

Forest Actors, Livelihoods, and Conservation: An Action-in-Context Analysis from Central Uganda

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ABSTRACT

This article examines the interactions between forest actors in the Najjembe area of Mabira Forest, Uganda, with a particular focus on how livelihoods, governance, and conservation practices intersect. Using the Action-in-Context (AiC) framework, the study analyses the actions, motivations, and options of key actors, including forest-adjacent communities, the National Forestry Authority (NFA), non-governmental organisations (NGOs), political leaders, and the Sugar Corporation of Uganda Limited (SCOUL). Drawing on qualitative methods such as participant observation and conversational interviews with community members, forest officials, and corporate actors, the article documents both problem-driven and strength-based narratives shaping forest use. Findings show that local livelihoods are deeply dependent on forest resources through subsistence farming, market trade, tourism-related activities, and informal extraction, while structural constraints such as land pressure, declining agricultural yields, weak extension services, and inconsistent industrial regulation intensify pressure on the forest. Yet, positive practices-including community whistleblowing, sustainable farming, local tourism initiatives, and collaborative conservation efforts-demonstrate existing capacities for stewardship. The article argues that effective forest conservation in Najjembe requires moving beyond problem-focused approaches towards strategies that deliberately recognise, strengthen, and scale local positive actions while addressing governance and accountability gaps.

KEYWORDS: Forest-actor interactions; Community livelihoods; Action-in-Context framework; Forest governance; Sustainable forest conservation

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1. INTRODUCTION

Forests play a critical role in advancing global sustainability objectives by supporting biodiversity, regulating climate systems, and sustaining the livelihoods of forest-dependent populations [1,2]. In sub-Saharan Africa, forests are deeply embedded in everyday social and economic life, serving as sources of food, energy, medicine, income, and cultural meaning [3,4]. Nonetheless, increasing population pressure, commercial agriculture, infrastructure development, and industrial activity continue to intensify competition over forest land and resources [5]. These dynamics have heightened policy concerns about how conservation goals can be reconciled with human development needs.

Historically, forest conservation policies have relied heavily on regulatory and protection-oriented approaches that prioritise control, enforcement, and restricted access [6]. While such approaches have helped curb large-scale deforestation in some contexts, they have also generated tensions with forest-adjacent communities, often framing local livelihoods as drivers of environmental degradation [7]. This problem-focused framing has been criticised for marginalising local knowledge and underestimating the capacity of communities to act as stewards of forest ecosystems [8].

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In response, participatory and community-based conservation approaches have gained prominence in both research and policy discourse [9]. These approaches emphasise shared responsibility, co-management, and the integration of livelihood concerns into conservation planning [10]. However, evidence on their effectiveness remains mixed. Some studies argue that high livelihood dependence on forests, particularly under conditions of poverty and weak governance, increases the risk of over-exploitation [11]. Others show that where local institutions, incentives, and social norms are recognised, communities can contribute positively to sustainable forest management [12,13]. These divergent perspectives point to unresolved debates within the field and underscore the need for analytical approaches that can capture complexity rather than rely on simplified assumptions.

Mabira Forest in central Uganda provides a compelling context for examining these issues. As one of the country's largest remaining tropical forest reserves, Mabira is ecologically significant and economically strategic, yet subject to sustained pressure from surrounding settlements, transport infrastructure, tourism development, and agro-industrial operations [14,15]. Previous studies on Mabira have documented forest disturbance, governance challenges, and contested land-use decisions [16,17]. Less attention, however, has been paid to the everyday interactions between different forest actors, the motivations shaping their actions, and the coexistence of destructive and constructive practices within the same landscape.

This article addresses this gap by applying the Action-in-Context (AiC) framework developed by De Groot [18,19]. The framework allows for a systematic analysis of actors, their actions, motivations, and available options within specific social, economic, and institutional settings. Importantly, it enables the integration of both problem-oriented and strength-based perspectives, thereby recognising negative pressures on the forest alongside existing positive practices and local capacities. This article is derived from the author's doctoral thesis submitted to Radboud University [see Ssozi, *doctoral thesis, Radboud University*], and substantially develops and extends findings from that research.

