



East African Journal of Environment and Natural Resources

eajenr.eanso.org

Volume 9, Issue 1, 2026

Print ISSN: 2707-4234 | Online ISSN: 2707-4242

Title DOI: <https://doi.org/10.37284/2707-4242>



EAST AFRICAN
NATURE &
SCIENCE
ORGANIZATION

Original Article

From Policy to Practice: Evaluating Governance Wellbeing Nexus of Oil and Gas Policy Implementation in Uganda's Albertine Graben

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Article DOI: <https://doi.org/10.37284/eajenr.9.1.4601>

Date Published: **ABSTRACT**

04 March 2026

Keywords:

*Oil and gas
Governance,
Human well-being,
Social-ecological
systems,
Buliisa-Hoima-
Kikuube,
Policy implementation.*

The discovery of commercially viable oil and gas in Uganda's Albertine Graben in 2006 raised expectations for socio-economic transformation in the host districts of Buliisa, Hoima, and Kikuube. In response, the Government of Uganda established an extensive policy and legal framework to regulate exploration, production, environmental protection, and petroleum revenue management. However, the extent to which these frameworks have translated into improved human wellbeing for host communities remains unclear. The objective of this study was to examine how Uganda's oil and gas governance arrangements have influenced human well-being outcomes in the three districts. A qualitative research design, guided by an interpretivist paradigm, was employed to explore lived experiences and institutional dynamics. Data were collected from 150 participants through focus group discussions, key informant interviews, and documentary reviews involving community members, district officials, civil society organisations, and technical staff from regulatory bodies and oil and gas companies. The results indicate that although Uganda has established strong statutory and policy provisions, their implementation has yielded limited well-being gains. Communities reported restricted access to employment and training opportunities due to affordability constraints, distance to training centres, and inadequate information flow. Environmental and public health concerns persisted, including water contamination, occupational risks, and inadequate health facility capacity. Social safeguards such as valuation transparency, compensation timeliness, livelihood restoration, and grievance handling were inconsistently implemented. Petroleum revenue management systems existed, but host communities had not yet received direct fiscal benefits because production royalties had not commenced. The study concludes that Uganda's governance framework is robust in design but suffers from implementation gaps. Strengthening institutional capacity, improving transparency, and ensuring the timely delivery of safeguards are critical for enhancing human wellbeing in oil and gas-host communities.

APA CITATION

Kisembo, V., Ogwang, T., Rugunda, G. K. & Ericksen, S. (2026). From Policy to Practice: Evaluating Governance Wellbeing Nexus of Oil and Gas Policy Implementation in Uganda's Albertine Graben. *East African Journal of Environment and Natural Resources*, 9(1), 315-329. <https://doi.org/10.37284/eajenr.9.1.4601>.

CHICAGO CITATION

Kisembo, Vincent, Tom Ogwang, Grace Kagoro Rugunda and Siri Ericksen. (2026). "From Policy to Practice: Evaluating Governance Wellbeing Nexus of Oil and Gas Policy Implementation in Uganda's Albertine Graben." *East African Journal of Environment and Natural Resources* 9 (1), 315-329. <https://doi.org/10.37284/eajenr.9.1.4601>

HARVARD CITATION

Kisembo, V., Ogwang, T., Rugunda, G. K & Ericksen, S. (2026). "From Policy to Practice: Evaluating Governance Wellbeing Nexus of Oil and Gas Policy Implementation in Uganda's Albertine Graben.", *East African Journal of Environment and Natural Resources*, 9 (1), pp. 315-329. doi: 10.37284/eajenr.9.1.4601.

IEEE CITATION

V., Kisembo, T., Ogwang, G. K., Rugunda & S. Ericksen, "From Policy to Practice: Evaluating Governance Wellbeing Nexus of Oil and Gas Policy Implementation in Uganda's Albertine Graben.", *EAJENR*, vol. 9, no. 1, pp. 315-329, Mar. 2026.

MLA CITATION

Kisembo, Vincent, Tom Ogwang, Grace Kagoro Rugunda & Siri Ericksen. "From Policy to Practice: Evaluating Governance Wellbeing Nexus of Oil and Gas Policy Implementation in Uganda's Albertine Graben." *East African Journal of Environment and Natural Resources*, Vol. 8, no. 3, Mar 2026, pp. 315-329, doi:10.37284/eajenr.9.1.4601.

INTRODUCTION

The discovery of commercially viable oil and gas deposits in Uganda's Albertine Graben in 2006 has been widely framed as a potential catalyst for the country's socio-economic transformation (Byakagaba et al., 2021; Kasimbazi, 2023). With an estimated 6.5 billion barrels of oil in place, of which about 1.4 billion barrels are recoverable, the sector represents one of the largest hydrocarbon endowments in East Africa (World Bank, 2020). Anticipated benefits include increased public revenues, employment creation, local enterprise development, and major investments in social and physical infrastructure. For host communities in Buliisa, Hoima, and Kikuube districts, expectations have centred on improved livelihoods, enhanced access to services, and meaningful participation in the emerging oil economy (Van Alstine et al., 2020).

