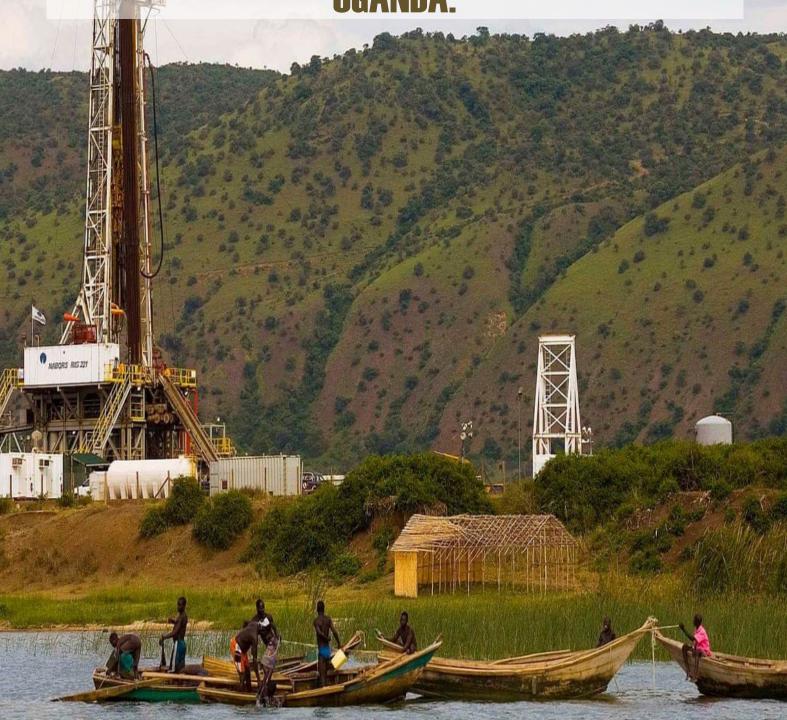


A COMPARATIVE ANALYSIS OF LAND ATTRIBUTES OF PROJECT AFFECTED PERSONS (PAPS) IN SELECTED PROJECT-AFFECTED DISTRICTS IN UGANDA.



We're not against oil and gas, we're against breaching land-rights.

1.0 Background, Introduction, and Methodology

The East African Crude Oil Pipeline (EACOP) involves the construction and operation of a buried, cross-border pipeline to transport crude oil from the Lake Albert area in Uganda to the port of Tanga in Tanzania for export to international markets (EACOP Company, 2023). The pipeline will run from Kabaale in Hoima district, Uganda, to Chongoleani, Tanga region, in Tanzania. The length of the pipeline is 1,443 kilometers (km), of which 296 km will be in Uganda (EACOP Company, 2023). The pipeline section in Uganda will traverse ten districts comprising Hoima, Kikuube, Kakumiro, Kyankwanzi, Mubende, Gomba, Sembabule, Lwengo, Rakai and Kyotera (Directorate of Petroleum, 2023).

The EACOP requires 2,740 acres of land in Uganda (Petroleum Authority of Uganda, 2021) and this land is being taken from 3,648 project-affected households (PAHs) in Uganda (EACOP Company, 2023). One hundred ninety-one (191) PAHs are primary residents who have opted for resettlement houses (EACOP 2023). Most of the PAHs opted for cash compensation. As at September 2023, 3,189 PAHs in Uganda had received their compensation while 3,433 had signed their compensation agreements (EACOP Company,2023). TotalEnergies is leading on the compulsory land acquisition processes on behalf of the other EACOP project developers, who include China National Offshore Oil Corporation (CNOOC) as well as the Ugandan and Tanzanian governments (EACOP Company, 2023).

Globally, the EACOP project is one of the most significant fossil fuel infrastructure projects under development. Uganda's oil development, if completed, will include hundreds of wells, hundreds of kilometers of roads, camps, and other infrastructure and a 1443-kilometer pipeline, the longest heated pipeline in the world, connecting western Uganda's oilfields to the Tanzanian coast. The first commercial wells were drilled in the Tilenga oilfields in June 2023. Infrastructure development is underway and compensation under the land acquisition project along the pipeline corridor is 96 percent complete as of September 2023. The oilfields lie in one of the most sensitive and ecologically diverse areas of the world, at the crossroads of Lake Albert, Africa's seventh largest lake and the headwaters of Africa's main basins for the Nile and Congo rivers. Over 400 kilometers of the pipeline runs alongside Africa's largest lake, Lake Victoria, a primary water source for more than 40 million people. EACOP comes at a time when the International Energy Agency (IEA), the Intergovernmental Panel on Climate Change (IPCC), and other experts warn that if the international community is to reach the goals stated in the Paris Agreement and avoid the worst impacts of climate change, no new fossil fuel projects can be built

