administrations' eras. It brought Gambellian out of their hinds to a point where they can see the light of development, which comes with many challenges. For example: the loss of unity in diversity, as well as an increase in ethnic and religious extremism. These are cited, and many Ethiopians regard ethnic federalism as a negative aspect of the current government system. Since then, ethnic federalism has failed to foster peaceful cohabitation in many Ethiopian cities and regional states (Gotamo, 2019). Even though federalism appears to benefit Ethiopia's marginalized citizens, this opportunity and fantastic opportunity did not materialize for Gambellian as conflicts, hatred, mistrust, and the search for superiority over others define Ethiopia's emerging state. Not only this, the city failed to sustain its previous steps as a trade enclave. This raises the question of when and how this trading enclave became an ethnic enclave. Some advantages and disadvantages of ethnic enclaves, which might convert Gambella City from a trading to an ethnic enclave, were not yet clear to many scholars. There is no policy that defines urban settlement in Ethiopia as an "enclave settlement area." The Gambella municipal authorities did not intend for the residents to reside on an ethnic basis, which has produced a lot of development challenges today. In this context, the study is motivated by enriching enclave settlement theory through examining connections between the ethnic enclave populations and the development spectrum underway in this study. It is uncertain why the same ethnic groups settle in the same place in such a concentrated manner. Yet still, it is not clear how ethnic enclaves have affected Gambella's development. Despite the fact that there is literature on the formation of ethnic enclave settlements (Carr, 2003; Marcus, 2005; and Perkins, 2010), its contribution to social, economic, political, and environmental development in many

countries is ongoing. However, some limitations in the context of Ethiopia were observed. Particularly in the Gambella regional state capital, the connection between ethnic enclaves and development spectrums has never been studied. Therefore, to have additional empirical evidence that enriches theories of ethnic enclaves like contact theory in relation to development, we explore the phenomenon in Gambella city. The study attempts to provide a response to the following questions: What links are there between the sociospatial, economic, environmental, and infrastructure development in Gambella City and the ethnic enclave's settlement? What ties do these things have to the growth of the city as a whole and to one another? Does ethnic enclave settlement have a strong or weak effect on socio-spatial, economic, environmental, and infrastructural development? The study describes and categorizes the complex interaction between a number of essential components that propel the expansion of Gambella City and the significance of settlement patterns that set apart diverse development results. We assess the factors that led to the increase of development activities and the incentive impact of ethnic enclave settlement in Gambella City using a reverse form of confirmatory factor analysis under a structural equation model (CFA-SEM). As a result, the emergence of ethnic pockets in Gambella has impacted the growth of the city in both positive and negative ways. The paper is organized as follows: a broad overview of ethnic enclaves; a systematic review of significant literature; the material and methods; results and interpretation; and discussion; the final section consisted of a conclusion with some policy recommendations.

LITERATURE REVIEW

Human capital settlements make a significant contribution to the people's experience in shaping the development of any country around the world. This is magnified by interpersonal contacts that are taking place in that particular spatial space (Diez Roux and Mair, 2010). Concentrations of people of one ethnic background have the potential to influence social interaction in this regard. According to Wagner and Christ (2011), a close relationship with residents of the same social and cultural background has the potential to lessen inter-ethnic group conflicts within the city. In the same vein, the capital goods in the community of those ethnic groups that reside in enclave settlement areas have enough potential to play a role in the development of social interaction among city neighborhoods (Carr, 2003). This implied that an ethnic enclave has the potential to enrich the weakest part of society that lives in a separate environment in a concentrated way. That means enclave has a positive relationship with development in terms of locating the best practices within the community that are concentrated in a way that makes them resourceful to city development at large. Furthermore, living geographically and socially in ethnic enclaves benefited the state's political system. According to Shizha E. *et al.* (2018), ethnic enclaves have

an advantage when it comes to civic participation as it promotes group cohesion and democratic action in the modern day. Ethnic enclaves may be rich in social capital, mutual support networks, and community organizations. Walton (2012) provided the best practice, stating that Asian Americans living in ethnic enclave settlements benefit from capital exchanges on both the social and economic fronts when they live in a concentration. Living in an ethnic enclave had more advantages than drawbacks. On the other hand, Bloemraad (2012) looked at ethnic enclaves as a focal point that either facilitated or fragmented socioeconomic and cultural integration. An ethnic enclave settlement, it erects a financial barrier that ethnic businesses find difficult to overcome and are unable to participate in the city's market system. This is due to the fact that their products, services, lack of promotion, business strategy, and management abilities and experience are inadequate. Ethnic concentration in enclaves prevents small enterprises from being competitive in the city's primary market sector (Wang, 2013). Agrawal (2010) also argues that enclaves can also be impediments to networking and engagement in more mainstream contexts, like business. In this respect, the isolation that comes with living in small communities may prevent people in enclaves from interacting socially with the rest of society. Lack of social connection also has an impact on one's ability to speak another language, as well as their ability to interact with locals and learn their languages (Chiswick and Miller, 2005). Invasion and succession spatially present themselves in social control when social difference is urbanized (Cirolia, 2014). Land speculation, exclusion, and relocation seem to be important obstacles in cities when residents come from different socioeconomic backgrounds (Cirolia, 2014). These imply that living in a concentrated, ethnically diverse location has a negative impact on the sociospatial infrastructure of the city. This indicated that if ethnic enclave settlement grew, there would be both positive and negative effects on the city's economy.

Environmentally, an enclave serves as a stepping stone to other environments rather than a barrier to integration (Qadeer & Kumar, 2006). Living in ethnic enclaves still has a detrimental influence on a large number of people in cities. The development of residential enclaves is closely related to that of cities around the world, especially in informal settlement regions where the majority of the urban poor are concentrated on the outskirts of towns (Cutini, Di Pinto, Rinaldi, and Rossini, 2020). That means we observed a poor relationship between the contributions of ethnic enclaves and the activities created in cities. Settlement areas with high population concentrations that are divided based on ethnicity have the potential to harm the ecosystem. High concentrations lead to an increase in health risks, unhygienic activities, and a lack of space and resources to create bathrooms for every inhabitant (Penrose, De Castro, Werema, & Ryan, 2010). As indicated, environmental contamination is pervasive in Sub-Saharan African communities, where

