Turkana Indigenous People Development

TIPD

Enhancing communities' resilience

How Renewable Energies Projects are Replicating Mistakes of Fossil Fuel Industry in the Indigenous Pastoral Lands.

The case of Kenya-offgrid solar projects in Turkana, Northwestern Kenya.

March 17, 2026

About this report

This report presents findings of the assessment of Kenya off grid Solar Projects (KOSAP) a Renewable Energy initiative providing solar access to assess if it replicating the mistakes of fossil fuel industries. The study research was conducted by the T.I.P.D Research team at the Research and Documentation (R%D) program.

This report synthesises research insights and findings from four research streams; (engaging both primary and secondary data).

Authorship and acknowledgements

This report was prepared by T.I.P.D R&D Team with support from the Coalition for Human Rights in Developments (CHRD). It presents a synthesis of findings from the Renewable Energy study of the Kenya Off grid Solar Project, assessing if and how they are replicating the mistakes of fossil fuel industries in the Turkana indigenous pastoral community.

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Acronyms and abbreviations

RE	Renewable Energy
R&D	Research and Documentation
UNDP AJET	Alliance for Just Energy Transformation
KOSAP	Kenya Off-Grid Solar Access Project
T.I.P.D	Turkana Indigenous People Development.
FPIC	Free Prior and Informed Consent
UNDRIP	UN Declaration on the Rights of Indigenous Peoples
SDGs	Social Development Goals.
ILO	International Labor Organization
FDG	Focus Group Discussion
CLMC	Community Land Management Committee
CSR	Corporate Social Responsibility
NEMA	National Environment Management Authority

Executive Summary

Research and Documentation (R&D) is T.I.P.D program that seek to promote evidence-based advocacies efforts by local civil societies groups in Northwestern Kenya through community-led research. In this Renewable Energy (RE) study the R&D program aimed at uncovering how renewable energy projects are replicating the same mistakes of fossil fuel industries in the Turkana Country a place inhabited by indigenous pastoralist communities. This summary report provides an overview of findings from across the various research streams within the study.

The Just Energy Transition

A just energy transition refers to the shift from fossil fuel-based energy systems like oil, gas, and coal to clean, renewable, and low-carbon energies such as solar, wind, and hydro in a way that is fair, equitable, and inclusive. In January 17, 2023, UNDP Alliance for Just Energy Transformation (AJET)[i], Outlines 8 core principles for a Just Energy Transformation, including being guided by science and Paris Agreement urgency, fairness in cost-sharing, people-centered processes, equity, economic diversification and job creation, social protection, environmental sustainability, good governance, gender and social inclusion, and alignment with global climate goals.

Renewable Energy study in Turkana.

This summary report presents a synthesis of findings from the RE study. This draws on data and findings from Key interviews and Focus Group Discussions across Lorengikipi, Napusmoru and Lochwaangikamatak areas of Loima and Turkana South sub-counties of Turkana County. The study evaluates the Kenya Off-Grid Solar Access Project (KOSAP), a renewable energy initiative providing solar access, to determine if it replicates fossil fuel industry mistakes, such as inadequate community engagement, land disputes, and limited benefits[ii]. Findings from RE study are presented in greater detail in part 2.1.

Study methodology

This study adopted a mixed-methods approach combining quantitative and qualitative data from existing sources with primary data collection through interviews and focus groups discussions. Further details on study methodology is set out in part 2.

Limitations

The study reflects the current state of evidence and key informant insights as captured in existing literature and data, as well as collected through primary data collection with Research and Documentation (R&D) team. Although examining implementation of all KOSAP project, the extent and quality of evidence available to support conclusions varies significantly. Primary data collected through interviews and focus group discussions reflects the expertise and insights of those that chose to participate in the study and should be understood in this light. Wherever possible, insights have been triangulated across participants and research focus.

Key findings

This report analyzes survey data from 311 respondents in the Turkana community, collected in December 2025 by Turkana Indigenous People Action for Development (TIPD) Research and Documentation team. The study evaluates the Kenya Off-Grid Solar Access Project (KOSAP), a renewable energy initiative providing solar access, to determine if it replicates fossil fuel industry mistakes, such as inadequate community engagement on land acquisition processes, uncompensated displacements, broken promises, limited benefits, lack of impacts assessments reports. Below are the core findings;

- Awareness and Understanding: 98.9% have heard of KOSAP, mainly via community meetings, but only 11.7% fully understand its purpose. Benefits are negligible, with 94.9% reporting none.

- Community Engagement: 83.0% were invited to discussions (primarily public meetings), with 90.0% leader involvement and 97.1% inclusion of women/youth. However, opinions were only partially considered (82.9%), with challenges like language barriers (40% of mentions), distance, and timing.

- Land Acquisition: 60.1% reported land use, with 97.3% consulted beforehand. Transparency was partial (82.4%), but compensation was absent for 92.5%, leading to disputes in 23.0% of cases—mostly displacement without resettlement. Pastoral practices were not respected in 56.7% of responses.

- Satisfaction and Benefits: Engagement satisfaction is moderate (62.7% satisfied, 34.4% neutral), but 94.9% report no community benefits, highlighting implementation gaps.

The data reveals partial replication of fossil fuel mistakes: While engagement surpasses typical extractive models, persistent issues like uncompensated displacement, low transparency, broken promises and unrealized benefits echo historical grievances in Turkana's oil sector. These risks eroding trust in renewables, potentially hindering energy transition goals. Positive aspects, such as inclusive discussions, suggest KOSAP could model better practices with improvements.

1. Introduction

Background and Context

Turkana County, located in northwestern Kenya, is one of the most marginalized regions in the country, characterized by arid landscapes, pastoralist livelihoods, and high poverty rates[iii]. The community, predominantly composed of Indigenous Turkana people who rely on nomadic herding for survival, has historically been impacted by extractive industries, particularly fossil fuel exploration. Since the discovery of oil reserves in 2012 by companies like Tullow Oil, the region has experienced environmental degradation, land dispossession, inter-community conflicts, and unfulfilled promises of economic benefits, leading to widespread distrust of large-scale energy projects. In response to global calls for sustainable energy transitions, the Kenyan government, with support from international partners like the World Bank, launched the Kenya Off-Grid Solar Access Project (KOSAP) in 2017[iv]. Valued at approximately USD 150 million, KOSAP aims to provide solar-powered electricity to off-grid areas in 14 underserved counties, including Turkana, through mini-grids, stand-alone systems, and clean cooking solutions. The project targets over 277,000 households and emphasizes community benefits such as improved access to energy, job creation, and reduced reliance on fossil fuels. However, despite its renewable focus, there are concerns that KOSAP may inadvertently replicate the systemic failures of the fossil fuel industry, such as inadequate community engagement, violations of land rights, and inequitable benefit distribution. This problem statement draws from a comprehensive analysis of survey data collected by the Turkana Indigenous People Action for Development (TIPD) in early January 2026. The dataset includes responses from 310 participants (after excluding the header), primarily from the Napusimoru sub-location, with some from Lorengikipi. Respondents were selected to represent diverse demographics, including pastoralists (79.1%), traders (13.5%), and community leaders (33.1%). The survey, conducted via structured questionnaires,

assessed awareness of KOSAP, community engagement processes, land acquisition practices, and overall satisfaction, with a specific lens on adherence to Free, Prior, and Informed Consent (FPIC) principles as outlined in international standards like the UN Declaration on the Rights of Indigenous Peoples (UNDRIP)[v].Despite the KOSAP project having guiding frameworks, like resettlement policy[vi], environmental and social framework[vii], the data reveals a stark gap between the project's intentions and its on-ground realities, highlighting how renewable energy initiatives in Turkana are perpetuating extractive patterns rather than fostering equitable development. This not only undermines the potential of renewables to drive sustainable progress but also exacerbates existing vulnerabilities in a climate-stressed region.

1.1 Problem Statement

The primary issue is that renewable energy projects like KOSAP in Turkana are replicating the mistakes of the fossil fuel industry by prioritizing project implementation over genuine community inclusion, leading to land-related conflicts, minimal tangible benefits, and erosion of trust. Despite high levels of initial awareness and consultation, the project fails to deliver on promises, resulting in displacement without compensation, partial transparency, and disregard for pastoral land use practices. This perpetuates a cycle of marginalization, where Indigenous communities bear the costs of energy development without reaping the rewards, mirroring the "resource curse" observed in oil extraction. Key evidence from the survey data underscores this replication:

- Limited Awareness and Understanding Despite High Exposure: While 84.9% of respondents have heard of KOSAP (primarily through community meetings), only 11.7% fully understand its purpose, such as providing solar energy access. Partial understanding dominates at 87.1%, and a small fraction (1.1%) reports no understanding. This superficial knowledge indicates inadequate education and outreach, similar to fossil fuel projects where communities are informed but not empowered to engage meaningfully.
- Superficial Community Engagement with Persistent Barriers: Although 83.0% were invited to pre-implementation discussions (mostly public meetings), engagement is often tokenistic. Opinions were only partially considered in 82.9% of cases, with full consideration in just 13.6%. Community leaders were involved in 90.0% of responses, and women/youth inclusion was high at 97.1%, yet challenges like language barriers (mentioned in 40% of open responses), distance

(30%), and timing/illiteracy (~10%) hindered participation. This echoes fossil fuel consultations, which are often performative and exclude vulnerable groups, leading to decisions that do not reflect community needs.