Uganda has developed an extensive legal and policy architecture to govern the sector. The Petroleum (Exploration, Development and Production) Act, 2013 sets out provisions for safety, transparency, and national participation in the oil and gas value chain (Republic of Uganda, 2013). The Petroleum (Exploration, Development and Production) (National Content) Regulations, 2016 specify obligations for employment, skills transfer, and the use of Ugandan goods and services (Republic of Uganda, 2016).

Environmental well-being is supported by the National Environment Act, 2019, and the Environmental and Social Assessment Regulations, 2020, which provide for ecological safeguards, public participation, and compliance monitoring (Republic of Uganda, 2019; S.I. No. 143 of 2020). In parallel, the Public Finance Management Act, 2015 establishes the Petroleum Fund and a statutory rule for sharing six percent of royalties with local governments in production areas, while ninety-four percent is retained at the centre for national development priorities (Republic of Uganda, 2015). These frameworks are aligned with Uganda's Vision 2040, the National Development Plan III, and the Sustainable Development Goals, which emphasise inclusive and sustainable growth (World Bank, 2020).

Despite this comprehensive framework, comparative research on extractive industries highlights persistent gaps between policy commitments and actual well-being outcomes in resource-rich settings. Studies across Africa show that oil and gas development often produces environmental degradation, uneven revenue distribution, and weakened local resilience, phenomena commonly described as manifestations of the "resource curse" (Ross, 2019; Schilling et al., 2018; Hickey et al., 2023). In Uganda's Albertine Graben, evidence already points to tensions around land acquisition,

compensation processes, environmental change, and limited community influence over decision-making (Kafuku, 2020; Van Alstine et al., 2020). These dynamics raise questions about how far existing policies and laws have translated into concrete improvements in human wellbeing for affected populations.

This study examined how Uganda's oil and gas governance arrangements have influenced human well-being outcomes in Buliisa, Hoima, and Kikuube districts. Human well-being is understood broadly to encompass economic opportunities, livelihood security, health, education, environmental quality, and social safeguards. The analysis is guided by the Socio-Ecological Systems (SES) theory, which links institutional and governance arrangements to social and ecological outcomes and emphasises the importance of fit between rules, actors, and resource systems (Ostrom, 2009; Cox et al., 2021; Baggio et al., 2021). By connecting statutory provisions to lived experiences, the study contributes empirical evidence on whether Uganda's oil and gas policy commitments are translating into tangible wellbeing gains in host communities.

MATERIALS AND METHODS

This study employed a qualitative research design guided by an interpretivist paradigm. This approach was appropriate because human well-being is shaped by social meanings, institutional contexts, and lived experiences that cannot be captured through numerical measurement alone. An interpretivist orientation, therefore, provided space for examining how policy commitments in the oil and gas sector interact with everyday realities in host communities in Buliisa, Hoima, and Kikuube (Creswell & Poth, 2018). The study was conducted in the three districts because they constitute the core of Uganda's oil and gas activities within the Albertine Graben. These districts host the Tilenga and Kingfisher projects, multiple land acquisition processes, and sections of the East African Crude Oil Pipeline. Their selection enabled the study to generate evidence from populations that interact directly with the

sector and experience the institutional, social, and ecological changes associated with oil development (Byakagaba et al., 2021; Kasimbazi, 2023).

The study population comprised community members affected by land acquisition and livelihood shifts, local government officials, civil society actors, and technical officers from institutions such as the Petroleum Authority of Uganda (PAU), the Ministry of Energy and Mineral Development (MEMD), and the National Environment Management Authority (NEMA). Purposive sampling was applied to identify participants with relevant knowledge, exposure, and experience. A total of 150 participants took part in the study. These included 60 participants in focus group discussions, 50 participants in individual interviews, and 40 key informants drawn from district departments, regulatory agencies, and civil society organisations. Purposive sampling allowed the study to access information-rich cases and gather depth and detail on governance and wellbeing processes (Patton, 2015).

Data were collected through semi-structured individual interviews, focus group discussions, key informant interviews, and documentary review. Individual interviews supported the gathering of personal accounts on livelihood changes, compensation practices, employment opportunities, and exposure to environmental risks. Focus group discussions provided insights into shared perceptions and collective interpretations among community members. Key informant interviews offered institutional perspectives on policy implementation, statutory obligations, and administrative constraints. Documentary review focused on Uganda's legal and policy instruments governing the sector, including the Petroleum (Exploration, Development and Production) Act, 2013, the Petroleum (National Content) Regulations, 2016, the National Environment Act, 2019, the Environmental and Social Assessment Regulations, 2020, and the Public Finance Management Act, 2015. These documents formed

the basis for assessing how statutory commitments aligned with lived experiences.