many people reside in enclaves and others in unplanned settlement zones (Dos Santos *et al.*, 2017). Access to services like sanitary facilities, landfills, and clean water is a problem in many enclave communities, which has led to an increase in environmental degradation (Barrington *et al.*, 2016). Additionally, basic utilities like adequate water, better waste disposal, access to power, public transportation, and open space were infrequently offered in populated regions with hazy land titles (Barrington *et al.*, 2016). In this manner, we have a direct correlation between ethnic enclave settlement and environmental pollution because enclaves are so prevalent in unplanned settlement cities in developing nations. Contrary to the above arguments, an ethnic enclave is considered because it has the potential to be advantageous to Asian Americans. According to Mossakowski and Zhang (2014), the relocation of new immigrants to their own enclave may facilitate easy access to services and contact with other members of the same ethnic groups without having regular contact that would segregate them. This is seen as being one of the greatest advantages of living in an ethnic enclave where the practices differ from those in Gambella City. Neighborhood enclaves may provide sociocultural elements that encourage beneficial intergroup interaction (Wang, 2013). Institutions and businesses in ethnic enclaves may offer chances for nearby residents to positively engage with one another (Carpiano, 2006; Zhou, 2005). This enables individuals to gather together to pursue shared interests or aims (Collins, Neal, & Neal, 2014).

According to the discussion above, scholar languages differ in their agreement on the positive impact of ethnic enclave settlement on city development. Some people considered ethnic enclaves to be cursed settlement areas on the city's development. This shows from the research that theories and opinions are unable to reach agreement on the potential and drawbacks that ethnic enclaves display. As a result, we attempt to fill these gaps by investigating the precise relationship between the enclave settlement and the development spectrum in Gambella city. This focus will enrich the observed gaps in the literature, as social inter- and intra-group interaction in a concentrated form has the potential to contribute to any city's development if properly managed. This paper employs intergroup and intragroup contact theory as a framework for understanding the relationship between ethnic enclaves and developmental spectrums. Since this theory was first developed by Allport (1954) as the means to blend the social relationships among ethnic groups in the city, According to him, equitable resident status, shared goals, cooperation between ethnic groups, and official assistance may all contribute to positive resident attraction that can further development in any city (Pettigrew *et al.*, 2011). In this regard, if the above Allport ingredient fails to be met by any settlement area, the contact theory results in group conflict within urban spatial space. This practice also informs the research with an important multiculturalism theory that considers all aspects of

human beings in a city. For Gambella city, an ethnic enclave settlement manifestation is a more unhealthful form of settlement. When a city has a high concentration of the same ethnic group, ethnic enclave settlement becomes a curse. Based on contact theory language, we expect that the benefits we receive from residing in an ethnic enclave settlement area may differ according to estimates of the outcomes of the development we observed in economic, sociospatial, environmental, and infrastructure activities in Gambella city.

The connection between the ethnic enclave and the level of development in Ethiopia's cities

This study examines how intergroup and intragroup contact in an ethnic enclave influences the economic, social, spatial, environmental, and infrastructure development in Gambella. In this regard, we focus on the relationship that exists between ethnic enclave settlement and the four development spectrums (economic, sociospatial, environmental, and infrastructure). We observe whether the relationship between ethnic enclaves and development spectrums has both positive and negative consequences. In this manner, the Ethiopian People's Revolutionary Democratic Front (EPRDF) adopted the concept of a developmental state as a policy to direct the growth of the state. However, Ethiopia's diverse ethnic population and urban polarization have prevented city growth from proceeding as planned.

The characteristics of Ethiopia's developmental stage appear to be outweighed by ethnicity. In this regard, enclave settlement is now increasingly a common practice in Ethiopian cities, especially in cities receiving migrants. For instance, in Addis Ababa, one ethnic concentration is visible in the Gulele region, 22 area, Gotera, Merkato, Teklaymanot, and Gojamberenda, and even in new condominium homes, we observe the concentration of Oromos, Tigrians, Amahrians, and Guragians in an area of condominium housing. Despite these signs and customs, the ethnic enclave has received little scholarly attention in Ethiopia. Empirical insights on how ethnic enclave settlement affects development possibilities are overlooked by city horizontal expansion, urban sprawl, and squatter settlement studies. All these were observed in Addis Abeba, Debre-Berhan, and other regions of Ethiopia, as provided by scholars like Gebeye, A. (2016), Melese, M. (2004), Megento, T. (2013), and Asefa, B. (2020). In addition to these, ethnic enclave communities were also visible in Dire Dawa (Oromo, Somali, and Amhara), Gonder, particularly among the Gonderian and Kimates, and Hawassa between Sidama and Walayta. The Anywa, Nuer, and Highlander enclaves were made known to Gambella. Conflicts between groups magnify as the best evidence of practices in Ethiopia's secondary and tertiary cities. As stated by Gotamo (2019), in Ethiopia's main cities, minorities are impeded and increasingly persecuted. Ethnic radicals instilled fear and pessimism in a few residential districts of various Ethiopian cities, most notably Gambella City, and a new movement has emerged

that advocates for unstable city expansion through ethnic federalism. As a result, ethnic enclave conflicts became more prevalent and hindered the economic, tourism, and other related services that had been crucial to the development of cities as they began to decline. Extreme poverty, a lack of socioeconomic possibilities, and an increase in violence can all be found in crowded cities (Van den Berg & Danilenko, 2010), as they concern the practice in Ethiopia. All these magnified ethnic enclave settlement systems were in place, but few were aware of their existence. In addition to these, the housing effect, the informal settlement enclave, and the environmental sustainability of development were among experts' top concerns. All these indications suggest that the empirical analysis this study aims to conduct cannot be compared to empirical studies conducted in other nations. It is critical to acknowledge the connection between ethnic enclave settlement and the development of Gambella city, which is the focus of this research. In order to highlight the role of ethnic enclaves in the development of Gambella city and their relationship to socio-spatial, economic, environmental, and infrastructure development, more illustrations are underway in the next section as we complete the methodological section in this paper.

MATERIAL AND METHOD

The sample size for this study consisted of 500 households from all five kebeles in Gambella city, as determined by Kothari (2004). A study used both probability and non-probability sampling techniques for picking the number of participants in each kebele. Using purposive sampling, we interviewed and conducted focus group discussions with the Gambella city deputy mayor, municipality manager, Gambella urban development and construction bureau deputy, and city speakers. Elderly people, Gambella city, and Gambella regional police were all purposefully selected for them to explain the practical challenges facing their day-to-day activities because ethnic enclave settlement is the only form of settlement in Gambella city. Information from households was collected from every resident in Gambella using simple random sampling, where every resident in the selected kebeles had a chance to participate.