The main aim of this study is to analyse forest-actor interactions in the Najjembe area of Mabira Forest and to examine how these interactions shape both livelihood outcomes and forest conservation. Drawing on qualitative field data from community members, forest authorities, non-governmental organisations, political actors, and a major agro-industrial corporation, the article demonstrates that while governance failures and livelihood constraints continue to drive forest degradation, there are also tangible opportunities for more inclusive and sustainable forest management. The findings suggest that policy interventions are likely to be more effective when they build on locally grounded positive actions, strengthen accountability, and address livelihood vulnerabilities in an integrated manner.

2. MATERIALS AND METHODS

2.1. Study Area

The study was conducted in the Najjembe area of Mabira Forest, located in Lugazi Municipality, Buikwe District, central Uganda. Najjembe lies along the Kampala–Nairobi highway and is characterised by dense settlement patterns, a busy roadside market, tourism facilities, and proximity to large-scale sugarcane estates. The area directly borders Mabira Central Forest Reserve, one of Uganda's most ecologically significant tropical forests and an important water catchment [14,15].

Najjembe Division comprises seven parishes and includes both forest-adjacent villages and forest enclave settlements. According to the 2014 Uganda National Population and Housing Census, the Division has a population of 33,321 people, with a predominantly youthful demographic [20]. Livelihoods include subsistence farming, market vending, sugarcane growing, tourism-related activities, and informal forest resource use. These characteristics make Najjembe a suitable site for examining interactions between livelihoods, governance, and forest conservation.

2.2. Analytical Framework

The study adopted the Action-in-Context (AiC) framework as its main analytical approach [18,19,22,23]. The framework explains environmental outcomes by examining actors, their actions, the motivations underlying those actions, and the options available to them within specific social, institutional, and policy contexts. Actors are understood as individuals, institutions, or organisations whose decisions influence environmental conditions either directly or indirectly. The AiC framework was originally developed by De Groot [18,19] and has been applied and extended in subsequent work on environmental governance and social-ecological systems analysis [22,23].

The framework distinguishes between primary actors, whose actions directly affect the forest, and secondary actors, who shape the motivations and options of primary actors through policy, regulation, economic influence, or social norms [23]. This approach allows for the integration of problem-oriented analysis with a strength-based perspective, making it possible to identify destructive practices alongside existing positive actions and capacities within the forest landscape [8].

Action-in-Context Schema

In the AiC approach, actors are understood as social entities defined by the actions they take and the decisions they make in everyday situations [19]. Actors' actions are shaped by practical considerations rather than chance. They choose among alternative actions, referred to as *options*, based on considerations such as needs, incentives, values, and constraints, described in the

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framework as *motivations* or reasons. These options and motivations are shaped through interaction with other actors, institutional arrangements, broader systems, and prevailing cultural norms [24].

Within the AiC framework, actors' actions may have both positive and negative effects on the environment. Actions may be direct or indirect. Direct actions are undertaken by primary actors, whereas indirect actions originate with secondary actors who shape the options and motivations available to primary actors. As illustrated in Figure 1 (the Action-in-Context schema), the primary actors in the Mabira context are local communities and SCOU, which operates as a supra-local actor. Secondary actors include the NFA, NGOs, politicians, and local leaders. The NFA functions as a government agency acting on behalf of the state, while local NGOs often collaborate with international conservation organisations.