Over 5527 households (PAPs), corresponding to 31,716 individuals, settling over 1,183 hectares have been displaced paving the way for the Tilenga project located in Buliisa and Nwoya districts in the Lake Albert graben, operated by TotalEnergies (56.6%), in partnership with CNOOC and UNOC in Uganda. As of 2025, it will produce 190,000 barrels of oil per day during peak production involving developing nine fields, namely, JobiRii, Ngiri, Gunya, Kasamene, Wahrindi, Kigogole, Nsoga, Ngege, and Ngara, and drilling 426 wells at 31 locations. The production will be transported through buried pipes to a processing plant, built at Kasenyi, where the fluids (oil, water, and gas) will be separated and treated. Production will be delivered through buried pipelines to a treatment plant built in Kasenyi, for the separation and treatment of the fluids (oil, water, and gas).

The crude will be treated at a Central Processing Facility (CPF) located on the northern edge of Lake Albert. The acquisition of this land is subdivided into six (6) Resettlement Action Plans (RAPs) (1, 2, 3A, 3B, 4 and 5). According to PAU, the project infrastructure includes over one hundred and seventy (170) kilometers (km) of buried flowlines, a ninety-six (96) km feeder pipeline, a Lake Water Abstraction System, and other infrastructure such as the Victoria Nile Crossing, Bugungu Airstrip, Support bases, camps, and access roads among others.

1.1 Justification

The justification for this study stems from the critical role land plays in the socio-economic well-being of individuals and communities in Uganda. Land acquisition for development projects often affects Project-Affected Persons (PAPs), yet disparities in land prices and sizes across districts remain insufficiently understood. These disparities can lead to inequities in compensation and undermine the social acceptability of development initiatives. By comparing land attributes such as price and size and examining their relationship, this study seeks to provide evidence-based insights to guide policy and decision-making processes.

Understanding these dynamics will contribute to designing fair and equitable compensation frameworks for PAPs, fostering community trust, and ensuring the sustainability of development projects. This research is essential for addressing the gaps in land management practices and promoting social equity in development

1.2 Objectives

1.2.1 Overall Objective.

projects across Uganda.

To compare the land attributes of PAPs in selected project-affected districts in Uganda

1.2.2 Specific Objectives.

- a). To compare the prices of land as per sales agreements of PAPs in selected districts affected by the project.
- b). To compare the size of land sold by PAPs in selected districts affected by the project.
- c). To examine the relationship between land size and land price among PAPs in the selected project-affected districts.

1.3 Methodology

The study employed a comparative cross-sectional design to analyze land attributes of PAPs in the districts affected by the EACOP project. Data was collected from sales agreements and compensation records focusing on Buliisa, Hoima, Kyotera, Lwengo, Rakai, and Sembabule districts. A quantitative and qualitative approach was used, with One-way ANOVA and correlation analysis to compare land attributes across the districts. This method allowed for an

1.4 Geographical Scope of the Study.

The study was conducted in six districts in Uganda: Buliisa, Hoima, Kyotera, Lwengo, Rakai, and Sembabule. These districts were selected due to their involvement in the EACOP project and the significant impact on PAPs within these areas. The districts represent diverse geographic, socio-economic, and cultural settings, providing a broad spectrum of perspectives on land acquisition, compensation processes, and land use patterns. Buliisa and Hoima are located in the Albertine Graben region, a hub of oil exploration activities, while Kyotera, Lwengo, Rakai, and Sembabule are situated along the central and southern parts of Uganda, forming part of the pipeline corridor. This geographical distribution allowed for a comprehensive analysis of land acquisition impacts across different landscapes and socio-economic contexts, reflecting the varying experiences of PAPs.



Map showing the EACOPE Oil Pipeline Route

2.0 Findings.

2.1 Comparison of Land Prices as per Sales Agreements of Project Affected Persons (PAPs) in Selected Districts.

Land acquisition for infrastructure projects, such as the East African Crude Oil Pipeline (EACOP), often involves complexities stemming from regional disparities in land valuation, socio-economic conditions, and negotiation processes.