The interview, focus group discussion, and survey were all conducted using both English and Amharic, as the researcher had potential in both languages and translated the Amharic feedback into English for proper interpretation in the context. Only four people out of 500 failed to respond as intended by the survey because they did not complete the survey documents on time. 496 participants completed the survey and were eligible for analysis. Furthermore, both the qualitative and quantitative findings were qualified through observations using structured and non-structured forms of data gathering in all five kebeles in Gambella city. The study was authorized by the Ethiopian Institute of Architecture, Building, and City Development (EIABC) of Addis Ababa University graduates' school for it to take place in Gambella city,

Ethiopia. The measurements tools and techniques used in this study were used to establish a clear relationship between the ethnic enclaves and the development spectrums in Gambella City. Multi-regression analysis was used to meet the parametric assumptions to investigate the relationship between ethnic enclave settlement and development spectrums. Statistical analysis in RStudio was used as a tool to examine the impact of ethnic enclaves on the development of Gambella City (Rstudio team, 2020). Here is the model's description and how it fits.

Fit Measures/Model Fit Statistics

The Comparative Fit Index (CFI), which is a scale that spans from 0 to 1, tends to have values greater than 0.90, but conservatively 0.95 indicates a good fit, according to the summary of standard measurement. The well-fit values that represent the good match should be better than 0.90 in the case of the Tucker Lewis Index (TLI), which runs from 0 to 1. The CFI always prevails when both the CFI and the TLI are less than one. The p-value in the RMSEA (root mean square error of approximation) model fit estimation should be tight, meaning the RMSEA should be less than 0.05. If you reject a model, it shows that it isn't a good fit.

Model Test User Model:

Test statistic	2680.927
Degrees of freedom	355
P-value (Chi-square)	0.000

For the degree of freedom that is 355, we are observing that the P-value (Chi-square) test for the model user is significant at a 1 percent level, which is a good indication of the fitness of the model utilized in this context.

Model Test Baseline Model:

Test statistic	7643.872
Degrees of freedom	406
P-value	0.000

In testing for the model baseline model, the P-value of SEM estimation output scored a significant level, which is less than 1 percent. This is an indication of the best baseline estimation employed in this analysis.

User Model versus Baseline Model:

Comparative Fit Index (CFI)	0.679
Tucker-Lewis Index (TLI)	0.632

When comparing the user model with the baseline model, the CFI and TLI model test outcome scored below 0.9, which expresses the existence of the well fit values of a good match.

Root Mean Square Error of Approximation:

RMSEA	0.115
90 Percent confidence interval - lower	0.111
90 Percent confidence interval - upper	0.119
P-value RMSEA <= 0.05	0.000

In the case of RSMSEA, all values are greater than 0.09, but the model's good fit is demonstrated by the RMSEA p-value of 0.000 or less than 0.05. This revealed that all of the latent variables used to assess the effect are very similar. For qualitative analysis, a thematic form of analysis was utilized based on the contents of this research, they are also matched along with results from quantitative results concurrently. The data presentation was conducted underway using tables, percentage, figures and photos. All these were interpreted and fit for discussion.

FINDINGS AND DISCUSSION

Accordingly, the findings in this study indicated that the quantile description consisted of the lowest, maximum, median, first quartile, and third quartile of the variables under consideration. The results are shown in a box plot and jitter plot, which show how well the data is distributed. To do so, we use measurement tools to determine the linkages and distribution of developmental activities in Gambella city's ethnic enclave settlements. The x-lines in Figures 2 and 3 depict the scales of development as assessed by economic, socio-spatial, environmental, and infrastructure activities. The distribution of settlements by ethnicity, such as Opo, Komo, Nuer, Highlanders, and Anywaa ethnic groups, is depicted by Y-lines. Keeping all of this in mind, the qualitative relationship that exists between the development spectrum and ethnic enclave settlement in this study is depicted in a format that fits in the figure based on the thematic and heading under each section.

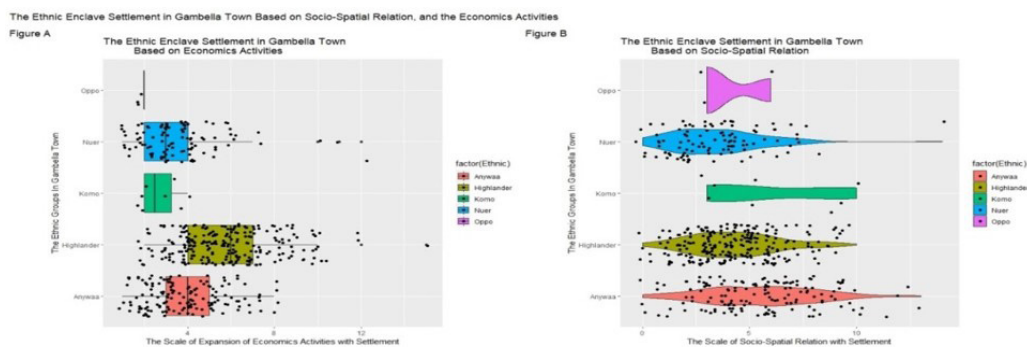


Figure 2: The Relationships between Ethnic Enclave Settlement with the Economic, and Socio-Spatial Development (Source: RStudio's Analysis from the 2021 Survey Data)

The Description on Relationships between Ethnic Enclave Settlement with the Economic, Socio-Spatial, Environment and Infrastructure Development

Figures 2 (A and B) show how economic and socio-spatial activities are spread following ethnic enclave settlement, with distribution patterns that change with the size of growth or are influenced by ethnic settlement density. This can be associated with either advances or deteriorations in development initiatives, as well as an increase in ethnic-based settlement.

Figures 2 (A and B) show how economic and socio-spatial activities are spread following ethnic enclave settlement, with distribution patterns that change with the size of growth or are influenced by ethnic settlement density. This can be associated with either advances or deteriorations in development initiatives. In Figure 2 (A), an ethnic settlement that influences the expansion of economic activity is seen in the highlanders' settlement, followed by Anywaa and Nuer, with the Komo and Opo settlements having the least influence. The reasons behind the last two ethnic groups (the Opo and Komo) may be attributed to their small population in the town. According to the same figure, economic activity in highlander settlement areas is increasing, medium in Anywaa settlement areas, and low in Nuer, Komo, and Opo settlement areas.