Figure 1: Action-in-Context (AiC) Schema

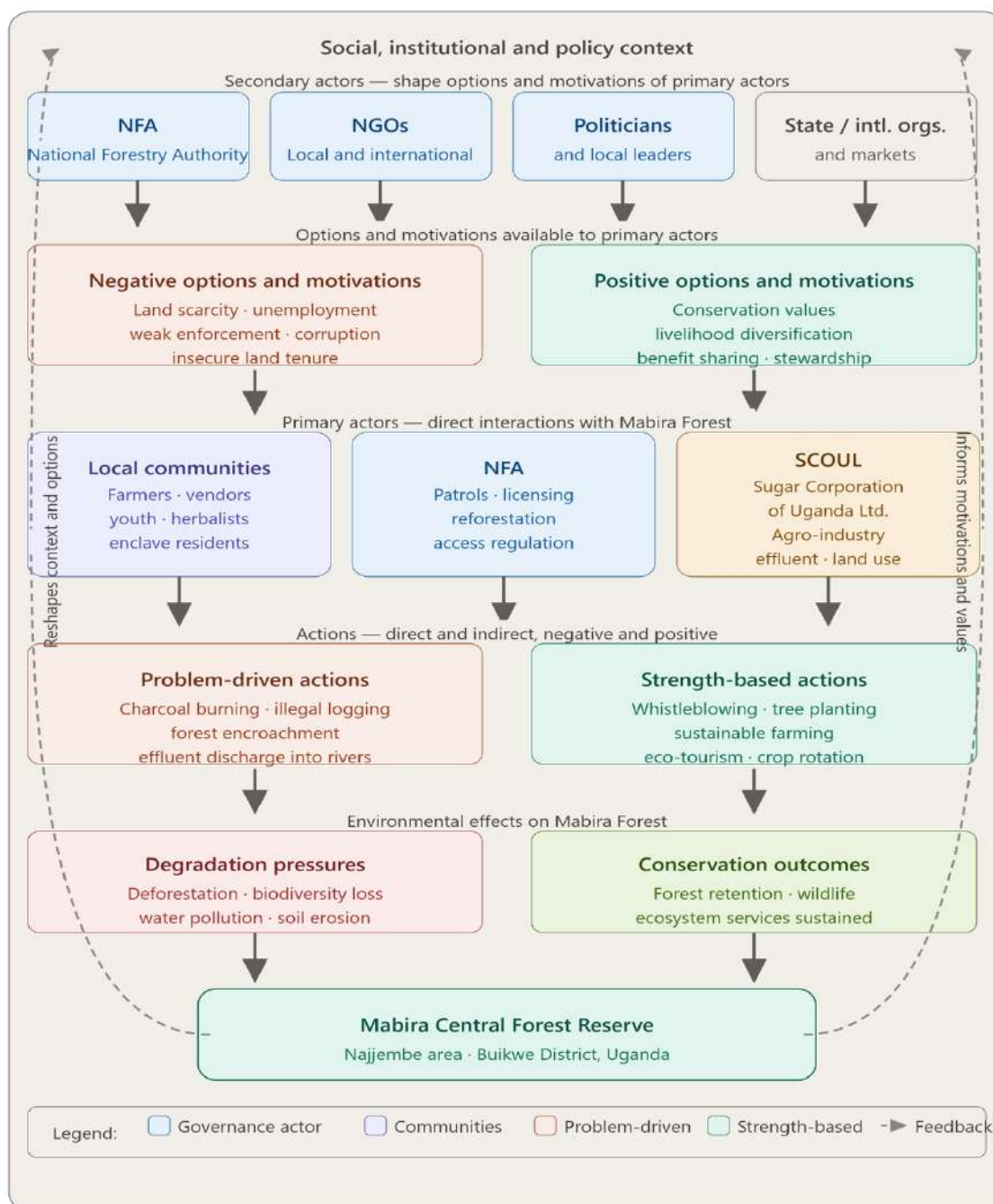


Figure 1. The Action-in-Context (AiC) schema applied to forest-actor interactions in the Najjembe area, Mabira Forest. Adapted from De Groot [18,19].