Data were analysed thematically using an approach guided by an adapted Socio-Ecological Systems (SES) theory. This theory is widely applied in natural resource governance studies to explain how institutional arrangements, actor characteristics, and ecological conditions interact to produce social outcomes (Ostrom, 2009; Baggio et al., 2021). The analysis process involved reading all transcripts, generating initial codes, organising related codes into thematic categories, and aligning these with SES analytical components. NVivo software was used to support the systematic organisation of data and the retrieval of coded segments.

Ethical approval was obtained from the Mbarara University of Science and Technology Research Ethics Committee and clearance from the Uganda National Council for Science and Technology. All participants provided informed consent, confidentiality was maintained throughout the study, and no identifying information was disclosed. The study adhered to ethical principles of voluntary participation, privacy, and responsible management of sensitive information (Bryman, 2016).

RESULTS

This section presents the empirical findings on how Uganda's oil and gas governance framework translated into human well-being outcomes in Buliisa, Hoima, and Kikuube districts. The results are organised around five domains that reflect the study objectives and the socio-ecological systems framing, statutory and policy context, economic wellbeing and livelihoods, public health and environmental conditions, human capital and skills, social safeguards and resettlement, and petroleum revenue management and local development.

Statutory and Policy Baseline

Uganda's oil and gas sector is governed by a set of laws and regulations that prescribe obligations for safety, transparency, national content, environmental safeguards, and revenue

management. The Petroleum (Exploration, Development and Production) Act, 2013, provides for safety, accountability, and promotion of national participation in the sector (Republic of Uganda, 2013). The Petroleum (Exploration, Development and Production) (National Content) Regulations, 2016 specify requirements for employment, training, technology transfer, and the use of Ugandan goods and services (Republic of Uganda, 2016). Environmental protection is provided for under the National Environment Act, 2019, and the Environmental and Social Assessment Regulations, 2020, which set out duties for environmental and social impact assessment, monitoring, and enforcement through the National Environment Management Authority and local governments (Republic of Uganda, 2019; S.I. No. 143 of 2020).

The Public Finance Management Act, 2015, establishes the Petroleum Fund and stipulates that 6 percent of petroleum royalties are earmarked for local governments in production areas, while 94 percent remains at the central government level, with the local share to be distributed according to a formula in Schedule 6 (Republic of Uganda, 2015). Collectively, these instruments form a statutory baseline linking resource exploitation to expected improvements in livelihoods, health, education, environmental quality, and local development in oil-bearing districts.

Field respondents across the three districts were broadly aware that laws and policies had been enacted to govern the sector. However, most participants reported limited knowledge of specific provisions, enforcement mechanisms, or the pathways through which these rules were expected to translate into concrete benefits at the household or parish level. District officials confirmed that while the legal framework was in place, operationalisation remained uneven and often delayed at the local level.

Economic Well-Being and Livelihoods

The national content and revenue-sharing provisions are intended to enhance economic opportunities, employment, and local enterprise participation. The Petroleum Act and National

Content Regulations require licensees and contractors to prioritise Ugandans in employment and training and to source goods and services from Ugandan enterprises that meet safety, quality, and cost requirements (Republic of Uganda, 2013, 2016). The Public Finance Management Act provides that 6 percent of royalties should be transferred to local governments in production areas to finance local development (Republic of Uganda, 2015).

Field results showed limited realisation of these expected gains during the study period. Across Buliisa, Hoima, and Kikuube, community members frequently reported that *“our children have received education, they have not yet benefited productively from the emerging oil and gas boom”* (FGD, Hoima Municipality, 4 December 2024). Participants identified several barriers to accessing jobs and contracts. Affordability was a recurrent constraint, as one district official in Buliisa noted, *“training programmes are there, but they are too few. Many youths from Buliisa, such as Kisyabi, Wanseko, and Ngwedo, cannot afford transport to Hoima”* (KII, Buliisa, 28 November 2024). Respondents in Kikuube highlighted information gaps, explaining that opportunities were often communicated late or not at all, which led to missed application deadlines.

Participants reported some short-term opportunities in petty trade, casual labour, and low-skilled construction support services around work camps and access roads. However, there were few accounts of sustained access to skilled employment or higher-value contracts. Local small and medium enterprises described difficulties in meeting pre-qualification requirements related to certification, safety standards, and financial guarantees that were demanded by major contractors.

Documentary evidence from public disclosures by operators and contractors for the Tilenga and EACOP projects indicated the existence of scholarship schemes, technical training, supplier-readiness clinics, and the use of national databases for suppliers and labour (EACOP, 2022a; PAU,

n.d.; TotalEnergies, 2025). These records reported numbers of trainees, training hours, and supplier engagement events. However, district officials and local business actors in the study districts reported that relatively few parish-level enterprises had secured contracts by the time of data collection.