In the case of Figure 2 (B), an ethnic settlement that influences socio-spatial activities was seen in the Anywaa ethnic group's settlement, followed by Highlanders and Nuer, whereas the lowest influence was observed from

the Komo and Opo. It is still the same reason that the economic activities took hold and are still taking hold here, as the settlement of the latest two ethnic groups (i.e., Opo and Komo) could be due to their insignificant population in the town. As a result of the findings, there is an increasing expansion of socio-spatial development activities in the areas where the Anywaa and Highlanders settled, a medium where the Nuer settled, and a low where the Komo and Opo settled. The two ethnic groups appear to have close relations for the reasons behind the increase in sociospatial and economic activities because they live adjacent to each other's. The two ethnic groups appear spatially linked by functions in the land since the establishment of Gambella city as Anywaa residents considered Gambella city their ancestral area and highlanders from highland Ethiopia are in the city for business purposes. On top of these, the implication of ethnic enclave settlement on development was also identified by considering the relationship that exists between ethnic enclave settlement and environmental functions and infrastructure development within Gambella City.

In Figures 3 (A and B), environmental and infrastructure functions are extended following ethnic enclave settlement, with distribution patterns that change with the size of growth or are influenced by ethnic settlement density. This can be associated with either improvements or declines in development initiatives, as well as an increase in ethnic-based settlement. In Figure 3 (A),

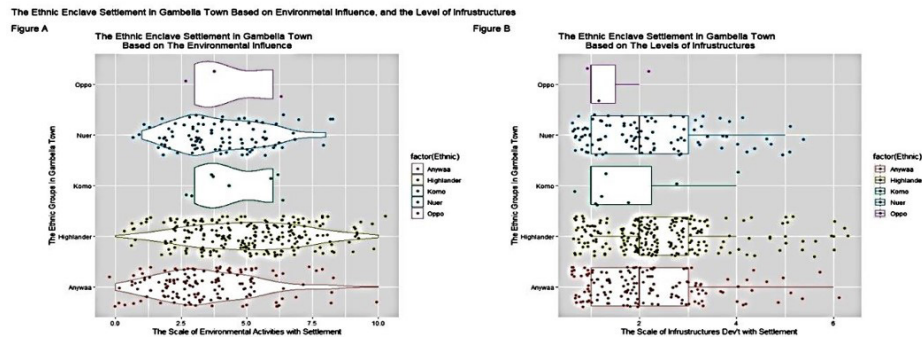


Figure 3: The Relationships between Ethnic Enclave Settlement with the Environmental and Infrastructure Development (Source: RStudio's Analysis from the 2021 Survey Data)

an ethnic settlement that influences the environmental activity is seen from the highlanders' settlement perspective, followed by Anywaa and Nuer, with the Komo and Opo settlements having the least influence. The presence of the last two ethnic groups (the Opo and Komo) may be attributed to their small population in the town. In addition to this, the above figure showed that environmental activity is increasing in highlander settlement areas, medium in Anywaa settlement locations, and low in Nuer, Komo, and Opo settlement areas. This is because high concentrations of business functions that attract many residents from highland Ethiopia are underway. In the case of Figure 3 (B), an ethnic settlement that influences infrastructure development activities was seen in the Highlanders' settlement, followed by Anywaa

and Nuer, whereas the lowest influence was observed from the Komo and Opo. It is still the same reason that the environmental activities took hold here as the settlement of the latest two ethnic groups (i.e., Opo and Komo) or because of their insignificant population in the town. The development and lowering of infrastructure is most noticeable in larger ethnic enclaves, as the majority of infrastructure developed many years ago concentrated in the city core, benefiting those in the city center, but enclaves in the suburbs face severe shortages. As a result of the findings, there is an increasing expansion of environmental deterioration in the areas where the Highlanders and Anywaa settled, either because the majority of residents concentrated in these areas or because the majority of residents concentrated in these

areas. This implied that their concentration hindered the environmental safety of Anywaa and the Highlanders' enclave, which hindered the safety residents should have in the city environment. The situation has taken a medium perspective on city development in areas where the Nuer ethnic group is highly concentrated, and a low perspective in areas where Komo and Opo have settled.

The SEM Estimates of the Relationships between Ethnic Enclave Settlement with the Socio-Spatial, Economic, Environmental and Infrastructure Development

The relationship of ethnic enclave settlement with respect to socio-spatial, environmental, infrastructure, and economic factors was all estimated using the SEM model. These relationships can be either positive or negative, depending on the results of the analysis, as shown in Table 1 in Annex 1. The CFA-SEM output reveals the major model fit, which may provide positive evidence for model accuracy. With 109 model parameters and 490 observations, the model produced a probability value of less than 1 percent, indicating that the factors estimated fit to explain the predicted variables, which are socio-spatial, environmental, infrastructure, and economic, as a result of the ethnic enclave settlement epidemic. Therefore, we have to conclude that the estimation outcomes from variables are appropriate to provide a better estimate, as indicated in Table 1.

The Relationships between Ethnic Enclave Settlement with the Socio-Spatial, Economic, Environmental, and Infrastructure Development in Gambella City

The development of the ethnic enclave settlement in Gambella Town allows us to considered independent covariates to confirm correlations between socio-spatial, environmental, infrastructure-related, and economic variables. The relationship between the ethnic enclave and the development spectrum is estimated using the SEM model. This yields findings for the empirical evaluation of these linkages as well as the size of these correlations. The findings show a strong positive link between the development spectrum and the expansion of ethnic enclave settlements in Gambella city, with 10.4 percent being socio-spatial and 4.7 percent being environmental. In this manner, the sociospatial-related functions and the spread of environmental disasters that polluted the city environment, which foster environmental degradation in the city, all happened because of ethnic enclave settlement.

Sociospatial and environmental functions were discovered to be positively related to ethnic enclave settlement. However, even though the results of these two components show a positive sign, their influence is still detrimental because their rise puts the social welfare of the settlers and the urban environment in jeopardy. This association implied that they had a negative impact on Gambella's development. On the other hand, the town's economy actually grew in decline (-1.2 percent) because the ethnic enclave benefited only a few enclaves, and since the largest

part of the population lives in the city, they never pledged their full effort to the city economy. However, there is a modest 2 percent correlation between infrastructure development and ethnic enclave settlement, which has led to a subpar infrastructure situation. Infrastructure development, sociospatial planning, and environment-related functions all have a positive connection to ethnic enclave settlement. However, there is a bad correlation between Gambella City's ethnic enclave settlement and economic function, as a few enclaves dominate the economic sectors that disperse others.