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The action levels shown in Figure 1 reflect the interplay of positive and negative options and motivations. Positive options and motivations are commonly identified through a strength-based approach, whereas negative options and motivations are associated with problem-based conditions. Environmental effects arise from how actors respond to these conditions. Local communities, for example, face a mix of positive and negative options that shape their interactions with the forest. Engagement in extractive activities such as charcoal burning, illegal logging, or unsustainable harvesting is often driven by unemployment, land scarcity, or the high cost of alternative energy sources. Despite this, some community members choose to comply with forest regulations because they benefit from the forest or because they value it beyond its direct material provision.

SCOUL's activities also yield a mix of positive and negative environmental outcomes. During sugar production, the company has taken steps to control pollution through effluent treatment. However, this treatment is not carried out consistently, and untreated effluent is at times diverted into river systems within Mabira Forest. Sugar production also generates bagasse, which presents both challenges and opportunities: on the positive side, bagasse is converted into electricity and organic fertilisers for local use, while SCOUL rotates sugarcane plantations with sunn hemp (*Crotalaria juncea*), a green manure crop known for improving soil fertility and generating substantial biomass within a short period [USDA, 1999].

The actions of both local communities and SCOUL are shaped by secondary actors, particularly the NFA and NGOs. The NFA is responsible for enforcing forest policies and regulating access to forest resources on behalf of the government. The NFA has both positive and negative options in carrying out this mandate: issuing licences to commercial loggers is a legal mechanism for forest use, but this process is sometimes undermined by corruption, while restricting access may protect ecological integrity yet limit community access to essential forest benefits. These actions may be motivated by revenue collection objectives or by commercial forest exploitation that is not always accompanied by adequate reforestation efforts.

Local and national NGOs play an important role in monitoring sustainability in the Mabira area through advocacy and direct participation in conservation programmes. They also contribute to accountability and governance oversight, often with support from international environmental organisations. Politicians and local leaders participate in the formulation of laws and by-laws and are expected to oversee government and NGO activities related to forest conservation. However, some political actors misuse their positions to influence forest officials to permit illegal extraction, and in certain cases NGOs may also be compromised through political interference, resulting in failure to report destructive practices.

2.3. Research Design

A qualitative case study design was employed to capture the lived experiences, perceptions, and practices of different forest actors [25]. This design was appropriate given the study's focus on understanding context-specific interactions rather than producing statistically generalisable results. The research combined participant observation with conversational interviews to generate in-depth, context-rich data [27,31]. This article draws on fieldwork conducted as part of the author's doctoral research at Radboud University.

2.4. Sampling and Participants

The target population comprised communities living within approximately five kilometres of the forest boundary, including villages within forest enclaves. Ten villages were purposively selected to reflect variation in location, livelihood activities, and proximity to the forest, consistent with established qualitative sampling principles that prioritise information richness [25,30].

Five participants were selected from each village using purposive sampling, resulting in fifty community respondents. Participants included elders, youth, women, and Local Council I chairpersons, many of whom engaged in subsistence farming alongside other income-generating activities. Additional interviews were conducted with NFA staff, administrators from SCOUL, sugarcane farmers, and sugarcane out-growers. In total, sixty-two participants took part in the study. This approach allowed for the inclusion of diverse perspectives across community, institutional, and corporate actors [26].

2.5. Data Collection Methods

Data was collected through participant observation and conversational interviews. Participant observation involved observing everyday livelihood activities, market interactions, forest-use practices, and interactions between community members and institutional actors [27]. This method enabled an understanding of how forest-related practices unfolded in everyday life, rather than relying solely on self-reported accounts.

Conversational interviews were used to explore participants' experiences, perceptions, and interpretations of forest use, conservation challenges, governance issues, and livelihood strategies [28,31]. Interviews were flexible and adaptive, enabling participants to raise issues they considered important. Informal group discussions were also held with market traders to gain insights into forest-linked livelihoods associated with roadside commerce and tourism [29].