- Problematic Land Acquisition Processes: Land was acquired for KOSAP facilities (e.g., solar mini-grids) in 60.1% of reported cases, typically involving ~5 acres. Consultation occurred in 97.3% of these instances, but transparency was partial (82.4%) or absent (2.1%). Critically, 92.5% received no compensation or benefits, and disputes arose in 23.0% of cases, primarily due to displacement of residents without resettlement. Over half (56.7%) believe the process did not respect pastoral land practices, such as communal grazing routes, forcing changes in livelihoods. This directly replicates fossil fuel land grabs, where communal lands are appropriated without fair recompense, leading to loss of traditional resources and increased poverty.
- Absence of Benefits and Low Satisfaction: An overwhelming 99.6% reported no personal or community benefits (e.g., solar access or jobs), with only 0.4% noting minor gains like employment. Overall satisfaction with engagement is moderate (58.8% satisfied, 34.4% neutral), but 94.9% confirm no broader community advantages. Open-ended recommendations frequently call for job opportunities (60%), compensation/resettlement (20%), and improved transparency (15%), highlighting unfulfilled expectations akin to oil projects' broken promises.

These patterns indicate a systemic failure: Renewables are framed as "green" alternatives, yet they employ similar top-down approaches, treating Indigenous lands as exploitable resources and sidelining FPIC (despite 85.5% awareness of rights). In Turkana, where pastoralism supports over 90% of livelihoods and climate change intensifies droughts, such projects risk amplifying vulnerabilities rather than alleviating them.

Impacts and Consequences

The replication of fossil fuel mistakes has multifaceted impacts on the Turkana community:

- Socio-Economic Effects: Displacement disrupts pastoral mobility, leading to loss of grazing lands and increased food insecurity. With no jobs or energy access realized, poverty persists, and inequality grows—benefits often captured by external actors or local elites, mirroring oil's "elite capture."
- Environmental and Cultural Harm: Solar installations, while low-emission, encroach on communal lands, fragmenting ecosystems and eroding cultural practices tied to land stewardship. This parallels oil's pollution and biodiversity loss, undermining the community's resilience to climate change.

- Social and Political Tensions: Disputes (23.0%) foster conflicts within and between communities, eroding social cohesion. Low trust in government and developers (evident in neutral/dissatisfied responses) could lead to protests or resistance, as seen in oil blockades, stalling future renewable transitions.
- Broader Implications for Energy Transition: In a region with vast renewable potential (e.g., solar irradiation of 6-7 kWh/m²/day), failing projects like KOSAP risk discrediting clean energy, perpetuating fossil fuel dependency and hindering Kenya's 100% renewable electricity goal by 2030.

Without intervention, these issues could escalate, contributing to a "green resource curse" where renewables exacerbate rather than resolve inequities.

Significance and Call to Action

This problem is significant because Turkana exemplifies the global challenge of just energy transitions in Indigenous territories. As Kenya scales up renewables under its Vision 2030[viii] and commitment on Paris Agreement[ix], replicating fossil fuel errors threatens sustainable development goals (SDGs 7: Affordable and Clean Energy; 10: Reduced Inequalities; 13: Climate Action). The survey data, representing grassroots voices, provides empirical evidence that policy reforms are urgently needed to ensure FPIC, equitable benefits, and cultural sensitivity. Addressing this requires stakeholder collaboration: Governments and funders must enforce transparent land processes and benefit-sharing mechanisms; NGOs like T.I.P.D should amplify advocacy; and communities need capacity-building for meaningful participation. Ultimately, transforming renewables from extractive to empowering tools is essential for equitable progress in Turkana and similar marginalized regions.

1.2 Research Objectives

To assess the extent to which renewable energy projects, particularly KOSAP, are replicating the mistakes of the fossil fuel industry in Turkana County by evaluating community awareness, engagement processes, land rights, benefit distribution, and overall satisfaction among affected Indigenous pastoralist communities.

1.2.1 Specific Objectives

1. To evaluate the level of awareness and understanding of KOSAP among Turkana community members, including knowledge of the project's purpose, components, and their rights to Free, Prior, and Informed Consent (FPIC).
2. To examine the nature and effectiveness of community engagement in the planning and implementation of KOSAP, including the extent of participation by

community members, leaders, women, and youth, as well as barriers to meaningful involvement.

3. To investigate land acquisition processes associated with KOSAP facilities (e.g., solar mini-grids), focusing on consultation, transparency, compensation mechanisms, resolution of disputes, and respect for traditional pastoral land use practices.
4. To determine the tangible benefits derived by the community from KOSAP, such as access to electricity, employment opportunities, or other socio-economic improvements, and to identify gaps between promised and actual outcomes.
5. To assess overall community satisfaction with KOSAP implementation and engagement processes, while documenting concerns, challenges, and recommendations for improvement.
6. To generate evidence-based insights and recommendations that can inform policy, project design, and advocacy efforts to ensure future renewable energy initiatives in Turkana and similar marginalized regions adhere to principles of equity, inclusivity, and respect for Indigenous rights, thereby preventing the replication of extractive industry failures.

1.2.3 Research Questions

- To what extent were local communities, particularly the Turkana people, consulted before renewable energy projects like KOSAP were implemented? Can you share specific examples of how your community was involved or excluded? (Probe: Was Free, Prior, and Informed Consent (FPIC) respected? How does this compare to consultation processes for fossil fuel projects, like oil exploration in Turkana?)
- How have renewable energy projects addressed or failed to address the needs and rights of indigenous communities in Turkana? Are there similarities to how fossil fuel projects have historically impacted local communities? (Probe: Examples of displacement, loss of land access, or lack of benefits.)
- What mechanisms are in place to ensure that local communities have a voice in the ongoing management of these projects? Do you feel these are sufficient, or do they mirror the top-down approaches seen in fossil fuel industries? (Probe: Are there community liaison officers, grievance mechanisms, or regular feedback sessions?)
- Have renewable energy projects, such as KOSAP, delivered promised economic benefits (e.g., jobs, infrastructure, or revenue sharing) to the Turkana community? How does this compare to the socio-economic outcomes of fossil fuel projects in

the region?
(Probe: Are jobs mostly for locals or outsiders? Are benefits equitably distributed?)

- Are there examples where renewable energy projects have led to socio-economic imbalances, such as prioritizing foreign or urban-based companies over local businesses or workers? How does this compare to the fossil fuel industry's practices? (Probe: Are local businesses involved in supply chains or project contracts?)
- In what ways could renewable energy projects better ensure that economic benefits stay within Turkana, and how might these lessons apply to avoiding the "resource curse" seen in fossil fuel regions like the Project Oil Kenya-South Lokichar Oil Basin? *
- How have renewable energy projects affected cultural or sacred sites in Turkana? Are these impacts being addressed, and how do they compare to the cultural disruptions caused by fossil fuel extraction? (Probe: Are there efforts to protect sacred sites or involve elders in decision-making?)
- Are renewable energy projects in Turkana being implemented with sufficient environmental safeguards? What improvements would you suggest to avoid repeating the environmental degradation seen in fossil fuel projects? (Probe: Are environmental impact assessments transparent and inclusive?)

1.4 Significance of the RE study.

This study, conducted by Turkana Indigenous People Development (T.I.P.D) between the month December 2025 and January 2026, holds profound significance at local, national, and global levels, as it provides timely, evidence-based insights into the risks of replicating extractive industry failures during the global shift toward renewable energy. By documenting the lived experiences of 311 Turkana community members affected by the Kenya Off-Grid Solar Access Project (KOSAP), the study addresses a critical gap in understanding how well-intentioned renewable initiatives can inadvertently perpetuate patterns of marginalization historically associated with fossil fuel development in Indigenous territories.

1.**Local Significance**: **Amplifying Marginalized Voices and Protecting Pastoralist Livelihoods**

In Turkana County one of Kenya's most arid, impoverished, and underserved regions, the study gives voice to Indigenous pastoralists who have repeatedly borne the disproportionate costs of large-scale energy projects. The findings reveal persistent issues such as uncompensated land displacement, lack of tangible benefits, and disregard for communal pastoral practices, despite high levels of consultation. By highlighting these

grievances, the study empowers local communities to demand accountability and equitable outcomes. It serves as a vital advocacy tool for organizations like TIPD to push for redress mechanisms, including fair compensation, resettlement support, and priority employment for locals. Ultimately, it contributes to safeguarding traditional livelihoods that are already threatened by climate change, drought, and resource competition.

2. National Significance: Informing Policy and Practice for a Just Energy Transition in Kenya

Kenya has ambitious renewable energy targets, aiming for 100% clean electricity by 2030 and universal energy access under Vision 2030. Projects like KOSAP, supported by the World Bank and Kenyan government, are flagship initiatives in this agenda. However, this study exposes implementation gaps that undermine these goals, particularly in marginalized counties. Its evidence of tokenistic engagement, inadequate FPIC adherence, and failure to deliver promised benefits provides concrete recommendations for policy reform. It underscores the need for stronger regulatory frameworks on land acquisition, mandatory benefit-sharing models, and culturally sensitive project design. By preventing the replication of fossil fuel mistakes like those seen in Tullow Oil's operations, the study supports Kenya in achieving a truly just and inclusive energy transition that aligns with national commitments to sustainable development and reduced inequalities (SDGs 7, 10, and 13).