The Interpretation of SEM Variance Outcomes

When interpreting the SEM variance outcomes, we observed the variance-measure departures from the mean of each covariate, as the results revealed from structural equation models (SEM) outputs in table 1. We determine the existence of an association by considering the extent to which the covariates deviated from the mean. This metric took into account how far the development spectrums and ethnic enclave settlements deviated from the ideal of a perfect match. According to these findings, all of the characteristics under consideration were found to be statistically significant at the 1% level for predicting the influence of ethnic enclaves on development spectrums, as mentioned previously in the method section. This shows that the ethnic enclave settlement has a substantial impact on the current economic, sociospatial, environmental, and infrastructure activities in Gambella City, which may be for the better or worse for Gambella City's advancement.

In this manner, the economic function of Gambella City contributed to a 49 percent disparity in connection to ethnic enclave settlement. This implied that a few ethnic groups within ethnic enclaves contributed to the economic sector. In particular, indigenous people contributed less to city economies than non-indigenous people. Furthermore, SEM results reveal that there is a 96.4 percent disparity in socio-spatial trajectory. This is because the city is settled spatially by ethnic groups of the same racial status. Even though there is a positive association between socio-spatial activities in Gambella city and the present ethnic enclave settlement, it produces a negative connotation for the inhabitants' well-being. Along with the environmental and infrastructure-related functions, the results show that a 17 percent disparity that has an unpleased morphological meaning in the city was magnified. In general, the findings indicated that an ethnic enclave settlement in relation to four development spectrums produced 72 percent different outcomes that hindered all the development sectors from running smoothly as ethnic-based interests dominated everything in the city. That is, the SEM outcomes are greatly magnified on the social-ecological-economic front, followed by the economic front, with the last two environments and infrastructure taking the smallest form. These consequences of ethnic enclave settlement mentioned above concurred with Hong *et al.*'s (2014) idea

that living in an ethnic enclave has a detrimental impact on residents. That means the best part of the ethnic enclave in Gambella city is being supplanted by the unequal rewards of development; ethnically oriented settlements harm the good consequences of the town's development. The SEM findings in Gambella city concur with the studies on Asian American immigrants that claim to live in an ethnic enclave, which can benefit people living outside the enclave far more than those living inside (Osypuk, Diez Roux, Hadley, & Kandula, 2009; Walton, 2012), as the Gambella enclave has worse benefits as ethnic enclave settlement dominates the entire city morphology.

An interview and focus group with the concerned key informants, according to businessmen found in Gambella City's central market, were conducted on July 21, 2021, about how their workplace had access to development facilities. There were several comments that appeared to be complaints about their access to street lights, roads, drinkable water, and security in the commercial center. In Highlander's concentrated space, World Bank programs that finance cable stones, drainage, vegetation, and trash management to fill development gaps in Ethiopian cities were mentioned as lagging significantly. The main reasons behind all of these are negligent toward the Highlanders' enclave because most of the time the city managers, mayors, and related authorities are closely affiliated with their ethnic majority settlement area. Highlanders' enclaves are ignored compared to indigenous enclaves as competition between enclaves increases and they are mostly out of the decision-making process. Furthermore, authorities in positions of rivalry with one another (the

Nuer and the Anywaa) hinder the minorities' access to development activities in Gambella. This means that ethnic minorities are being left out of development functions because major ethnicities predominate. Thematically, more explanations are underway.

Ethnic enclave settlement in relation to socio-spatial in Gambella city

In Gambella City, ethnic enclave settlement was seen as having a strong relationship with the socio-spatial activities that are practiced. As a result of ethnic enclave settlement in Gambella, there has been an increase in illegal activities and functions on public property, such as land, and the city structure plan. Widespread land grabbing and security concerns because of land conflicts were among the most noticeable elements that had a negative impact on people's quality of life in both social and physical environments. Despite the fact that Ethiopia's constitution defines land as state property owned by the government and the public.

The practices in Gambella City failed to match this statute. Land in Gambella is treated like group property in certain spatial spaces or community land rather than government or public property (see figure 4 below). Every enclave in Gambella City has its own atmosphere and surroundings, controlled by ethnicity. According to observation, an organized group of people of the same ethnic background used the neighboring forest and the city's periphery as theirs. They control, protect, sell, and distribute accordingly. In general, the settlement of ethnic enclaves puts a lot of strain on the land in Gambella City.



Figure 4: Illegal appropriations of land in Gambella ethnic enclave (Source: Own Observation (2020/2021))

The interview with a city administration official about how they provide services to city residents and the challenges they face as ethnic enclave settlement dominates the spatial space. According to the mayor's office's (2021) perspectives, ethnically focused settlement has a negative effect on how the city uses its land. Not only this, but there is opposition when we try to open interior routes, and they won't tear down their homes when the road passes by (KII5, 2021). As a result, the bulk of the population rejected the structure plan's operation normally, unless force was used. Many aligned their interests with their main ethnic group, registering complaints against the person in charge of carrying out the plan as they were being targeted because of their

ethnicity or clannism. These groups put blacklisted citizens in charge of plan implementation. High suspicions are underway, as many in the implementation stage never trust the residents who are victims of demolition, and they translate the survey wrongly. All of this leads to complaints to higher authorities, which sometimes halts the plan's implementation. These are being done to stir up internal conflict in an effort to delay or pique the interest of higher officials to stop the implementation of the structural plan. Because the majority of residents in an ethnic enclave do not have the necessary title deeds or legal papers, Numerous occupants and newly constructed homes in many enclaves lack safe and permanent tenure, leaving them vulnerable whenever demolition occurs.

The best example is the 40-meter-wide inner road that opened in Kebele 01 (2022), where concrete-built homes were bulldozed down without compensation, which has a negative impact on the economy as well as an individual who owns property. According to these perspectives, there is an ethnic enclave settlement in Gambella city,

and its land uses appear to be contentious. Because land use functions are being mismanaged by ethnic groups' interests and their concentrations fail to match the urban land use, we observe tombs of the deceased in every resident's backyard, which has a lot of implications when inner roads in the city are opened (see figure 5).