2.6. Data Analysis

Interview and observation data were analysed thematically using the AiC framework [18,19]. The analysis involved identifying key actors, mapping their actions, examining motivations and options, and assessing the livelihood and environmental outcomes

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associated with these actions. Both negative and positive narratives were coded to enable a balanced assessment of pressures on the forest and opportunities for sustainable management [24].

The analysis was iterative, moving between empirical data and the analytical framework to refine interpretations. Particular attention was paid to points of convergence and divergence across actor groups, and to how institutional arrangements and policy contexts shaped behaviour [32].

2.7. Ethical Considerations

Ethical mindfulness guided all stages of the research process. The study was conducted in accordance with the ethical guidelines and requirements of the Radboud University Doctoral Committee Ethics Board. Participants were informed of the study's purpose, the voluntary nature of participation, and their right to withdraw at any time. Informed consent was obtained before interviews, and confidentiality was maintained by using pseudonyms and removing identifying information [30,32].

Reflexivity was maintained throughout the research to minimise researcher bias and ensure fair consideration of diverse viewpoints. Attention was paid to power dynamics during interviews, particularly when discussing sensitive issues related to illegal activities or governance failures [33].

3. RESULTS

This section presents the results of the study as they emerged from narratives, participant observation, and key informant interviews conducted in Najjembe Division. Given the qualitative and narrative-oriented nature of the research, results are presented through participants' own accounts, accompanied by analytical interpretation. The findings are organised around four interlinked themes: socio-economic values derived from Mabira Forest, livelihood sustenance strategies, problem-oriented narratives, and positive narratives that point toward sustainability pathways.

3.1. Socio-Economic Values Derived from Mabira Forest

Participants consistently described Mabira Forest as an integral part of everyday life rather than a distant conservation entity. Narratives revealed that the forest supports both subsistence and supplementary livelihoods through medicinal plants, firewood, water sources, food items, and limited hunting activities.

Herbalists and community members emphasised the ongoing relevance of ethnomedicine. One participant explained that the forest provides remedies for common diseases such as malaria and typhoid, herbs for pregnant women, and herbs that relieve HIV/AIDS-related symptoms, reflecting a growing reliance on traditional medicine as formal healthcare remains costly or inaccessible. These accounts indicate that forest-based ethnomedicine is not a residual cultural practice but an active component of local health strategies. Reliance on herbal remedies reflects both cultural continuity and gaps in affordable formal healthcare. As such, medicinal plant harvesting represents a livelihood–health interface rather than simple resource extraction [34,36].

Access to firewood and water was described as essential for household survival. Community members referred to regulated access arrangements, such as designated firewood collection days, but noted that enforcement varies. The forest was also identified as a source of building poles and charcoal, although participants openly acknowledged that much of this extraction occurs illegally.

Hunting emerged as a culturally grounded but economically marginal activity. A villager from Buwoola stated:

'...some people hunt small animals to supplement their diet, but this is on a very small scale. Hunters are usually permitted to hunt on specific Thursdays and Saturdays. The NFA is not very strict on hunters as compared to illegal tree cutting. Perhaps because hunting is not a profitable venture.'

This narrative highlights how enforcement priorities are shaped by perceived economic impact rather than ecological risk. Although hunting was not viewed as a major livelihood activity, its continuation raises concerns about wildlife depletion in an already pressured ecosystem.

Tourism was widely recognised as a potential livelihood opportunity, yet community narratives revealed feelings of exclusion. A forest administrator noted that the forest provides employment for many community members as tour guides, rangers, and caretakers, but that more needed to be done to empower the community to benefit from tourism. In contrast, local residents expressed frustration. One respondent observed that tourists pay fees to tour Mabira Forest and its eco-sites but that this money does not reach their communities. These narratives point to a disconnect between institutional perceptions of benefit sharing and lived community experience, a challenge widely reported in conservation tourism contexts [35,36].