3. Global Significance: Contributing to Debates on Just Transitions and Indigenous Rights in Renewable Energy Development.

Globally, the rapid scale-up of renewable energy infrastructure driven by climate imperatives has raised concerns about a potential "green resource curse," where clean energy projects displace communities, encroach on Indigenous lands, and exacerbate inequalities in the name of sustainability. This study adds an empirical, community-centered case from the Global South to this discourse, demonstrating parallels between fossil fuel and renewable energies. It complements existing research on projects like the Lake Turkana Wind Power and geothermal developments in Kenya, reinforcing calls for rights-based approaches grounded in UNDRIP and ILO Convention 169. The findings are particularly relevant for international financiers such as World Bank, African Development Bank and developers operating in Indigenous territories across Africa, Latin America, and Asia. By illustrating how renewables can replicate historical injustices if not carefully managed, the study advocates for global standards that prioritize language sensitive Free, Prior, and Informed Consent, equitable benefit distribution, and respect for traditional land uses.

4. Methodological and Temporal Significance: Timely Grassroots Evidence in a Fast-Evolving Context.

Conducted nearly a decade after KOSAP's launch in 2017, the study captures mid-to-late implementation realities at a moment when many facilities are operational yet benefits

remain unrealized. Its primary data from directly affected pastoralists predominantly from Napusimoru offers a rare, granular perspective that official project evaluations often lack. This grassroots methodology strengthens the credibility of claims about exclusion and displacement, providing a counter-narrative to top-down assessments. In summary, this study is significant because it bridges a critical evidence gap at the intersection of renewable energy, Indigenous rights, and just transitions. It not only exposes risks in current practice but also charts a path toward more equitable renewable energy development one that ensures Turkana's indigenous pastoralist communities become true beneficiaries rather than casualties of the global shift away from fossil fuels. The insights generated have the potential to influence policy, improve future projects, and contribute to a more just and sustainable energy future for marginalized regions worldwide.

1.5 Theoretical framework

This RE study on the implementation of the Kenya Off-Grid Solar Access Project (KOSAP) in Turkana County, Kenya, adopts an integrated theoretical framework that combines energy justice, political ecology, just energy transitions, and rights-based approaches centered on language sensitive Free, Prior, and Informed Consent (FPIC). These interconnected lenses provide a robust basis for analyzing whether renewable energy projects replicate the extractive mistakes of the fossil fuel industry, such as inadequate community engagement, broken promises, land dispossession, and inequitable benefit distribution, while prioritizing the perspectives of Indigenous pastoralist communities. The framework is rooted in critical social science traditions that view energy systems not merely as technical infrastructures but as socio-political constructs shaped by power relations, historical inequalities, and environmental dynamics. It draws on empirical insights from similar cases like Lake Turkana Wind Power project to interrogate how "green" initiatives can perpetuate a "green resource curse." Energy justice serves as the core analytical lens, providing a multidimensional approach to evaluate fairness in energy systems. Popularized by scholars like Sovacool and Dworkin (2014), it encompasses three tenets:

- Distributional Justice. Focuses on the equitable allocation of benefits (e.g., electricity access, jobs) and burdens (e.g., land displacement, environmental impacts). In this study, it assesses whether KOSAP delivers tangible socio-economic gains to Turkana communities or disproportionately imposes costs, mirroring fossil fuel inequities.

- Procedural Justice. Emphasizes inclusive, transparent, and participatory decision-making processes. It critiques tokenistic consultations and barriers like language issues, evaluating adherence to meaningful engagement.
- Recognition Justice. Addresses the acknowledgment of diverse identities, vulnerabilities, and knowledge systems, particularly those of marginalized Indigenous groups. Here, it examines respect for pastoralist livelihoods and cultural ties to land.

Extended frameworks such as Jenkins et al., 2016) incorporate restorative and cosmopolitan justice, highlighting the need to remedy historical injustices from extractive projects (e.g., oil exploration in Turkana) and consider global climate responsibilities.

Political Ecology of Energy Transitions

Political ecology complements energy justice by situating energy projects within broader power structures, resource conflicts, and ecological transformations (Bridge et al., 2018). It views renewables as potentially replicating "extractive" logics under a green veneer—"green extractivism"—where land enclosure, elite capture, and marginalization persist despite sustainability claims.In Turkana's context, this lens analyzes how KOSAP reinforces center-periphery dynamics (e.g., national energy priorities overriding local pastoral needs) and exacerbates vulnerabilities in arid, climate-stressed environments. It draws on concepts like the "4Es" (enclosure, exclusion, encroachment, entrenchment) from Sovacool et al. (2021) to map causal pathways of winners (e.g., external developers) and losers (e.g., displaced herders).

Just Energy Transitions and Rights-Based Approaches

The framework incorporates just transition principles, which advocate for equitable shifts from fossil fuels to renewables without perpetuating inequalities (Healy & Barry, 2017). For Indigenous contexts, it integrates a rights-based approach grounded in the UN Declaration on the Rights of Indigenous Peoples (UNDRIP, 2007), emphasizing self-determination, land rights, and FPIC.FPIC is operationalized as a cornerstone: "Free" (without coercion), "Prior" (before decisions), "Informed" (full disclosure), and "Consent" (active agreement, not mere consultation). Violations risk legitimizing "green grabbing" or neocolonial resource appropriation. This aligns with court rulings (e.g., Turkana wind farm case, 2021) underscoring FPIC's role in balancing renewables with Indigenous rights.

Integration and Application to the Study

These theories converge in a hybrid framework tailored to Turkana's pastoralist realities:

- Energy Justice evaluates outcomes (benefits, burdens) and processes (engagement quality).
- Political Ecology contextualizes power imbalances and ecological disruptions.

- Just Transitions with FPIC provides normative guidance for equitable, rights-respecting implementation.

This framework guides the analysis of survey data (e.g., high consultation but low compensation/displacement issues) to reveal systemic gaps. It critiques top-down renewables as potentially entrenching marginalization while advocating for community-led models that prioritize Indigenous knowledge and equity. By highlighting "green extractivism" risks, the study contributes to global debates on ensuring transitions are truly just, particularly in the Global South.

2. Research Methodology

This study employed a cross-sectional survey design using a structured questionnaire for Key interviews and focus group discussions. It was administered by trained enumerators in three communities in Turkana County, Kenya.

2.1 Focus Group Discussion

In addition to questionnaires and interviews, this study employed focus group discussions (FGDs) as a key qualitative data collection method. FGDs are particularly effective in exploring complex social issues and capturing a diversity of perspectives from community members who are directly affected by a given phenomenon (Krueger & Casey, 2015). This report presents an analysis of two Focus Group Discussions (FGDs) conducted on 22–23 December 2025 in Turkana County, Kenya. The FGDs gathered community perspectives on two renewable energy initiatives: the KOSAP (Kenya Off-grid Solar Access Project) at Napusimoru and Lorengippi communities. Both communities are from the Turkana people and share similar experiences of limited transparency, unfulfilled project promises, land acquisition concerns, and inadequate community participation. Key findings indicate that both projects remain largely unimplemented despite land having been acquired and initial community consultations held. Communities' express frustration over broken commitments, exclusion from economic opportunities, poor environmental practices, and lack of clarity on project ownership and timelines.

2.1.1 Key discussions

Both communities reported that initial consultations were carried out before land acquisition, but meaningful ongoing participation has been lacking. The following are the very key points that comes out from the discussion across both communities;

- Napusmoru community reported that a public baraza was held; a committee and grievance committee were elected among the community members.
- However, the community is dissatisfied with the manner land was acquired, the process lacked sufficient clarity, one community member was displaced from the acquired land without compensation to date, this was cited by a representative of Nakukulus Community Land Management Committee.
- In Napusmoru, the last project engagement meeting was held in October 2025, and no activities have started to date.
- There is no clear roadmap or timeline communicated to the community for KOSAP implementation.
- Napusmoru community raised concerns over exclusion of Community Land Management Committee (CLMC) in Land acquisition processes as required by the community land act 2016, instead the KOSAP team used chief and village elders.
- In Lorengikipi where they are no community land management committee (CLMC) yet proposes of a different community chosen person to liaise with KOSAP project team
- Both communities raised that since the initial consultation, no any other step taken by the KOSAP team.

2.1.2 Implementation Comparison: Renewable Energy vs. Fossil Fuel Projects.

Criterion	Fossil Fuel (Tullow Oil)	KOSAP / Renewable Energy
Free Prior and Informed Consent (FPIC)	-Lack of FPIC -Language barrier	Inadequate and non-language sensitive FPIC. -Language barrier
Access to Information	-Information made public through the Kenya gazette notice, only accessible to elites, locking out indigenous pastoralists.	- Information made public through the Kenya gazette notice, only accessible to elites, locking out indigenous pastoralists.