Figure 5: Tomb in residential area (Source: Own observation -2021/2022)

An ethnic enclave in Gambella City has expressed concerns about sociospatial issues, resulting in safety and security issues. Even though living in an ethnic enclave has a favorable impact on intergroup contact based on the social and cultural interaction between ethnic groups residing in the same area, some ethnic groups perceive enclaves to be safe havens (Wang, 2013). What is observed in Gambella is different from the context of other cities. Enclaves in Gambella are the focal point for the killing and butchering of civilians by unknown assailants. The concern for residents' safety in Gambella city concurs with the idea of Mossakowski and Zhang (2014), who stated that living in an ethnic enclave assisted us in realizing subtle discrimination among residents. Because of socio-spatial imbalances, ethnic enclaves in Gambella city create safety and security concerns, where robberies, smuggling, and other dangerous crimes occur. The malpractices in the neighborhood forced residents in the minority to move away from where they felt they were minorities to other areas where their ethnic majorities prevailed. Internal migration and property sales from Highlanders in Kebele 04 to Mettu via the main road in Kebele 05, and from Anywaa in Kebele 01, 03 to so-called Agnota near Gambella Teacher and Health Science College. In Nuer Mender, Kebele 04, along the Itang special road, Nuer are looking for land. The spatial security and safety concern forced Adinet Hotel and Park Number One Hotel to quit working because of the hostile surroundings for owners and customers. We might draw the conclusion that ethnic enclave settlements in Gambella City seem to offer criminals and smugglers a commercial opportunity that shows how dangerous the city is.

The enclave hamlet is notorious for being a danger to its residents' safety in Gambella. Unnamed criminals were burned alive and killed, killing a number of vulnerable innocents (Observation, 2020–2021). The spatial isolation of the Nuer, Anywaa, and Highlanders enclaves, who are the largest ethnic groups, exaggerated the misbehavior of youths in the city. The physical separation created by enclave settlement keeps murderers in enclaves from being easily identified as they are confined within the

enclave. Transporting dead bodies murdered somewhere to a location perceived and suspected to be concentrated by their counterpart who can be perceived to murder the victim is one of the new practices being implemented. Because ethnic group conflict and vengeance killing are prevalent in the Gambella region, the relationship between ethnic enclaves and criminal acts in spatial space was also supported by FGD (2021), conducted with city and regional police personnel. They considered the ethnic enclave's settlement seriously endangering the city's security system because of illegal practices like smuggling, robbery, theft, and the sale of military amenities as they function in the city because of ethnic concentrations in separate spaces. These practices are common in Anywaa, Nuer, and Highlander enclaves. Crime rates in a city are typically higher because ethnic residents are less likely to disclose them. They use the enclave as their safest location, renting homes with the cash they rob from other people. The police imprison criminals such as murderers, thieves, or Ganges, but judges and officers with ethnic affiliations release the prisoner before the investigation process is completed. This makes the police system subject to questioning and mistrust. The best example is the 2016 killings between Nuer and Anywaa Special Force troops in the Jor, Makuay, and Gog waredas. In this sense, we refer to the Gambella city police as "tribal police," as the system's practices have been revealed. Enclave settlement should be linked to the 2003 Anywaa massacre in Gambella City, where uprisings were exaggerated by unknown groups that victimized those settlers found in the minority in the city. As a result, the ethnic enclave in Gambella fostered murders, robberies, smugglers, and spatial conflicts, as shown in Figure 6.

Ethnic enclave settlement and economic activities in Gambella city

As an enclave-dominated area, the market system in Gambella City encourages monopolies and criminal activities. Even though Roy J. (2013) claimed that communities that are constantly based on ethnicity have a chance to contribute to the growth of cities, as in line



Figure 6: Conflicts avoided residential areas in Gambellaa City (Source: Own Observation, 2020/2021)

with the Highlanders' ethnic enclave profile in Gambella city, This failed to be displayed in other enclaves within Gambella City. One key informant (KII4, 2021) associated ethnic base settlement with insufficient tax money payment from taxpayers. This means that ethnic enclave settlements have a significant impact on residents' willingness to pay lower city taxes. As indicated in the previous section of sociospatial descriptions, the majority of residents occupied urban space without a proper legal base that could make them pay the land tax. On the other hand, transactions in municipal markets occur without properly utilizing sanctioned legal means (observation 2020–2021). More refugees arrive in the city who are unconcerned about being welcomed, exacerbating illegal business practices.

In this context, the ethnic enclave settlement in Gambella benefits individuals in the business sector by allowing them to earn more and pay less to the government. Enclave is also used by traders as a potential because it forces them to define market prices for every commodity based on their interests, which consistently violate the market system (Observation, 2021-2022). Wholesalers and merchants who determined market prices were concentrated in a few traders, resulting in disparities between ethnic groups.



Figure 7: Business center in Nuer, Anywaa and highlanders enclaves (Source: Own observation 2021/22)

Figure 7 shows a clear picture of the differences between business sectors among different enclaves. Because of these economic disparities, indigenous business practitioners are forced to engage in illegal trade and contraband of military supplies. They also do cross-border trade from Gambia to Kenya, and between North and South Sudan. They buy and sell illegally on Gambella's main streets as petty traders, as well as in their enclave, going door to door. The Gambella enclave has become the most dangerous part of the settlement, causing the economic system to collapse.

The economic sector is negated by an ethnic enclave settlement because the concentration of like-minded residents becomes a potential to those with a relative in the economic sector. The unfair economic functions in Gambella city manifested themselves in young people, mostly found in indigenous enclaves where Nuer, Anywaa, Komo, Majang, and Opo are heavily clustered; their exposure led them not to know how to do business.