With respect to royalties, district officials and community members across all three districts reported that there had been no observable transfers to district or sub-county budgets tagged to petroleum royalties during the fieldwork period. Officials explained that revenue sharing under section 75 of the Public Finance Management Act is triggered only once production royalties begin to flow, which had not yet occurred at the time of the study (Republic of Uganda, 2015).

Public Health and Environmental Determinants of Wellbeing

Uganda’s environmental governance framework requires that petroleum projects undertake environmental and social impact assessments, apply the mitigation hierarchy, and put in place monitoring and management plans for environmental and health risks (National Environment Act, 2019; S.I. No. 143 of 2020). The Petroleum Authority of Uganda also holds responsibilities for health, safety, and environmental oversight in the sector (PAU, n.d.).

Despite these provisions, communities in all three districts reported concerns related to water quality, sanitation, and occupational exposure associated with oil-related activities. In Kabaale, a participant stated that *“oil companies and the government do not care much about us. They have degraded our wetlands and rivers as they put up the EACOP pipeline”* (FGD, Kabaale Sub-County, 18 November 2024). Respondents in Kikuube linked perceived changes in water quality to increased cases of diarrhoea and skin conditions, noting that *“since oil activities started, we see more cases of diarrhoea and skin rashes from using river water”* (FGD, Kikuube, 27 November 2024).

Participants also reported concerns about occupational health. A respondent from Ngwedo in Buliisa observed that “workers in oil fields get sick from chemicals, but there is no proper medical care nearby” (FGD, Ngwedo, 30 November 2024). District officials acknowledged that many rural health facilities remained under-resourced in terms of staffing, equipment, and essential medicines, with one Hoima official explaining that efforts to promote safe water and hygiene practices were often implemented in partnership with civil society organisations but faced resource constraints.

Documentary review of environmental and social impact assessments for the Tilenga and EACOP projects showed that wetlands, rivers, and biodiversity were recognised as valued environmental components and that mitigation measures were proposed for water management, erosion control, occupational safety, and public health interventions (EACOP, 2022a; EACOP, 2022b). Independent assessments cited in the documents pointed to challenges in enforcement capacity, timely dissemination of monitoring results, and the adequacy of occupational health services in rural settings (EACOP, 2023; PAU, n.d.).

Human Capital, Education, and Skills

The national content framework seeks to expand opportunities for Ugandans in employment, training, and supply chains. The Petroleum Act and National Content Regulations require companies to submit national content plans detailing employment targets, training programmes, and technology transfer initiatives for Ugandans (Republic of Uganda, 2013, 2016). The Petroleum Authority manages the National Supplier Database and the National Oil and Gas Talent Register to facilitate Ugandan participation in contracts and jobs (PAU, n.d.).

Field results revealed that these provisions had not yet translated into broad-based improvements in human capital outcomes in the study districts. Community members and parents repeatedly stated that young people had acquired education and certificates but were not securing meaningful

employment in the oil and gas value chain. Barriers reported included high transport and subsistence costs for attending training centres located in urban areas such as Hoima, the limited number of training slots, distance from rural communities, and delayed or incomplete communication about scholarships and training opportunities. Participants in Kikuube explained that “our youths miss out on opportunities because no one tells us about the training programmes or scholarships, or if they communicate, they do so past the timeline” (FGD, Kikuube, 22 November 2024).

Gendered constraints were also evident. Women reported additional obstacles such as caregiving responsibilities, social norms that discouraged them from enrolling in technical trades, and concerns about safety when travelling to training centres. Some female participants described feeling excluded from both land-related processes and higher-value opportunities in the sector, summarising their situation as being “left out of everything, land, jobs, and justice” (FGD, Kikuube, 25 November 2024).

Documentary evidence from national skills and technical vocational education and training (TVET) reports indicated that competence-based assessments and recognition of prior learning had been introduced to reduce barriers to certification. However, they also highlighted persistent constraints associated with limited financing for trainees, uneven distribution of accredited centres, and shortages of assessors and equipment, particularly in rural areas (DIT, 2023; NPA, 2022; World Bank, 2023). These system-level gaps were reflected in the access challenges reported by communities in the three districts.

Social Safeguards, Resettlement, and Livelihood Restoration

Uganda’s safeguards framework is anchored in constitutional guarantees for property rights, land legislation, and environmental regulations. The Constitution provides that compulsory acquisition of property must be accompanied by prompt, fair, and adequate compensation and access to court (Constitution of Uganda, 1995, art. 26). The Land

Acquisition Act and Land Act set procedures for acquisition and require spousal consent for transactions affecting family land (Land Acquisition Act, Cap. 226; Land Act, Cap. 227). Environmental and social assessment requirements include social baselines, consultation, disclosure, and enforceable approval conditions (National Environment Act, 2019; S.I. No. 143 of 2020). International standards applicable to internationally financed projects require compensation at replacement cost, livelihood restoration, and functioning grievance mechanisms (IFC, 2012; World Bank, 2018).