These factors significantly influence the compensation provided to PAPs, shaping their perceptions of fairness and adequacy. This study examined the land prices offered to PAPs by the East African Crude Oil Pipeline (EACOP) across the districts of Buliisa, Hoima, Kyotera, Lwengo, Rakai, and Sembabule. The comparative analysis was conducted using One-way ANOVA as shown in Table 1.

Table 1: One-Way ANOVA Comparing Land Prices as per Sales Agreements of Project Affected Persons (PAPs) in Selected Districts.

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	2169581846086074.8	5	433916369217214.940	3.367	.007
Within Groups	17396802814906832.0	135	128865206036346.900		
Total	19566384660992908.0	140			

Source: Field Data (2025).

The One-way ANOVA results in Table 1 indicate a statistically significant variation in the land prices offered to PAPs by EACOP across the districts of Buliisa, Hoima, Kyotera, Lwengo, Rakai, and Sembabule at the 5% significance level (P-value = 0.007 < 0.05). As shown in Figure 1, Buliisa district received the highest average land price of UGX 21,875,000, followed by Rakai district with an average of UGX 18,557,857, Sembabule district ranked third with an average land price of UGX 17,727,391, and Kyotera district recorded the lowest average land price at UGX 9,378,750. These findings highlight notable disparities in compensation across the districts.

The significant variation suggests potential inconsistencies in the valuation criteria or negotiation processes used across different districts. Higher land prices in districts like Buliisa may indicate either a higher perceived land value or more effective advocacy by affected communities, while lower prices in Kyotera could reflect weaker bargaining positions or undervaluation of land. These differences could lead to perceptions of inequality, possibly affecting community satisfaction and trust in the project. Addressing these disparities is essential to ensure fairness, enhance transparency in compensation processes, and maintain social cohesion in the affected regions.

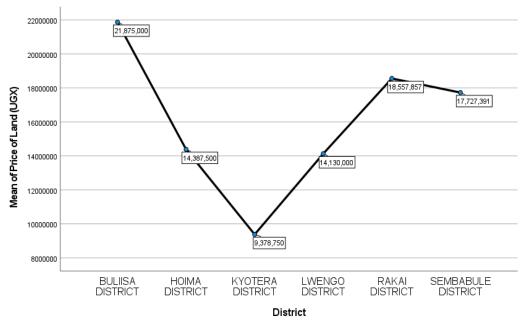


Figure 2: Mean Plot Comparing Land Prices as per Sales Agreements of PAPs in Selected Districts.

Uganda's National Land Policy (2013) advocates for transparency, stakeholder engagement, and conflict resolution mechanisms during compensation processes. The findings suggest gaps in uniformity and potentially insufficient engagement or advocacy, especially in districts receiving lower compensation. These disparities may undermine the policy's objectives of promoting equitable development and social justice, highlighting the need for policy reinforcement, improved negotiation frameworks, and robust oversight mechanisms to ensure that compensation practices align with Uganda's legal and policy frameworks.¹

 $^{1 \\} https://www.landnet.ug/landwatch/wp-content/uploads/2017/01/FINAL-UGANDA-NATIONAL-LAND-POLICY-OF-2013.pdf$

FGD with PAPs revealed diverse perspectives on the compensation process. In districts like Buliisa, PAPs expressed moderate satisfaction, citing extensive consultations and clarity in the valuation process as factors contributing to higher land prices. Conversely, PAPs in Kyotera reported dissatisfaction, highlighting insufficient communication, inadequate time for negotiations, and a perceived lack of transparency in determining land value. Many respondents across districts voiced concerns over delayed payments, limited access to independent valuers, and minimal involvement in decision-making processes. One respondent from Kyotera stated, "We were given very little time to understand the valuation, and no one explained how they arrived at such a low price for our land." In contrast, a PAP from Buliisa remarked, "The officials consulted us thoroughly, and I believe the price we received reflects the true value of our land." Another participant from Lwengo district shared, "There is a lot of delay in payments, and this uncertainty affects our ability to plan for the future." These varied perspectives show the uneven implementation of compensation procedures across districts and emphasize the need for improved transparency and communication.



FGD With PAPs in Kyotera District

2.2 Comparison of Land Size of Project Affected Persons (PAPs) in Selected Districts

Land size is a critical factor influencing compensation, as larger parcels typically attract higher payouts. Uganda's National Land Policy (2013) emphasizes equitable access to land, fair compensation, and transparency in land transactions to promote social justice and economic growth. Understanding the distribution of land sizes sold to EACOP by PAPs is essential to assess whether disparities exist across districts. This section analyzes the land sizes of PAPs across Buliisa, Hoima, Kyotera, Lwengo, Rakai, and Sembabule districts to determine whether there are significant differences and how these variations might relate to compensation practices. The findings are presented in Table 2.