Criterion	Fossil Fuel (Tullow Oil)	KOSAP / Renewable Energy
	- Lack of transparency with withheld documents such EIA, and Lease agreements, displacement and resettlement guide.	-Unshared EIA report for the KOSAP projects.
Land rights	-Non-participatory land acquisition process. -Compensations mismanaged by the trustee (County government)	Irregular land acquisition process -No information about compensations of the displaced and community.

2.1.3 Summary of key findings

- Both communities experienced initial consultation for land acquisition, but engagement has since stalled.
- Both communities don't understand the components of KOSAP project, they are confusing it with the existing street lights, private-business solar power supplies.
- No physical project activities have commenced in either community despite land being handed over.
- Promises made (CSR projects, compensation, jobs) remain largely unfulfilled.
- Transparency is a major concern: communities do not know who owns or drives the projects.
- Local economic inclusion is inadequate, foreign contractors are being used while local businesses are excluded.
- Environmental safeguards are insufficient, particularly around battery storage and disposal.
- Community land rights are contested; residents prefer lease arrangements, not outright sale or uncompensated displacement.

- Both communities link renewable energy project failures to broader patterns seen in extractive/fossil fuel industries in Turkana.

2.1.4 Recommendations

2.1.4.1 Community Engagement

- Conduct a language sensitive adequate Free Prior and Informed Consent.
- Establish regular, structured community update meetings (at minimum quarterly).
- Designate a locally chosen community liaison person in addition to the area chief, where there no CLMC.
- Share project timelines, ownership structures, and implementation plan with community leaders.

2.1.4.2 Transparency & Governance

- Publicly disclose the identity of all companies and entities involved in KOSAP project.
- Distribute EIA reports to community leaders and host public review sessions.
- Create a clear project roadmap with verifiable milestones and deadlines.

2.1.4.3 Socio-Economic Inclusion

- Prioritize local contractors, suppliers, and workers in all project phases.
- Involve community leaders and the Community Land Management Committee (CLMC) in negotiating employment terms.
- Address compensation for displaced persons before further land activities proceed.
- Channel all community-derived project (CSR) funds through the CLMC for accountability.

2.1.4.4 Environmental Safeguards

- Develop and communicate a formal end-of-life materials disposal plan in line with Kenya's environmental regulations.
- Engage Kenya's National Environment Management Authority (NEMA) to review disposal practices.

2.1.5 FGD Conclusion

The FGD findings from Napusimoru and Lorengippi reveal a pattern of incomplete project implementation, broken promises, and insufficient community inclusion in Turkana County's renewable energy initiatives. While both communities' express willingness to support renewable energy development, their trust has been eroded by a lack of transparency, exclusion from economic benefits, and environmental negligence. Addressing these concerns is critical not only for the success of these specific projects but for building long-term social acceptance of renewable energy in Turkana and similar communities across Kenya.

Immediate action is required on compensation, environmental safety, and the communication of clear project timelines. The communities' recommendations - grounded in lived experience and comparison with the fossil fuel sector - provide a pragmatic roadmap for more inclusive and transparent project implementation.

Napusimoru community providing responses during Focus group discussion

Lorengippi Focus group discussion

2.2 Key interviews: Data Analysis

The Data was collected in December 2025 using the Kobo Toolbox digital data collection platform.

Total respondents	311	100%
Lorengikipi	110	35.4%
Napusimoru	101	32.5%
Lochwaangikamatak	100	32.2%

Male respondents	221	71.1%
Female respondents	90	29.0%
Pastoral community members	278	89.4%
Community leaders among respondents	82	26.4%

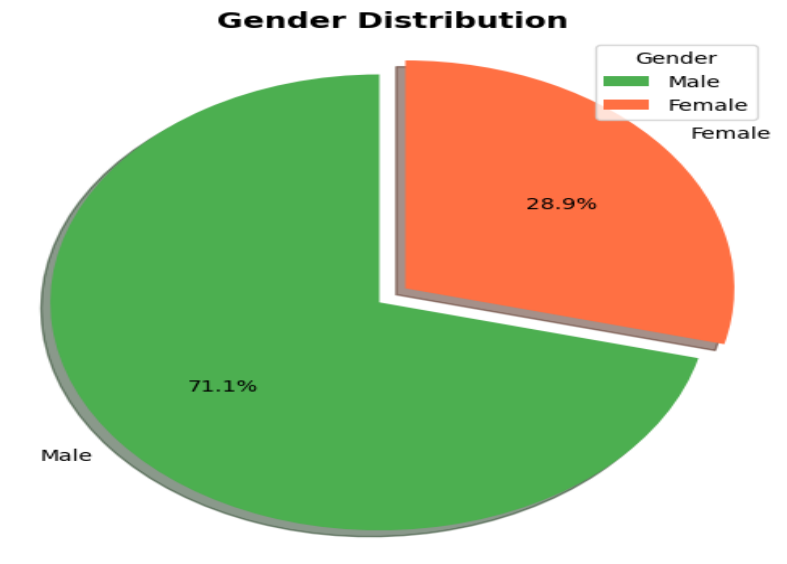
The raw dataset was exported as an Excel file containing 311 rows and 78 columns representing every question, sub-question and system-generated field in the survey instrument. The first stage of analysis involved data cleaning and preparation, columns were renamed from their full question text to short analytical labels, response categories were inspected for inconsistencies and variant spellings arising from manual data entry.

2.2.1 Results and findings

This report presents a comprehensive analysis of survey data collected from 311 members of Indigenous pastoralist communities in Turkana County, Kenya, to assess whether the Kenya Off-Grid Solar Access Project (KOSAP) is replicating the structural mistakes of the fossil fuel industry in its engagement with marginalized communities. The study was commissioned by Turkana Indigenous People Action for Development (TIPD) and draws on responses from three sub-locations, Lorengikipi (n=110), Napusimoru (n=101), and Lochwaangikamatak (n=100).

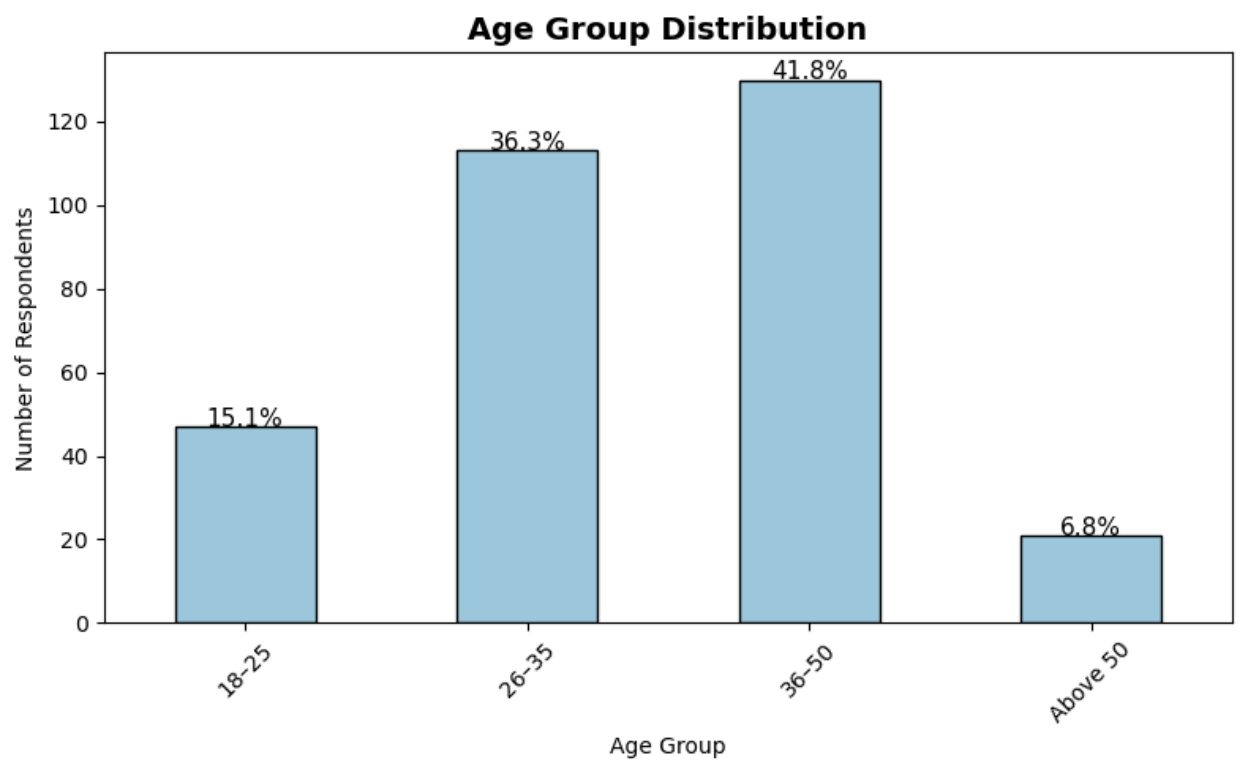
2.2.2 Gender dimension

The data reveals a strong male predominance in the sample, with males comprising 71.1% and females only 28.9%. This imbalance suggests that males are generally more conversant with land issues than females. The top community recommendation of 'gender balance' (9 respondents) and 'gender equality' (9 respondents) alongside 'gender inclusivity' (5 respondents) confirms that community members themselves identify gender inclusion as an insufficiently addressed dimension of KOSAP.