3.2. Means of Livelihood Sustenance and Forest Dependence

Livelihood strategies in Najjembe were diverse but unevenly distributed across age and gender. Subsistence farming dominated among older residents, while youth gravitated toward roadside trade and forest-based income-generating activities. Participants repeatedly described the forest as a fallback option in times of economic stress.

An elder explained the logic driving youth engagement in illegal forest activities:

'...the youth want quick money. They cut trees for charcoal burning and brick making. They can get at least 50,000 shillings within one or two days. This is why they are reluctant to grow crops like maize that take three to four months.'

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This narrative illustrates how forest exploitation is embedded in livelihood rationality rather than deviance. The preference for activities with immediate returns reflects the temporal mismatch between youth needs and agricultural production cycles. Similar patterns have been documented where youth unemployment intersects with weak rural economies [37].

Women's narratives highlighted their growing role in sustaining households through market vending and small-scale trade. A market vendor stated:

'...many women are working in the Najjembe market because men have fled their homes due to fear of responsibilities. Women have no option but to engage in small business activities to meet their family needs.'

These accounts highlight how gendered access to land structures livelihood choices and environmental outcomes. Women's economic agency exists alongside structural exclusion from productive assets, limiting their capacity to pursue sustainable alternatives. This reinforces findings that gender inequities indirectly intensify environmental pressure [38].

3.3. Problem-Oriented Narratives

3.3.1. Land Scarcity, Encroachment, and Development Pressures

Land acquisition narratives revealed a complex history of settlement, legality, and encroachment. Several participants insisted that their presence near the forest was lawful. One resident explained that the forest was gazetted in 1936, that some areas became public land, and that people were allowed to settle and have titles of occupancy. Despite this, population pressure and inheritance fragmentation were repeatedly cited as drivers of land scarcity. A respondent noted that while parents gave plots to their children, each generation faced the question of what would remain to pass on to the next. The narratives reveal land scarcity as both a demographic and institutional issue. Inheritance fragmentation, historical land allocations, and contemporary development projects combine to reduce available livelihood space. From this perspective, forest encroachment is a symptom of land governance challenges rather than of population growth alone [39].

3.3.2. Narratives on SCOUL, Pollution, and Community Relations

Community narratives about SCOUL were particularly strong. While acknowledging employment opportunities, respondents emphasised environmental harm. One participant stated:

'...the sugar factory is not consistent in treating effluent. When alarms are raised, they act, but soon after they go back to their old ways. The factory dumps effluent into river channels, especially River Musamya.'

Field observations confirmed partial effluent treatment practices, including the use of lime for purification. However, persistent reports of foul smells and drying vegetation suggest inconsistent application. Research on sugar industry effluent supports concerns about nutrient loading and secondary pollution in river systems [40,41].

Community members also questioned the fairness of corporate social responsibility efforts. A teacher remarked that although SCOUL generates electricity from sugarcane biomass, it does not supply it to the community, who continue to face high electricity prices. These perceptions underscore how industrial actors shape local environmental contexts beyond their immediate operational boundaries. Inconsistent effluent management not only affects water quality but also erodes trust between communities and regulatory institutions. Such dynamics have been observed in other agro-industrial settings where enforcement is uneven [40,41].

3.3.3. Declining Agricultural Yields

Farmers consistently reported declining crop yields, particularly for maize. One farmer observed that maize plants sometimes became stunted with yellowish leaves and tiny cobs, and that the soil needed to be nourished since mulching was no longer working effectively. Others attributed poor yields to inappropriate use of planting materials, noting that reusing hybrid seeds progressively reduces yields. Farmers' explanations closely align with agronomic evidence of soil nutrient depletion and inappropriate seed reuse. Declining yields therefore constitute a technical and institutional challenge rather than a matter of farmer negligence. The resulting shift towards forest-based coping strategies reflects adaptive behaviour under production stress [42,43].