Table 2: One-ANOVA comparing Land Size of Project Affected Persons (PAPs) in Selected Districts

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	42.980	5	8.596	3.416	.006
Within Groups	339.674	135	2.516		
Total	382.654	140			

Source: Field Data (2025)

The One-way ANOVA results presented in Table 2 demonstrate a statistically significant difference in the average land sizes sold by PAPs across the selected districts at the 5% significance level (P = 0.006 < 0.05). Figure 2 reveals that Rakai district recorded the largest average land size sold by PAPs at 2.3 acres, followed by Sembabule with an average of 1.95 acres, Lwengo ranked third with an average land size of 1.8 acres, while Buliisa reported the smallest average land size sold at only 0.5 acres. The significant differences in land sizes sold by PAPs across districts suggest variations in land ownership patterns which may reflect socio-economic, cultural, or geographic factors influencing landholding sizes in different areas.

Despite the variations in land sizes, the prices offered do not consistently reflect the size of land sold. For instance, Rakai district had the highest average land size of 2.3 acres but received a moderate price of UGX 18,557,857, compared to Buliisa district which had the smallest average land size of 0.5 acres but commanded the highest average price of UGX 21,875,000.

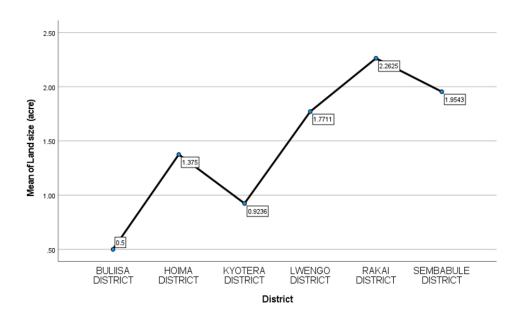


Figure 3: Comparing Land Size of Project Affected Persons (PAPs) in Selected Districts

Findings from FGDs revealed that PAPs in Rakai and Sembabule districts generally owned larger tracts of land due to traditional agricultural practices and less population density, which influenced their willingness to sell more land to the project. One participant in Sembabule noted, "Land here has been in our families for generations, but with fewer people, we can afford to sell larger portions without compromising our livelihoods." In contrast, discussions in Buliisa showed that landowners were reluctant to sell larger portions due to the limited availability of land and the community's reliance on it for subsistence.

Key informant interviews (KIIs) with local leaders indicated that discrepancies in land pricing despite size variations were often due to perceived strategic importance of the land. For instance, smaller parcels in Buliisa were valued higher because of their proximity to critical project sites. In addition, field observations showed that some larger plots in Rakai and Sembabule were located in less accessible areas, which may have contributed to their lower valuation.



EACOP Officials survey land in Sembabule District where the oil pipeline will pass before heading to Tanzania.

2.3 Correlation Analysis between Land Size and Land Price

Land compensation processes often involve the interplay of multiple factors, including the size of land sold and the price offered. Understanding the relationship between these variables is crucial in assessing whether compensation practices align with principles of equity and fairness as outlined in Uganda's land policies. The study examined the relationship between land size and land price among PAPs in the project-affected districts. The results are analyzed using Pearson correlation in Table 3.

Table 3: Correlation Analysis between Land Size and Land Price

		Land size (acre)	Price of Land (UGX)
Land size (acre)	R	1	
	P-value		
Price of Land (UGX)	R	.864**	1
	P-value	.000	

Source: Field Data (2025)

The correlation results in Table 3 reveal a strong positive and statistically significant relationship between land size and land price for PAPs (R = 0.864, P-value = 0.000 < 0.05). This indicates that as the size of the land increases the price of the land also tends to increase in the project-affected district. This also aligns with the scatter plot which indicates a positive association between land size and the price of the land. These results align with Uganda's land policies, which emphasize fair and adequate compensation based on market value and the specific characteristics of the land, including its size, location, and productivity. The observed positive correlation supports the notion that compensation amounts are, to some extent, reflective of land size. However, variations in district-level compensation patterns, as noted in previous sections, suggest that additional factors—such as land use, geographic considerations, and local negotiation dynamics—may also influence pricing.