Findings from Buliisa, Hoima, and Kikuube indicated recurring concerns about the transparency and timeliness of valuation and compensation. Households reported being presented with lump-sum compensation figures with little or no explanation of how values for land, crops, and structures had been derived. In Buliisa, some respondents described delays between valuation and payment, during which they felt uncertain about when they would receive the agreed amounts. Women in polygynous households reported difficulties associated with joint account requirements and disputes over who should be recognised as a joint holder.

Participants reported limited visibility of livelihood restoration measures after displacement. Many explained that they had received cash compensation but had not been supported with agricultural inputs, business development services, or verified job placements to rebuild their livelihoods. In Kikuube, several respondents reported that compensation money had been exhausted without establishing sustainable alternative income sources (FGD, Kikuube, 26 November 2024).

Although grievance mechanisms formally existed in the form of village committees, community liaison officers, and telephone hotlines, respondents often experienced challenges in following up on their complaints. In Hoima, participants stated that grievances were acknowledged but that they rarely received updates on investigations or resolutions (FGD,

Hoima, 8 December 2024). District officials confirmed that documentation gaps and capacity constraints at the local level weakened the effectiveness of grievance handling in practice.

Revenue Management and Local Development

Part VIII of the Public Finance Management Act creates the Petroleum Fund and sets rules for the collection, management, and use of petroleum revenues. All petroleum revenues are to be deposited into the Fund and can be transferred to the Consolidated Fund to finance infrastructure and development projects or to an investment reserve for long-term savings (Republic of Uganda, 2015). Section 75 provides that 6 percent of royalties are to be shared with local governments in production areas according to Schedule 6, while 94 percent are retained at the national level. The Act also prescribes detailed reporting, auditing, and investment requirements (Republic of Uganda, 2015).

Field results showed that communities and district officials were aware that laws on petroleum revenue management and revenue sharing existed. However, respondents consistently reported that they had not yet observed any direct financial transfers, projects, or services in their districts or parishes that could be clearly attributed to oil revenues. In Hoima, one participant noted that “we hear that six percent is meant for our districts, but nothing has come to our villages yet” (FGD, Hoima, 6 December 2024). District officials in Buliisa explained that royalty sharing had not commenced because production had not yet started and, therefore, no royalties had been realised (KII, Buliisa, 28 November 2024).

Documentary evidence from government fiscal reports showed that by the end of 2024, the Petroleum Fund held pre-production receipts and investment income rather than recurring production royalties. The Fund balance had increased from earlier periods, but no Schedule 6 transfers to districts had yet been made (Accountant General, 2023; MoFPED, 2024/25). This confirmed the field observations that communities were already experiencing some social and environmental effects of oil

development, while visible fiscal benefits were still pending.

DISCUSSION

This study examined how Uganda's oil and gas governance framework has influenced human well-being in Buliisa, Hoima, and Kikuube. The findings show that while the country has constructed an extensive legal and policy architecture to regulate petroleum exploration, production, environmental protection, national content, and revenue management, the translation of these formal commitments into improved well-being outcomes remains limited and uneven. Interpreting these findings through the Socio-Ecological Systems (SES) theory highlights problems of institutional fit between rules in law and the capacities, incentives, and constraints of actors who are expected to implement and benefit from them (Baggio et al., 2021; Cox et al., 2021; Ostrom, 2009).

The economic findings point to a significant misalignment between national content prescriptions and the actual opportunities accessible to communities in oil-bearing districts. Legally, Uganda has clear provisions on employment, training, and the participation of Ugandan enterprises in supply chains (Republic of Uganda, 2013, 2016). In practice, community members in Buliisa, Hoima, and Kikuube reported that youth with qualifications were not accessing meaningful employment, that training centres were distant and costly to reach, and that information about scholarships and courses arrived late or not at all. Local enterprises described difficulties in meeting pre-qualification thresholds related to capital, certification, and safety management. These constraints echo experiences in Ghana, where national content rules did not automatically generate broad-based local participation because capital requirements, technical standards, and contractual networks favoured established firms and excluded many domestic actors (Arthur, 2020; Darkwah, 2021). The SES perspective helps explain this pattern; the rules of the game are formally in place, but they are poorly matched to the resource

constraints and organisational capabilities of rural households and small firms, which reduces the potential of oil governance to support inclusive livelihood improvement (Baggio et al., 2021; Cox et al., 2021; Ostrom, 2009).