3.4. Positive Narratives and Sustainability Pathways

Despite the challenges, participants articulated strong positive narratives centred on cooperation, stewardship, and aspiration. Community members described past collaboration with forest authorities, particularly in tree planting and sensitisation programmes. A forest officer noted that some community members had helped by reporting illegal tree cutting. However, whistleblowers expressed frustration at the lack of protection and incentives. One suggested that illegal loggers could be required to plant trees in degraded areas, which would benefit the community.

Sustainable farming practices emerged as a key positive narrative. Farmers practising mixed farming and crop rotation reported higher yields. Youth and market vendors proposed poultry farming, zero-grazing, and horticulture as viable alternatives. One youth observed:

'...we have a ready market here. If we are empowered, we can start poultry farming instead of cutting trees.'

These narratives demonstrate local awareness of sustainability options and echo findings that livelihood diversification reduces pressure on forest ecosystems [44,45].

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Participants also expressed strong willingness to re-engage in conservation if institutional support were restored. A youth leader remarked that forest-adjacent communities needed to be sensitised to create alternatives instead of depending solely on the forest, and that education was meaningless if it did not empower people. These accounts demonstrate that conservation-oriented values persist within forest-adjacent communities. However, the translation of these values into sustained action depends on institutional recognition, protection, and tangible benefit. Without such support, positive motivations remain fragile [46].

3.5. Summary of Results

Overall, the results indicate that forest-actor interactions in Najjembe are shaped by lived experience, economic necessity, and institutional trust. The narratives show that forest degradation is not driven by ignorance or hostility towards conservation, but by constrained choices in a context of land scarcity, limited livelihood options, and uneven benefit sharing. Equally important, the presence of strong positive narratives demonstrates the community's readiness to participate in sustainable forest management if enabling conditions are restored.

4. DISCUSSION

This study applied the AiC framework to examine forest-actor interactions around Mabira Forest, with particular attention to how decisions and actions are shaped by livelihood realities, institutional arrangements, and historical experience. Rather than attributing forest degradation to individual behaviour alone, the findings show that outcomes arise from the interplay between actors' motivations and the options available to them within a given context.

4.1. Decision-Making under Constrained Options

A central insight from the AiC perspective is that actions are best understood as outcomes of constrained choice. The narratives in Section 3 show that many forest-related activities—including illegal tree cutting and charcoal production—are not undertaken in isolation or in ignorance of conservation rules. Instead, they reflect calculated responses to limited livelihood alternatives, delayed agricultural returns, and insecure access to productive assets.

Youth engagement in forest exploitation reflects a temporal logic of survival. Activities that generate immediate income are prioritised over agriculture, which requires land, inputs, and time before returns are realised. From an AiC standpoint, such decisions are rational in a context of high unemployment and weak institutional support for youth livelihoods. This reinforces the argument that environmental degradation often stems from structural constraints rather than a lack of environmental awareness.

This relational understanding of decision-making aligns with broader social-ecological systems thinking, which emphasises that sustainability outcomes emerge from interactions among actors, institutions, and biophysical systems rather than from single variables or behaviours [46].

4.2. Actors, Institutions, and the Production of Context

The findings further highlight the role of institutions in shaping the context in which forest-related decisions are made. Local communities, forest authorities, and corporate actors such as SCOUT are primary actors whose actions directly influence forest outcomes. However, their behaviour is mediated by secondary actors, including regulatory bodies, political leaders, and market institutions.

Narratives on forest governance indicate that enforcement practices are perceived as uneven and, at times, contradictory. While access restrictions are applied rigorously to subsistence activities, large-scale development projects and industrial operations are perceived as facing less scrutiny. Within the AiC framework, such inconsistencies undermine the perceived legitimacy of institutions and reshape motivations for compliance.

These dynamics reflect what Cleaver [47] describes as institutional bricolage, whereby actors interpret, negotiate, and adapt formal rules to fit everyday realities rather than adhering to them rigidly. In this context, non-compliance with forest regulations can be understood not simply as resistance, but as an adaptive response to governance arrangements perceived as unjust or exclusionary.