FGDs and KIIs revealed mixed sentiments regarding the adequacy of compensation relative to land size. While some respondents acknowledged the fairness of the size-based pricing, others raised concerns about discrepancies in valuation practices across districts. A PAP from Rakai district remarked, "We expected larger land sizes to bring more money, but sometimes, even small parcels in certain areas received better compensation because of the project's needs." These insights indicate that while land size plays a significant role, other project-specific and contextual factors also impact compensation outcomes.

Observation of land characteristics during field visits reinforced the importance of non-size factors in valuation. For instance, land near major infrastructure or with agricultural potential appeared to command higher prices regardless of size. This highlights the need for transparent and consistent compensation frameworks to address potential inequalities and foster trust among affected communities.

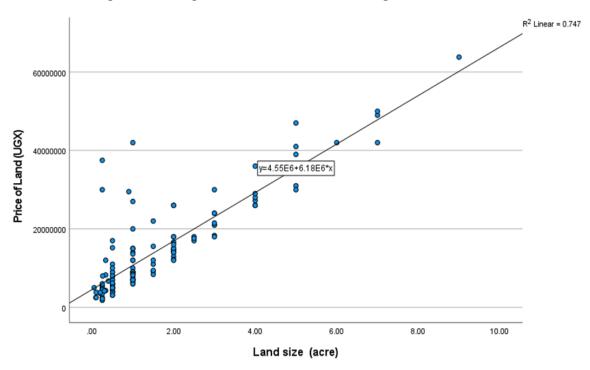


Figure 4: Scatter plot showing the Correlation Analysis between Land Size and Land Price

3.0 Conclusion.

In conclusion, this study examined various aspects of the land compensation process for PAPs in the districts affected by the EACOP project. The findings revealed significant variations in land prices and land sizes across the districts of Buliisa, Hoima, Kyotera, Lwengo, Rakai, and Sembabule. The analysis showed that Buliisa had the highest average land price, while Kyotera had the lowest, pointing to potential inconsistencies in the compensation process. Similarly, Rakai had the largest average land size, while Buliisa had the smallest. Despite these variations, a strong positive correlation between land size and land price was found, indicating that larger land parcels tend to attract higher compensation.

These findings show the need for a more consistent and transparent compensation framework to ensure fairness and address perceived inequalities, thus promoting community trust and social cohesion within the affected areas.

4.0. Recommendations

a) Recommendations to EACOP.

- i) To address the significant disparities in land prices and sizes across districts, it is essential for EACOP to implement standardized compensation procedures. A clear, consistent valuation model should be developed to ensure that PAPs are compensated fairly based on comparable criteria, regardless of their district.
- ii) There should be a transparent communication process that clearly explains the land valuation methods, compensation rates, and the reasons behind any variations across districts. This can help alleviate concerns of inequality and foster trust between the affected communities and the project authorities.
- iii) In districts where PAPs received a lower compensation, such as Kyotera, there should be a focus on strengthening community advocacy. Community representatives should be empowered to engage effectively in negotiations and advocate for fair and adequate compensation.
- iv) Local authorities in project-affected districts should receive training on land valuation and compensation processes. This will help ensure consistency and fairness in the compensation process, especially in remote districts that may lack the resources or expertise to assess land value accurately.
- v) In addition to fair compensation, it is important to consider the long-term welfare of PAPs. EACOP should provide support for alternative livelihoods, training, and capacity building to help PAPs transition smoothly after the loss of their land.

b) Recommendations to Total Energies.

- i) Total energies and contractors should expedite compensation of remaining PAPs and ensure they are able to go on with new life after displacement. Total Energies should collaborate with relevant government agencies to support PAPs missing land titles, letters of administration and national identity cards to access them and have them compensated without further delay.
- ii) Total Energies should avoid putting government of Uganda on pressure to have vacant possession of land before land owners are adequately and fairly compensated as per national and international standards and best practice.
- iii) Total Energies should profile the remaining complaints and act on them promptly and re-value, compensate and restore livelihoods of PAPs that have failed to have their grievances acted upon for the last 4 years. PAPs whose graves were not compensated, orphaned land not compensated and churches as well as community water sources should be henceforth considered for compensation.
- iv) Total Energies should strengthen the livelihood restoration program to ensure that PAPs are given fairly adequate food for the to manage transition period without compromising their food security. PAPs also require enhanced provision of adequate planting materials for sustainability of their families beyond project. Vocational skills training.

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