The environmental and public health findings further illustrate weak institutional fit. Uganda's National Environment Act and Environmental and Social Assessment Regulations require impact assessment, mitigation, and ongoing monitoring to safeguard ecosystems and human health in petroleum development areas (Republic of Uganda, 2019; S.I. No. 143 of 2020). Yet residents in the study districts reported perceived degradation of wetlands and rivers such as Kabaale and Wambabya in Kikuube and Hoima, respectively, increased cases of diarrhoea and skin conditions, and occupational exposures in settings where nearby health facilities remained under-resourced. These experiences are consistent with earlier research in the Albertine Graben, where communities linked oil-related activities to deteriorating environmental conditions and health risks, despite the presence of formal environmental regulations (Atekyereza et al., 2021). They also align with wider evidence that environmental and health safeguards in extractive regions are often undermined by limited enforcement capacity, fragmented mandates, and inadequate public access to monitoring results (Schilling et al., 2018). From an SES viewpoint, feedback loops between ecological change, health outcomes, and governance responses appear weak, since community concerns are neither consistently documented nor translated into timely corrective action, which in turn heightens vulnerability and erodes trust in regulatory institutions (Ide, 2022; Schilling et al., 2018).

Human capital and skills outcomes similarly reveal that formal mechanisms have not yet produced equitable gains. National content regulations, the National Supplier Database, and the National Oil and Gas Talent Register were intended to structure Ugandan participation in jobs and contracts (PAU, n.d.; Republic of Uganda, 2013, 2016). The study showed that access to these opportunities was constrained by

transport costs, distance to training centres, limited training slots, and information lags. These constraints are consistent with national diagnostics on the TVET system, which highlight weaknesses in financing, assessor capacity, and spatial distribution of accredited centres as key obstacles to inclusive skills development (DIT, 2023; NPA, 2022; World Bank, 2023). Gendered patterns of exclusion reported by women in Kikuube and Buliisa mirror global evidence that extractive industries often intensify inequalities when training pipelines and employment practices are not deliberately designed to be gender-responsive (Hilson, 2021; UN Women, 2022; World Bank, 2024). Within an SES framing, these findings indicate that the “actors” component of the system, particularly women and rural youth, lacks the enabling conditions, such as finance, information, proximity, and safety, needed to respond to opportunities created at the “governance” level, which limits the ability of the system to convert formal rules into improved wellbeing outcomes (Cox et al., 2021; Ostrom, 2009).

The evidence on social safeguards, resettlement, and livelihood restoration reinforces concerns about implementation quality. Uganda’s constitutional and statutory provisions on compulsory acquisition, together with environmental and social assessment requirements and project-level Resettlement Action Plans, are substantially aligned with international standards that emphasise compensation at replacement cost, livelihood restoration, and functioning grievance mechanisms (IFC, 2012; Republic of Uganda, 2015, 2019; S.I. No. 143 of 2020; World Bank, 2018). However, affected households in all three districts reported opaque valuation processes, delays in payment, limited or absent livelihood support, and grievance mechanisms that were difficult to navigate and track. These experiences parallel findings from Tanzania and other African settings, where ostensibly robust land and safeguards frameworks did not prevent perceptions of unfairness, loss of livelihoods, and mistrust of state and project actors (Bues &

Theesfeld, 2021; Mdee et al., 2020). In SES terms, the “rules” governing land and resettlement appear only partially enforced and are filtered through local power relations and capacity constraints, which undermine their effectiveness in maintaining social resilience and can create new vulnerabilities for displaced households (Schilling et al., 2018).

The findings on revenue management and local development expose a temporal and spatial mismatch between the costs and benefits of oil extraction. Uganda’s Public Finance Management Act created a dedicated Petroleum Fund, strict reporting obligations, and a formula that allocates six percent of royalties to local governments in production areas (Republic of Uganda, 2015). At the time of fieldwork, however, production royalties had not yet commenced, and no Schedule-6 transfers had been made, even as communities were already experiencing land acquisition, disruption of livelihoods, and perceived environmental change. Government fiscal reports confirm that the Petroleum Fund held pre-production receipts and investment income rather than recurring royalties (Accountant General, 2023; MoFPED, 2024/25). This temporal lag resonates with evidence from other resource-rich countries, where visible benefits often trail behind social and ecological costs, which can undermine the legitimacy of petroleum governance and fuel perceptions of a resource curse (Hickey et al., 2023; IMF, 2021; Ross, 2019). Transparency initiatives such as the Extractive Industries Transparency Initiative stress that citizen-facing communication about revenue flows, allocation rules, and funded projects is essential to maintain confidence in the governance of natural resource revenues (EITI, 2023; UGEITI, 2024/25). In SES language, the system currently exhibits delayed and opaque feedback from the “resource” and “governance” subsystems to communities, weakening the potential for inclusive and adaptive responses (Baggio et al., 2021; Cox et al., 2021).