2.2.3 Age distribution

The age distribution (36-50 years = 41.8%; 26-35 = 36.3%; 18-25 = 15.1%; 50+ = 6.8%) reveals relative underrepresentation of youth (18-25) and elders (50+). Elder representation matters because customary land governance in Turkana is vested in elder councils whose authority over pastoral territories is not captured in formal land titling systems.



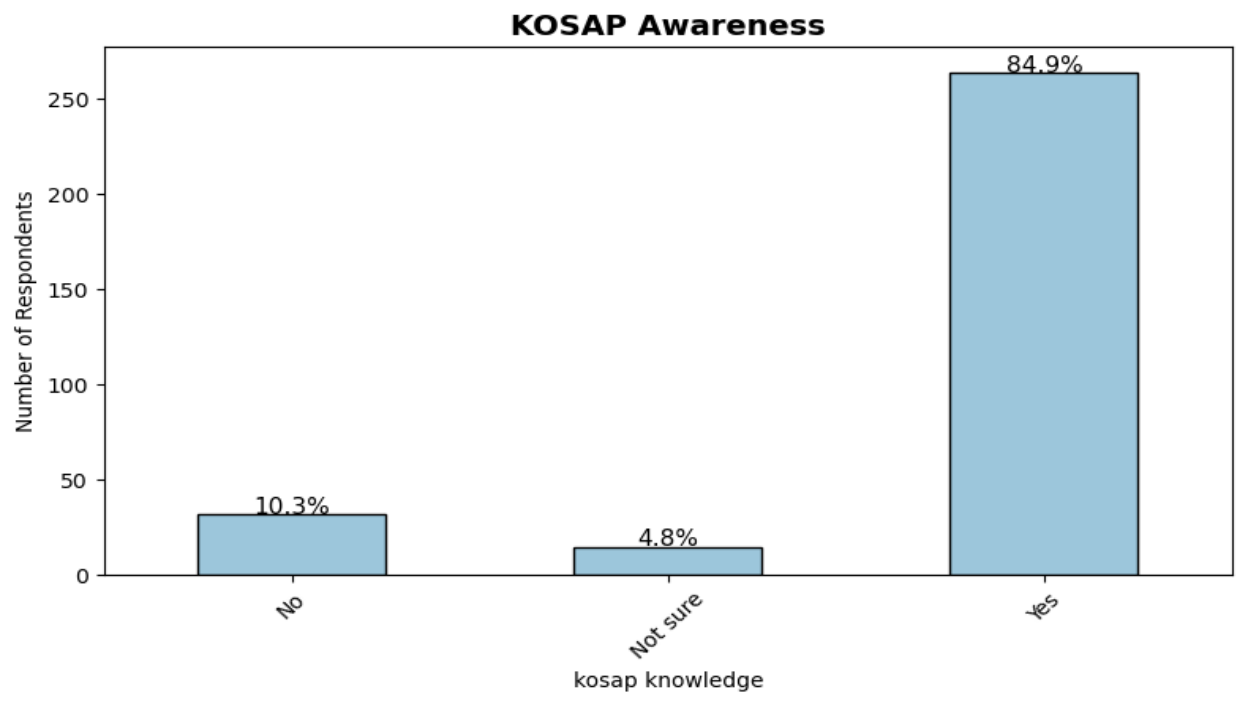
2.2.4 Occupation dynamics

The dominance of pastoralists in the sample is analytically significant as it validates the study's representativeness, the communities most likely to be affected by KOSAP's land acquisition and infrastructure placement are precisely those whose livelihoods depend on mobility-based land use. It also means that findings on land rights, compensation and pastoral practice disruption speak directly to the majority of respondents lived reality rather than to a minority subgroup. The relatively small farmer and trader populations also serve as a reminder that Turkana's economy is not homogeneous. While pastoralism dominates, the 16.7% of respondents in non-pastoral livelihoods may experience KOSAP's impacts particularly access to electricity for small businesses differently and their perspectives warrant disaggregated analysis in future work.

3. Discussions

3.1 Objective 1: Knowledge & Awareness

84.9% have heard of KOSAP. This represents a relatively successful information dissemination effort. However, nominal awareness is a necessary but not sufficient condition for FPIC. Knowing a project exists is not the same as understanding its implications for one's land, livelihood and rights.



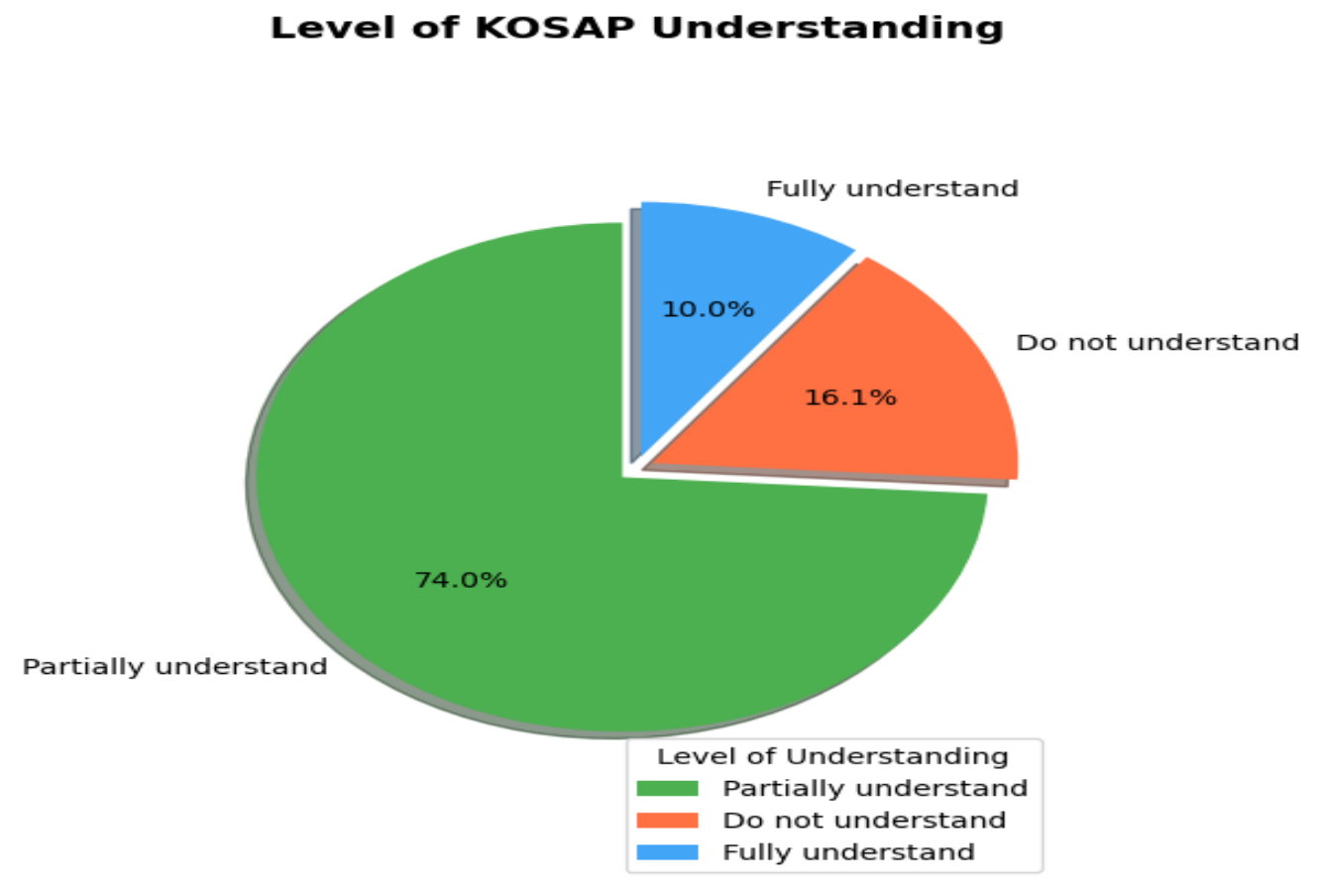
The information channels through which communities learned about KOSAP reveal as much about the quality of awareness as the quantity. Nearly every aware respondent 98.9% learned through community meetings, making it by far the dominant channel. On the surface this looks like thorough outreach. But community meetings, as the engagement data confirms, were overwhelmingly one-directional public gatherings where information was presented to communities rather than developed with them. Learning about a project through a meeting you attended does not mean you left understanding it which is precisely what the 87.1% partial-understanding figure bears out.

The second and third channels, local leaders (61.0%) and project staff or NGOs (60.6%) are closely matched and together point to an elite-mediated information flow. Knowledge

of KOSAP is largely passing through two filtered layers, formal leaders and implementing agencies.