Ethnic enclave settlement and its relationship with environmental activities in Gambella city

Ethnic enclaves are also thought to be a major cause of concern because they damage and drain the ecology of the city. In Gambella, the most feasible way to pollute the city is the widespread disposal of solid and liquid garbage everywhere (see figure 8). Despite the city's long history, Gambella City's urban waste management cycle is still in its infancy. The city has no functional landfill or sewage infrastructure in place. The majority of ethnic enclaves lack an efficient waste management and disposal facility. Residents dumped their trash in neighboring neighborhoods, a nearby stream, and possible locations for each household. Waste separation, whether liquid or solid, is not taking place. For the sake of the citizens' health and sense of ownership, the urban environment needs to be tidy and secure. The emergence of ethnic enclaves in Gambella city exhibits a modest sense of ownership over its environment. Residents' apathy is most noticeable in the city center, where business waste is much more prevalent. One major discovery from the year 2021 was the disposal of chemical-related waste under a small bridge over the Jabjabe stream, as observed in figure 8 below. Outdated medications, dead animals, and decomposed waste in containers containing bad odors, toxic materials, and garbage from commercial residuals were among the wastes discovered. The use of JabJabe stream as a trash stream jeopardizes the Baro River's ability

to dry up during the rainy season because solid waste is washed into the river. Residents' carelessness caused the Baro shoreline to dry up more because plastic waste dumped everywhere drained into the Baro and needed careful handling. This can have a significant impact on both downstream residents and residents who live near the stream in Gambella City, as the majority still drink Baro River water. The concentration of the same ethnic residents from the same ethnic group in one locality makes residents not feel the commonness of the city as their common resource, which leads to weak sensitivity

to their urban ecosystems. This also has an impact on small city resources like manhole obstructions that block the rainwater flow along asphalt roadways and damage the asphalt. In 2021, high odor levels under the JabJabe stream, which are hazardous to the health of those crossing and walking around the city, are prominent. Generally, an ethnic enclave settlement in Gambella city induced a negative effect on the city's safe environment, which showed a positive correlation with the negative effect on environmental safety that the ethnic enclave settlement imposed on Gambella city.



Figure 8: Solid waste disposal mean in Gambella city (*Source: Observation 2020/2021*)

Ethnic enclave and the development of infrastructure in Gambella city

Aligned with the previous section above on the effect of ethnic enclaves on the environment, we then deal with the relationship that exists between ethnic enclave settlement and infrastructure development. For every resident to have access and contribute to infrastructure development in Gambella city, one of the most crucial components under consideration in this study was the social infrastructure. They considered the demand for potable water, an electricity connection, access to road networks, and the possibility of drainage and sewerage lines. According to SEM estimates, 17 percent of people have access to the city's infrastructure, which includes clean water, electricity connections, the road network, and drainage system connections, all of which are major issues in Gambella City. As enclaves increased, the competition and demand for more infrastructure increased, which led to conflicts. Observation (2020–2021) and confirmation from resident interviews indicate that all residential districts in Gambella City lack access to potable water, adequate main and inner roads, sewerage, and drainage systems. Although the severity of the concern about city infrastructure development may vary based on the size and concentration of the population as well as the city's historical growth and expansion, the weak access seems to be shared by all enclaves. Despite the fact that the city is divided by a river that changes course throughout the year, the availability of drinkable water is a major worry for every enclave. An interview with an elder (KII7, 2021) from Kebele 01 and Kebele 05 on August 7, 2021, said, "There is no drinking water available from the tap that is potable." Not only these, but Gambella city has a high demand for water due to the extremely hot weather, which

necessitates both drinking water and water for bathing. Figure 9 depicts how severe the demand for potable water is and how the majority of residents dig up a nearby stream to use groundwater in their enclave. Lack of access to safe drinking water led to child abuse, exposing children to the dangers of the river Baro's wild crocodiles. That claims the lives of boys and girls every year. Furthermore, the demand for potable water was mentioned, as it caused many residents to pay donkey riders birr 7 to birr 20 per jar. The potable water shortage was confirmed by experts (KII5, 2021), who acknowledged the existence of the shortage and supported it by citing data from their office that showed less than 10,000 inhabitants have access to tap water. Because of the unmet population estimate and potable water sources, the coverage did not match the demand. The expert also illustrated that ethnically based settlements had a negative impact on water bill payment: residents never paid their water bills on a regular basis and never worried because the bulk of them lived in a dire water shortage condition. People in Kebele 01 and Kebele 05, which are primarily home to Nuer and Highlander enclaves, are particularly affected by water shortages in residential areas. In order to end this situation and preserve the lives of people in Ethiopia's poorest region, government intervention is highly demanded.

Along with the water shortage, we find out that road development is under normal status since ethnic enclave settlements have weaker potential for opening roads because ethnic enclaves have resistance to plan implementation. The traditional type of habitation, which increases the patchy coverage of roadways, is a major factor manifested. A further obstacle to the development of city roads is the poor ability of citizens to pay for public services like roads and other social infrastructure



Figure 9: Gambella source of water within Anywaa, Nuer and highlanders enclave (Source: observation 2021)

based on each enclave's economic situation. Even though the city is one of the UIDP city projects supported by the World Bank, inhabitants never pay matching money due to weak awareness as well as the capacity of each enclave to pay.

The only option in place and in practice for the project's sustainability is that the Gambella municipality assumes the expense from the government purse in order to keep the project from failing. Weak infrastructure

developments like roads are also hindered by the weak financial source of the municipality that compensates the demolished properties. Despite the fact that the new city layout plan effectively proposes development activities and inner highways, the disadvantage is that each enclave's resistance to implementation contributed greatly (KII5, 2021). Figure 10 summarizes the variety of roads in Gambella City and identifies inner roads in the Anywaa, Komo, Nuer, and Highlander enclaves.



Figure 10: Roads in Gambella enclaves (Source: observation 2021)

DISCUSSION

The Structural Equation Model (SEM) was used to analyze the development of Gambella's economy, sociospatial, environment, and infrastructure. The SEM results in table 1 in annex show that the variable categories of each factor are interconnected and have a significant impact of 1percent variance. This demonstrated that the development of ethnic enclaves had a mixed impact on Gambella city. From the findings, an ethnic enclaves provide specific, beneficial support for sociospatial, environmental, and infrastructural functions. However, because ethnic enclave settlement predominated in Gambella city, economic growth received little effect. From the table1, we have 72percent different as disparity because of city ethnic based settlement in enclave. In this regard, the most contributing factor with the

development trajectories in Gambella city, the sociospatial trajectory was discovered to be more closely associated with all social and spatially related issues with 96.4percent. followed by economic factor that consisted of 49percent in comparison to environment and infrastructure development. Some of the best manifestations on the variation we observed, includes: racial tensions, illegal activities on urban land, and locals' opposition to the execution of city structure plans implementation. Economic wide, An ethnic enclave settlement was found to only benefit a small number of people due to limited access to market centers, a subpar market system, a lack of market days, a lack of malls and bazaars, a lack of financial resources that can provide loans, and a conflict between the Anywaa, Nuer, and Highlander enclaves that produce spatial disparity as group competition is visualized. These

results support the notion that discrimination, general stress, and immigration stress are all elevated in places with significant ethnic concentrations (Morey BN. *Et al.*, 2020). Additionally, irresponsible residents that dumped trash everywhere in the city, horizontal city development, internal displacement and succession, and excessive waste pollution, worsened the city environment. Infrastructure development hindered by weak participation of residents on the development was all magnified.