Taken together, the discussion shows that Uganda’s oil and gas governance framework is strong in form but constrained in practice by

institutional capacity gaps, uneven enforcement, structural inequalities, and limited social legibility of rules and benefits. The SES theory helps clarify that improving human well-being in oil-bearing districts will require more than legal reforms. It will require strengthening actor capacities at the local level, re-designing participation mechanisms to account for affordability, gender, and spatial disadvantage, enhancing the visibility and timeliness of environmental and fiscal information, and ensuring that safeguards and livelihood restoration measures are implemented with procedural fairness and verifiable outcomes. Without such systemic adjustments, there is a risk that the current governance arrangements will reproduce patterns of exclusion and vulnerability documented in other resource-dependent contexts, rather than delivering the inclusive wellbeing gains envisaged in Uganda's policy and legal commitments (Arthur, 2020; Darkwah, 2021; Hilson, 2021; Hickey et al., 2023; Ross, 2019).

CONCLUSION

This study set out to examine how Uganda's oil and gas governance framework has shaped human wellbeing outcomes in the districts of Buliisa, Hoima, and Kikuube. Uganda's petroleum legislation and associated regulations constitute one of the most comprehensive governance architectures in the region, covering national content, environmental management, revenue administration, land acquisition, social safeguards, and institutional oversight. However, the findings demonstrate that the existence of strong laws does not automatically translate into improved well-being at the community level. The Socio-Ecological Systems (SES) theory provided a lens for understanding why implementation gaps persist, particularly in contexts where institutional mandates, actor capacities, and resource conditions are not well aligned.

The study found that economic opportunities expected under national content requirements have not materialised evenly across the three districts. Despite provisions promoting Ugandan participation in jobs, training, and supply chains,

many youth and local enterprises remain unable to access these opportunities. Barriers such as transport costs, limited training slots, information asymmetries, and stringent supplier standards disproportionately disadvantage rural communities. These constraints indicate that national content provisions are not yet effectively tailored to the socio-economic conditions of host districts. The SES theory shows that weak links between governance arrangements and actor capacities reduce the system's ability to generate inclusive economic benefits.

Environmental and public health outcomes also reveal a disconnect between statutory safeguards and lived realities. Communities continue to report concerns related to water quality, sanitation, and occupational exposure. Rural health facilities remain poorly equipped to manage increased health risks associated with oil-related activities. These findings highlight persistent weaknesses in monitoring, enforcement, and feedback mechanisms, which limit the responsiveness of environmental governance institutions. The SES perspective suggests that without strong ecological feedback loops and timely corrective action, vulnerabilities accumulate in affected communities.

Human capital development has similarly progressed unevenly. While Uganda has established the National Supplier Database and Talent Register to guide participation, the ability of communities to benefit remains constrained by distance to training centres, affordability challenges, and gendered barriers. Women, in particular, face structural obstacles shaped by caregiving roles, mobility constraints, and limited access to resources needed to participate in technical training. These findings demonstrate that human capital pathways require more deliberate attention to spatial, economic, and gender dynamics if the sector is to support inclusive wellbeing.

The study also found that social safeguards and resettlement processes are experienced as inconsistent and procedurally unclear. Households reported opaque valuation

procedures, delays in payment, limited livelihood restoration, and weak grievance handling. These experiences undermine perceptions of fairness and procedural justice, which are essential components of social well-being. The SES theory emphasises that when rules governing land, compensation, and resettlement are not socially legible or responsive, trust in governance institutions diminishes and social resilience is weakened.

Finally, the absence of visible petroleum revenue benefits at district and community levels reflects a temporal mismatch between the timing of extraction-related impacts and the accrual of fiscal benefits. Although the Public Finance Management Act lays out clear procedures for revenue sharing, production royalties had not commenced during the study period. This means that communities already experience land loss, environmental disruptions, and social change without corresponding improvements in services or infrastructure. Such delays can fuel disillusionment and reinforce perceptions of inequity, particularly in areas where expectations for development benefits have been actively cultivated over time.

Overall, the study concludes that Uganda's oil and gas governance framework is strong in form but significantly constrained in practice. The SES theory demonstrates that enduring improvements in human wellbeing require alignment between legal provisions, actor capacities, institutional performance, and ecological conditions. Strengthening this alignment will require deliberate investment in local institutional capacity, improved information flow, greater transparency in safeguards and revenue management, and targeted interventions to reduce the spatial, economic, and gendered barriers that limit participation. Without such measures, Uganda risks reproducing patterns of exclusion and vulnerability documented in other resource-rich regions, rather than achieving the inclusive and sustainable wellbeing outcomes envisioned in national policy.

Recommendations

The findings demonstrate that Uganda's oil and gas governance framework is comprehensive in design, but constrained by implementation gaps, institutional capacity limitations, and socio-economic inequalities that hinder the realisation of improved wellbeing in host communities. To address these gaps, the following recommendations are proposed for government agencies, district authorities, private sector actors, and development partners.