Source	**Count (of 264)**	**% of those aware**
Community meetings	261	98.9%
Local leaders	161	61.0%
Project staff/NGOs	160	60.6%
Radio/TV	13	4.9%
Other	0	0.0%

The understanding data exposes a critical gap between exposure and comprehension. Of the 264 respondents who have heard of KOSAP, only 31 just 11.7% fully understand its purpose. The vast majority, 230 respondents (87.1% of those aware), sit in the partial understanding category, they know something about KOSAP but not enough to meaningfully engage with its implications for their land, livelihoods or rights. This distinction matters enormously in the context of FPIC. Only 3 respondents reported not understanding KOSAP at all, which might appear encouraging. But read alongside the 87.1% partial understanding may indicate that the respondents being reluctant to admit complete ignorance rather than genuine comprehension. The 47 respondents who had not heard of KOSAP at all (15.1% of the full sample) represent a separate and equally serious concern. These are community members living in areas where a major energy project is underway or planned who have been entirely bypassed by information dissemination efforts. Collectively, only 1 in 10 aware respondents possesses the level of understanding that FPIC requires as its baseline. The remaining 9 in 10 are being asked, implicitly or explicitly, to consent to something they do not fully understand.



74.0% partially understand KOSAP's purpose. This represents the largest segment of communities who know something about the project but lack comprehensive understanding. Partial knowledge is particularly problematic for FPIC because it creates an illusion of informed consent without its substance. Only 9.9% fully understand the purpose, and just 0.3% know KOSAP's components. This represents a knowledge chasm that renders formal FPIC processes hollow. A community cannot give meaningful informed consent to a project whose components it does not know

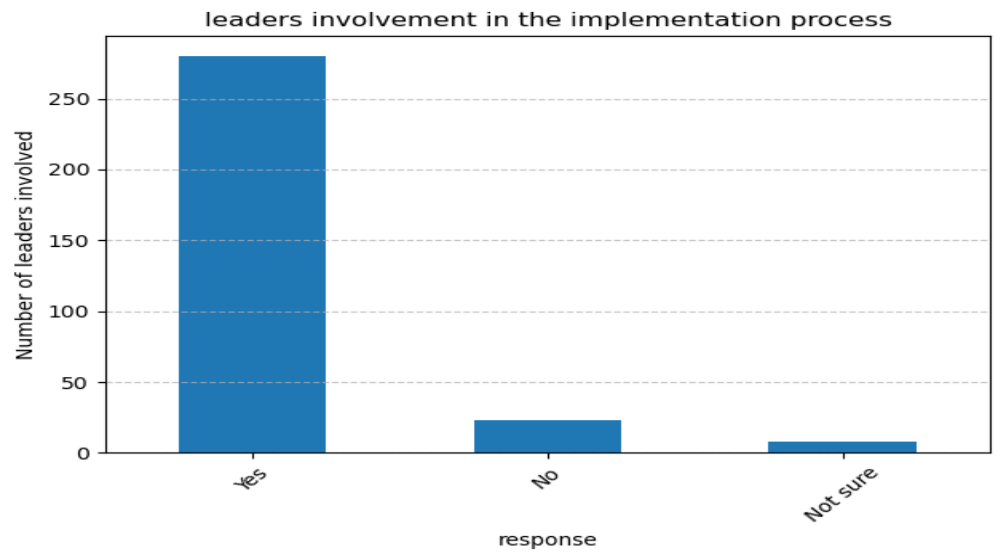
3.2 Objective 2: Community engagement

The majority of respondents indicated 'Yes', with about around 260 respondents reporting that the community participated in the project implementation. This suggests strong community involvement, which is often important for the success and sustainability of development or environmental projects.

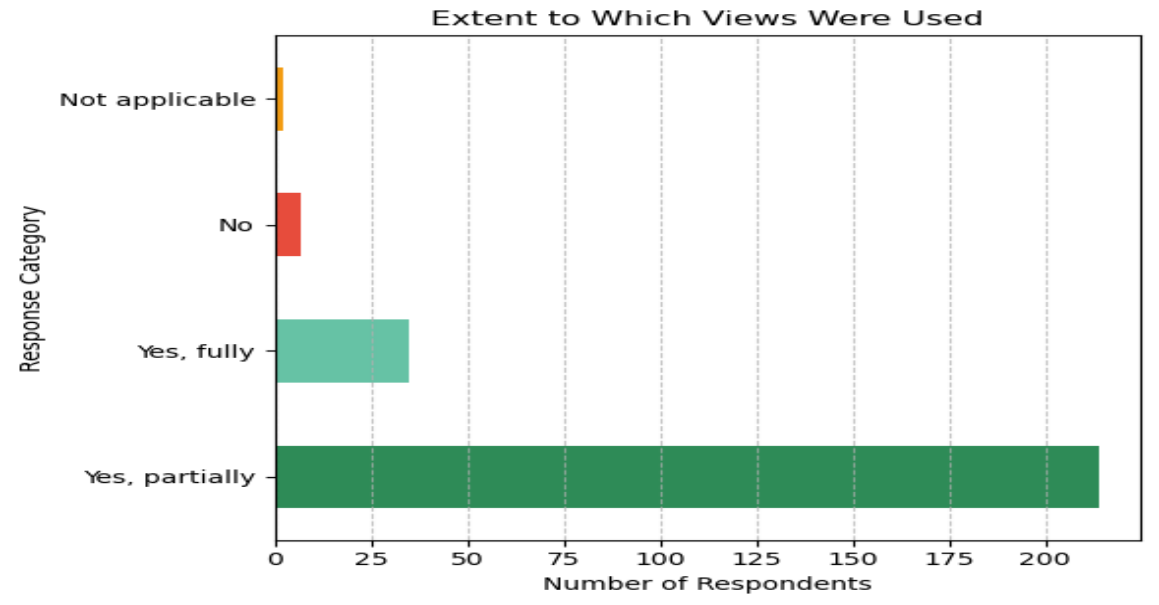
A smaller group, approximately around 40 respondents, indicated 'No', meaning they believe the community did not participate in the implementation.

The smallest number, about around 15 respondents, selected "Not sure."

This could indicate limited awareness or communication gaps about the project's implementation activities. This may point to some areas where participation was limited or certain groups.



The results indicate that the majority of respondents acknowledged the involvement of leaders in the implementation process, with approximately 280 respondents indicating 'Yes.' In contrast, a small number of respondents reported that leaders were not involved, while a few were unsure. These findings suggest that leadership participation in the implementation process was widely recognized by the respondents.

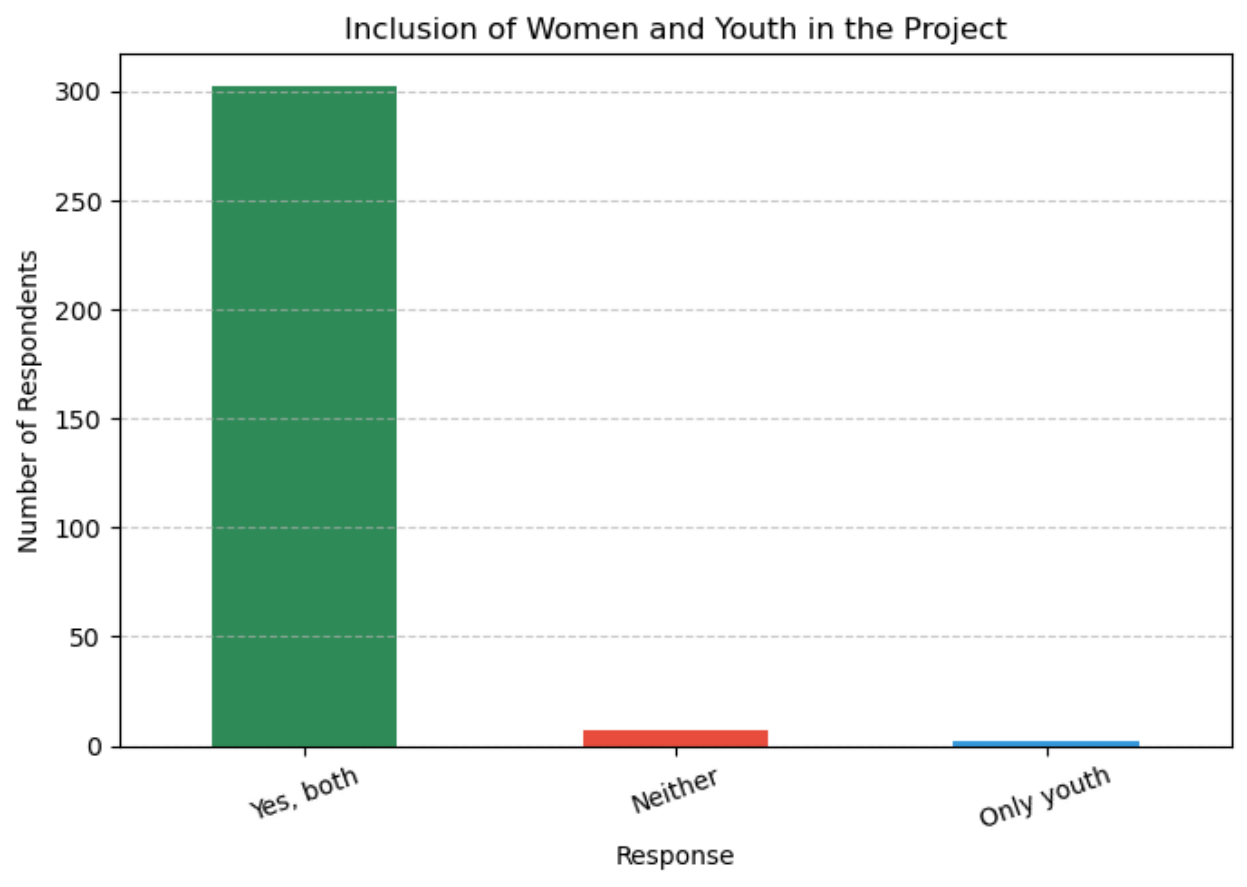


The majority of respondents (214) indicated that their views were partially used. This suggests that while respondents' opinions were considered, they may not have been fully incorporated into the final decisions or implementation.