The most typical behavior seen in Gambella is the high reliance of the population on infrastructure supported by public funds. Concern about infrastructure is greatly accentuated by the city's unplanned and illegal outside development which consists of patchworks with high ethnic acquisition. Along with them, federally controlled infrastructure like power and telecommunications is also behind schedule due to the municipality's low financial resources. This showed that the impact of ethnic enclave settlement may diminish as infrastructural development grows as racial competition for few resources will destroy the advancements. These findings produced a new theoretical insight as the concentration had an effect on development. Operationalize an ethnic enclave settlement, which is the concentration of the same ethnic group in one spatial space. This is not clear how living in an ethnic enclave can produce positive or negative consequences on the development of economic, sociospatial, environmental, and infrastructure in Gambella. These account to gap between the settlement and development spectrums. It also highlighted the city's current sluggish development in relation to enclave settlement. Overall, the findings on Gambella ethnic enclaves undermine the enormous advantages that city growth may bring about when it is effectively utilized. Ethnic enclaves and their unfair treatment harm the positive impacts and progress that can be achieved from enclave settlement benefits. Instead of the usual practices of changing structural inequalities that necessitate the creation of new institutions to protect marginalized groups, we need a proper treatment that makes every resident own the city. As researchers on ethnic enclaves noted (Bailey *et al.*, 2017; Seaton *et al.*, 2018), reducing prejudicial attitudes can act in the smallest form in changing the largest structure of inequality in any city, which has contributed a lot to the present-day Gambella.

Empirical research on the link between ethnic enclave settlement and development spectrums demonstrates that ethnic enclave settlement has had significant negative effects on Gambella development. We require planning methods and regulations that are appropriate for the long-term growth of a livable and competitive city. Consequently, in order to balance urban growth, adopting Talen's (2012) multicultural planning approach and methodologies their implementation will help Gambella City's ethnically based communities in terms of socioeconomic development, environmental preservation, and infrastructure growth. With the application of this technique, the detrimental effects

of the ethnic enclave settlement that wreaked havoc on Gambella city can be reduced or even avoided. As a theory of contact, it explains how interactions between ethnic groups may reduce prejudice, foster understanding, and increase the possibility that individuals will talk about shared interests or problems (Pettigrew and Tropp, 2006). According to multicultural theory, interactions between ethnic groups can result in assumptions that are founded on understanding the variety that occurs both inside and between ethnic groups. Contact theory therefore provides us hope that diversity deficiencies can be gradually addressed as people get to know one another. However, it presents a diversity paradox since it both increases the possibility of the sorts of intergroup encounters required to successfully transform perspectives and build new identities while also resulting in debits (Stolle *et al.*, 2008). Although contact theory and multiculturalism sometimes seem to contradict one another, this opposition may really be the basis for much of the new research on ethnic enclaves that divide people in cities.

The main argument is that interpersonal interaction across networks is challenging to carry out as a result of the clustering of ethnic networks, which explains why ethnically diverse communities living in enclaves lack social cohesion and are unable to collaborate and organize for improved public goods supply for development as indicated in this paper (Axelrod, 1984). Due to the potential for social network-based segmentation, corrupt or abusive leaders may become largely immune to examination from anyone outside of their group. These theories are appealing alternatives to conflict theory, which relies on cognitive biases, despite the fact that their applicability appears to be much more constrained to local levels, such as cities or neighborhoods, and they struggle to explain outcomes at the national level. Therefore, an ethnic enclave settlement in Gambella contradicts the role of growth since there is no obvious connection between the people of each enclave that would allow them to live and contribute to the development of the city.

This contradicts theories that show how similar status, shared objectives, and support from the community can lead to positive intergroup interactions (Allport, 1954; Pettigrew *et al.*, 2011), but the dynamics are complicated for Asian American women because of their varied ancestry and length of residence in the U.S. The results show that intergroup contact in Gambella City diminishes ethnic enclave settlement and its contribution to city growth. We proved and established that sociospatial, economic, environmental, and infrastructural development were adversely affected by ethnic enclaves. We take ethnic enclave villages with varying levels of development into account in Gambella City because of their strong ties but also because of their negative consequences on city growth.

CONCLUSION

The Gambella enclave provides cross-border trades transportation between Sudan and Ethiopia. It was

unclear, many academics who have expertise into this subject do not understand the connection between ethnic enclaves and city development. The study's main objective is to establish the connections between sociospatial activities, environmental factors, infrastructure, and the ethnic enclave settlement in Gambella city. In this regard, all but the sociospatial and economic functions are significant factors that are closely related to ethnic enclave settlements.

However, these significant has both positive and negative consequence on the city development that make ethnic enclave settlement ineffective form of settlement. The finding in this study enriched both contact theory and developmental theories. Using multicultural city design as the ideal planning approach to Politicians, planners, and professionals in the field of urban development might lessen the impact of ethnic enclave settlement. A comprehensive multicultural city planning model that adheres to the finest cultural practices, planning, and design that best represents social norms and encourages luxurious architectural outlooks, financial and technical support on the economic activity with a special focus on local indigenous resources that can up level indigenous entrepreneurs are necessary to preserve the stability and viability of Gambella City. In order to balance out the disparity in development levels seen in Gambella City, the government should also spend heavily in public infrastructure, which is beneficial to everyone. All of these will promote harmonious living among city dwellers. Like previous studies, this one has some limitations. CSA (2017) data lack neighborhood and block level information where census traces data, to measure ethnic enclaves should be taken. Since we used already collected land use data from Gambella municipality with weak update, These results might not apply to every state in Ethiopia, other Sub-Saharan African nations, or anywhere else in the globe since certain information on each enclave in Gambella is not thoroughly documented, and the methodology is hampered by an inadequate update on the land use inventory. However, the results of this study contribute to contact theory, development theory, and multicultural theory in terms of links between ethnic enclave settlements. The suggested model and practice can mitigate the negative effects that may lead to proper development if ethnic enclaves are utilized as useful resources in Gambella city. Ethnic enclave settlements have adverse negative effects on the sociospatial, economic, environmental, and infrastructure development of the city.

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