Strengthen District-Level Institutional Capacity for Implementation

Local governments play a central role in environmental monitoring, community mobilisation, land administration, and the delivery of social services. However, they continue to face shortages of technical staff, operational budgets, and basic equipment. Strengthening district capacity requires predictable financing for field inspections, staffing of critical positions such as environmental officers, community development officers, and health inspectors, and provision of tools for data collection and disclosure. Implementing agencies such as the Petroleum Authority of Uganda and NEMA should collaborate with district structures through joint planning, joint inspections, and shared reporting platforms to ensure consistent enforcement of safeguards.

Increase Transparency and Public Access to Information

Information asymmetries impede communities from accessing jobs, training opportunities, compensation procedures, and grievance pathways. Government institutions, particularly PAU, MEMD, NEMA, and district authorities, should institute proactive disclosure measures that include parish-level noticeboards, regular community briefings, translated materials, and publicly accessible digital dashboards. Operators and contractors should publish simplified versions of national content plans, employment opportunities, compensation progress, and environmental monitoring reports. Strengthening transparency will enhance trust, support accountability, and reduce misinformation.

Improve the Design and Delivery of National Content Programmes

To ensure that national content provisions translate into local economic gains, training programmes must be aligned with the socio-economic conditions of host communities. This requires expanding district-based training centres, subsidising transport and accommodation costs for rural trainees, increasing the number of training slots, and strengthening partnerships with technical institutes in Buliisa, Hoima, and Kikuube. Supplier development programmes should provide phased support for local enterprises, including access to certification, safety training, financial guarantees, and mentorship to meet industry standards. National content reporting should include parish-level participation metrics to assess equity in benefit distribution.

Enhance Environmental and Public Health Protections

Given the concerns raised by communities, enforcement of environmental safeguards requires greater consistency, visibility, and responsiveness. NEMA and PAU should ensure that environmental monitoring results are regularly disclosed at the community level and that corrective actions are clearly communicated. Partnerships between district health departments, operators, and civil society should prioritise equipping frontline health facilities, strengthening disease surveillance, and providing targeted occupational health services for workers and nearby communities. Strengthening environmental governance will reduce ecological risks and contribute to both human and ecosystem wellbeing.

Strengthen Social Safeguards, Compensation Processes, and Livelihood Restoration

Transparency and procedural fairness in compensation and resettlement are essential for mitigating social vulnerability. Government and operators should ensure that valuation methods are clearly explained to households, joint account requirements are applied consistently and sensitively, and compensation is paid in a timely

manner. Livelihood restoration plans should be implemented comprehensively, with follow-up visits to assess progress and provide support for agriculture, small businesses, and vocational training. Grievance mechanisms should be simplified, regularly monitored, and accompanied by clear timelines for response and resolution.

Accelerate Readiness for Revenue-Sharing and Local Development Planning

Although royalty sharing had not commenced at the time of the study, early preparation is needed to safeguard the effectiveness of future transfers. Local governments should develop inclusive, participatory development plans that identify priority investments in health, education, water, roads, and livelihoods that can be supported through petroleum revenue allocations. National institutions should strengthen the clarity of formula-based allocations and provide guidance on performance monitoring, financial reporting, and community engagement to ensure that revenue flows translate into visible and equitable improvements in service delivery.

Integrate Gender-Responsive and Youth-Inclusive Approaches

The findings highlight gendered constraints and youth exclusion from opportunities in the oil and gas sector. National content initiatives, training programmes, and livelihood support should incorporate targeted strategies for women and young people, including flexible training schedules, childcare support, safe transport arrangements, and mentorship programmes. Gender-responsive planning should also be integrated into compensation processes, livelihood restoration, and grievance management.

Align Governance Reforms with the Socio-Ecological Systems Perspective

The Socio-Ecological Systems theory emphasises the importance of feedback loops, actor capacities, and fit between rules and local contexts. Uganda's oil and gas governance system would benefit from regular community-level monitoring that captures ecological and social

changes, integrates them into decision-making, and supports adaptive management. Strengthening community participation at multiple levels, from environmental oversight committees to district planning structures, will enable more responsive governance and sustainable wellbeing outcomes.

Acknowledgement

The author acknowledges the valuable contributions of the community members, district officials, civil society representatives, and technical officers from the Petroleum Authority of Uganda, the Ministry of Energy and Mineral Development, and the National Environment Management Authority, who generously shared their time and insights during data collection. Appreciation is also extended to the local leaders in Buliisa, Hoima, and Kikuube districts for providing guidance and support throughout the fieldwork process. The author recognises the institutional support received from Mbarara University of Science and Technology and expresses gratitude to the academic supervisors for their constructive guidance during the development of this study. The cooperation of all participants made this research possible.

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