A smaller number of respondents (35) reported that their views were fully used. This indicates that only a limited proportion of participants felt their contributions were completely reflected in the outcomes.

Only 7 respondents indicated that their views were not used at all. This shows that very few respondents believed their opinions were ignored.

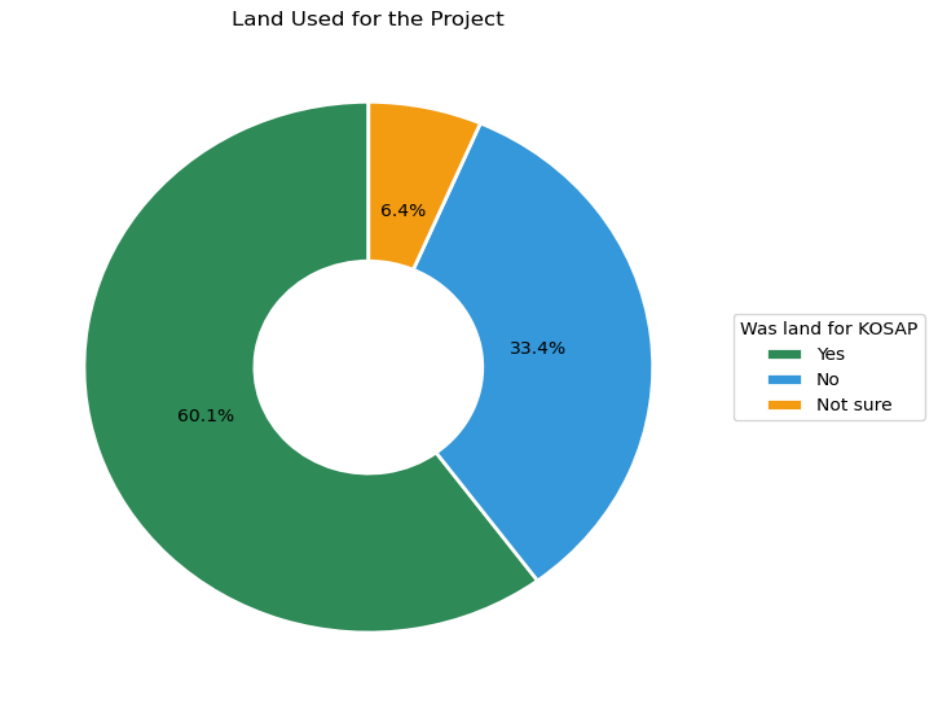
The results indicate that most respondents felt their views were considered to some extent but not fully utilized. This suggests a moderate level of participatory decision-making, where stakeholders' opinions were acknowledged but there may still be room to strengthen full inclusion in the decision-making process.



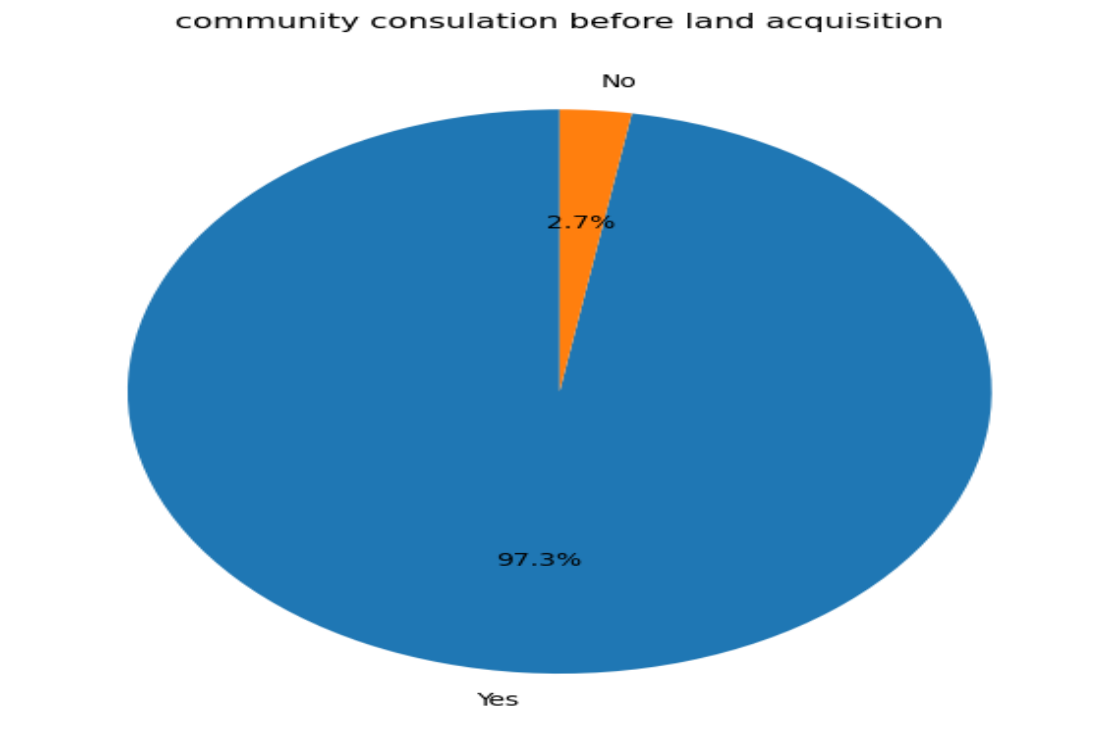
The findings show that the majority of respondents (302) indicated that both women and youth were included in the project. Only a small number of respondents reported that

neither group was included (7), while very few respondents (2) indicated that only youth were included. These results suggest that the project successfully promoted inclusive participation by involving both women and youth.

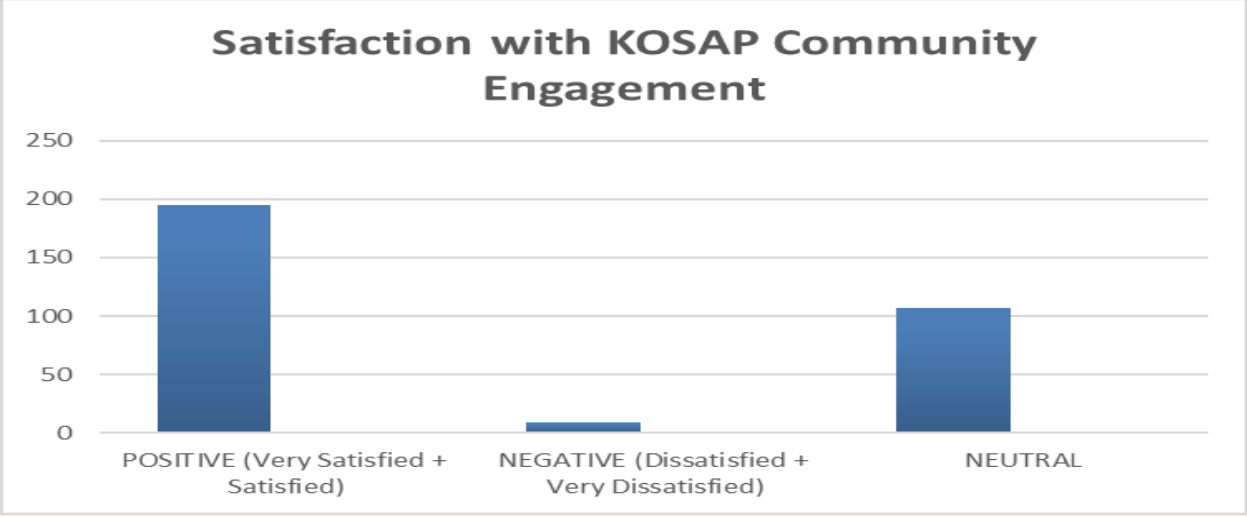
3.3 Objective 3: Land Rights.



The findings indicate that the majority of respondents (60.1%) reported that their land was used for the KOSAP project. Meanwhile, 33.4% indicated that their land was not used, and 6.4% were unsure. These results suggest that a significant proportion of community members gave land to the project without knowledge of their land rights, reflecting substantial participation in the land acquisition process.

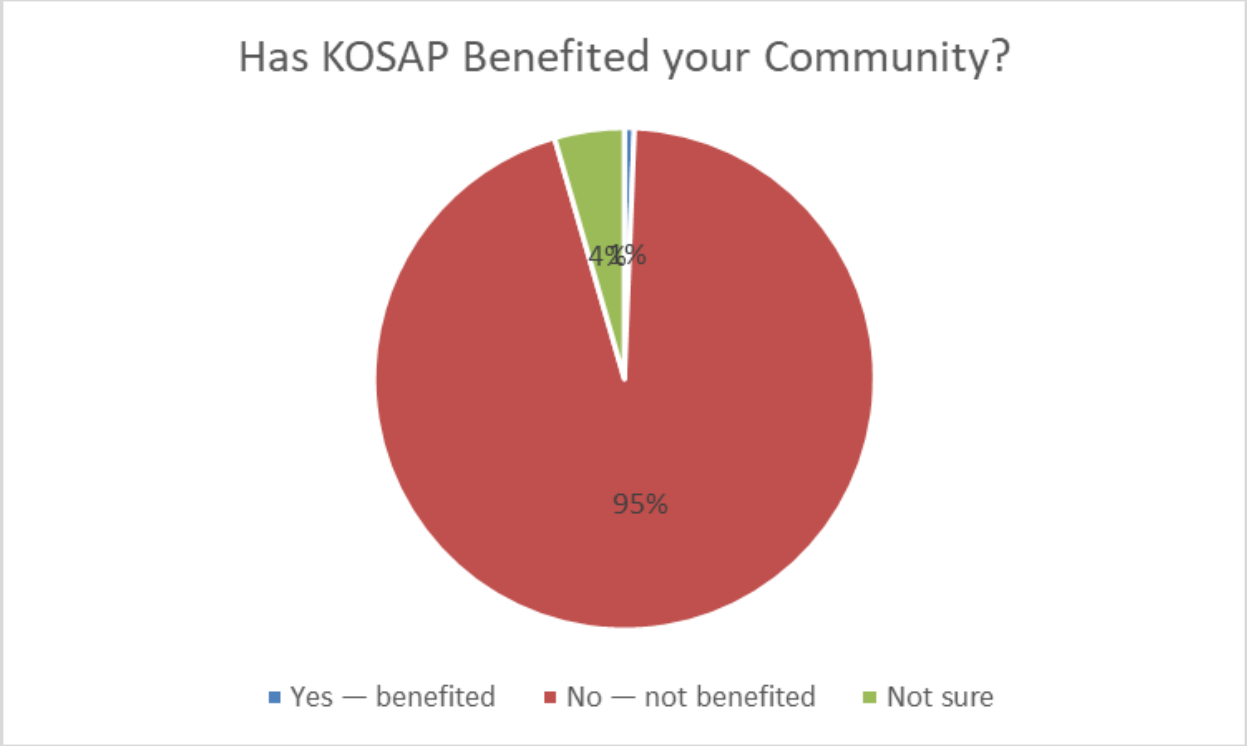


3.4 Objective 4: Benefit delivery

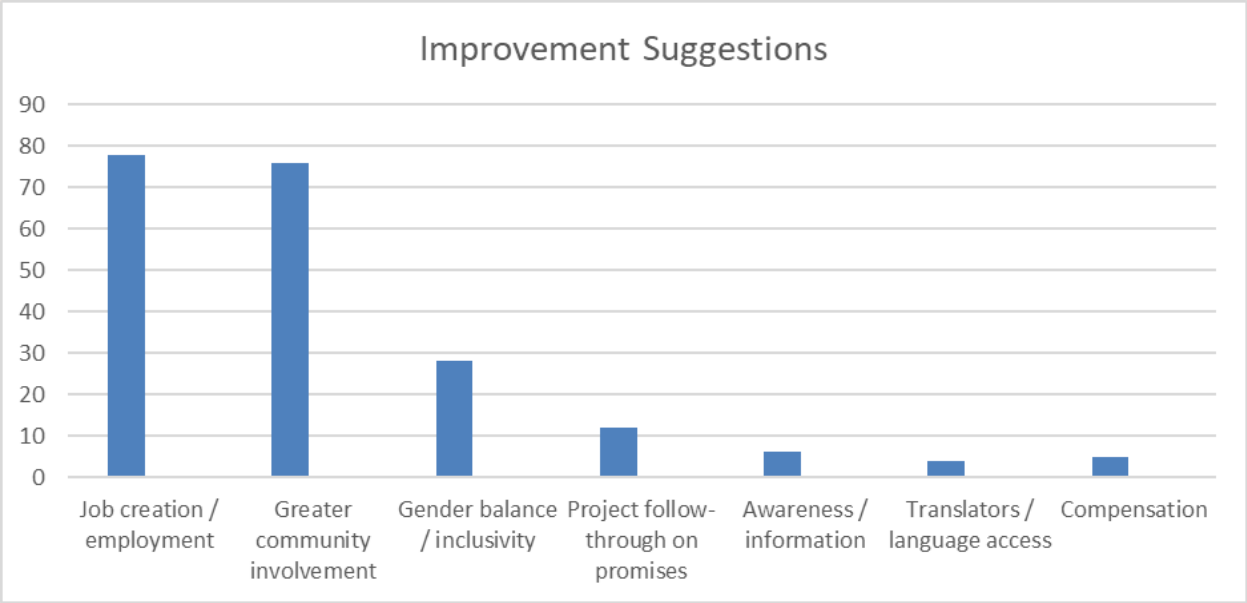


The satisfaction and benefit data, read together, produce the most analytically significant finding of this entire study. On the surface, 62.7% of respondents report being satisfied

or very satisfied with KOSAP's community engagement. Of the same 311 respondents, 94.9%, 295 people report that KOSAP has delivered no tangible benefit whatsoever to their community. Only 2 respondents, representing 0.6% of the sample, could point to any concrete outcome: one job opportunity and one instance of water pumping from a borehole. The satisfaction rate and the benefit rate are not just in tension they are irreconcilable if satisfaction is understood as a response to delivered outcomes. They can only coexist if satisfaction is measuring something else entirely that is the experience of being consulted, the hope of future delivery or the constrained expression of communities who remain dependent on the goodwill of the very agencies evaluating their responses.



3.5 Objective 5: Satisfaction & Agency



The near-equal weight is significant. It tells us that communities are not simply asking for economic handout but they are simultaneously demanding both material inclusion and genuine decision-making power. These are two distinct but related forms of exclusion that KOSAP has reproduced, one is economic exclusion, where the project operates in the community but does not employ it and political exclusion, where communities are consulted but not empowered.

Gender balance and inclusivity (9.7%) ranks third confirming that community members themselves, not only external researchers, identify gender equity as an unrealised dimension of the project.

The project follow-through theme (4.2%) carries weight disproportionate to its frequency. The specific phrasing recorded in the data points to a breach of trust rooted in unkept promises. Communities are not asking for new things; they are asking for delivery on commitments already made. That distinction marks the difference between a development shortfall and a credibility crisis.

The lowest-ranked themes awareness (2.1%), language access (1.4%) and compensation (1.7%) should not be dismissed because of their small counts. Language access in particular is structurally upstream of every other concern: if communities cannot participate in their own language, neither job access, nor genuine involvement, nor gender inclusion, nor compensation claims can be effectively pursued.

4. Limitations

- Gender underrepresentation as female respondents (29%) likely underrepresents women's perspectives given population parity. Results should be interpreted with caution regarding gender-specific impacts.
- Social desirability bias because in the presence of community leaders and project enumerators, respondents may have moderated critical responses, potentially inflating satisfaction scores.

5. Ethical Consideration

All 311 respondents provided informed consent. Data were collected voluntarily, with assurance of confidentiality and the right to withdraw. Enumerators were briefed on ethical data collection practices. Data stored securely and used for the stated research purpose in accordance with TIPD's research ethics protocol

6. Conclusion

This study set out to assess whether KOSAP is replicating the structural mistakes of the fossil fuel industry in Turkana County. The answer based on survey data from 311 Indigenous pastoralist community members across three sub-locations, is: yes, to a significant and concerning degree.

The TKEM composite Extractive Replication Index score places KOSAP's current implementation in the 'Largely Extractive' zone. Across five analytical domains, Knowledge & Awareness, Community Engagement Quality, Land Rights & Territorial Integrity, Benefit Distribution, and Satisfaction & Agency. The data reveals structural patterns that reproduce rather than transcend the extractive paradigm: communities nominally consulted but substantively uninformed land acquired through procedurally compliant but culturally processes, benefits promised but largely undelivered and satisfaction scores that may reflect constrained voice and aspirational hope rather than genuine fulfillment of rights.

7. Recommendations

1. Conduct a comprehensive FPIC audit across all KOSAP implementation sites in Turkana, using an independent, culturally competent third party acceptable to affected communities, to assess whether initial consent processes met international standards.
2. Establish a community-accessible, Turkana-language grievance mechanism with clear timelines and accountability structures to address displacement, compensation and promise-delivery complaints.
3. Commission an independent benefit mapping study to determine what benefits are available from KOSAP, where they are being received and why 94.9% of surveyed community members report receiving none.
4. Establish a Turkana County Renewable Energy Community Advisory Council with elected representation from pastoral communities, women and youth with statutory consultation rights over all renewable energy projects in the county.
5. Develop an Indigenous People's Energy Transition Plan for Turkana County, led by T.I.P.D and community representatives, that articulates community-defined priorities, red lines and benefit expectations for the energy transition.

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