4.3. Livelihoods, Gender, and Unequal Access to Options

The study also shows that access to livelihood options is unevenly distributed across social groups, with important implications for forest sustainability. Women's narratives reveal significant economic agency through market vending and informal trade, yet this agency is constrained by gendered land tenure systems. Limited access to land reduces women's capacity to invest in sustainable agricultural practices or alternative livelihoods, reinforcing reliance on short-term coping strategies.

From an AiC perspective, these gendered constraints narrow the range of options available to women and indirectly shape their environmental interactions. The findings support existing evidence that social inequalities, rather than individual preferences, play a significant role in shaping environmental outcomes [38]. Addressing forest degradation therefore requires interventions that expand access to productive assets, particularly for groups whose choices are structurally constrained.

4.4. Industrial Actors and Environmental Accountability

Narratives surrounding SCOUL highlight how industrial actors shape environmental contexts beyond their immediate operational boundaries. While the company provides employment and some social services, perceived inconsistencies in effluent management and limited benefit sharing have contributed to community distrust. These perceptions matter, as they influence how communities interpret environmental responsibility and fairness.

Within the AiC framework, corporate behaviour is shaped not only by internal policies but also by the strength and consistency of regulatory enforcement. Where oversight is weak or selective, environmentally harmful practices may persist, altering local ecological conditions and social relations. Similar patterns have been documented in other agro-industrial contexts where regulatory capacity is limited [40,41].

Importantly, these dynamics also affect community motivations. When industrial actors are perceived to externalise environmental costs while local livelihoods are constrained, incentives for conservation at the community level are weakened.

4.5. Positive Motivations and Latent Capacity for Sustainability

Despite significant constraints, the findings reveal strong positive motivations for conservation within forest-adjacent communities. Narratives of whistleblowing, participation in tree planting, and willingness to cooperate with forest authorities demonstrate a latent capacity for stewardship. However, the translation of these motivations into sustained positive action depends on institutional recognition, protection, and tangible benefit.

Community-based monitoring and reporting have been shown to contribute to improved environmental outcomes when local actors are supported and their contributions valued [48]. In the absence of such support, positive motivations risk being eroded by fear, fatigue, or perceived futility.

Similarly, farmers who reported stable yields through mixed farming and soil management practices illustrate how sustainable outcomes can emerge when viable alternatives exist. These practices were adopted not primarily for conservation purposes, but to secure livelihoods. This supports the AiC argument that sustainability often arises as a secondary outcome of livelihood-oriented decisions rather than from explicit environmental intent [49,50].

4.6. Sustainability Pathways and the Expansion of Options

The discussion points toward a critical implication of the AiC framework: effective sustainability interventions must focus on expanding positive options rather than relying solely on restriction and enforcement. Livelihood diversification initiatives, vocational training for youth, and equitable benefit-sharing mechanisms are not peripheral to forest conservation; they directly reshape the context within which decisions are made. They are shaped by power relations, historical exclusions, and contested visions of development. Addressing forest degradation in Mabira therefore requires attention to social justice, institutional accountability, and participation alongside ecological objectives. This perspective aligns with arguments that sustainability pathways are socially negotiated and politically embedded rather than universally prescribed [51].

5. CONCLUSIONS

This study examined forest-actor interactions around Mabira Forest using narratives interpreted through the Action-in-Context framework, drawing on data collected as part of the author's doctoral research at Radboud University. The findings show that forest use and degradation are closely tied to everyday decision-making shaped by limited livelihood options, land scarcity, institutional practice, and historical experience. Activities often labelled as illegal or destructive emerge from practical responses to survival pressures rather than from disregard for conservation goals.

The narratives also reveal that forest-adjacent communities are not indifferent to sustainability. Many respondents expressed concern about forest loss and demonstrated willingness to participate in conservation activities, including reporting illegal practices and engaging in tree planting. These positive motivations persist despite frustration with uneven enforcement, limited benefit sharing, and declining trust in institutions responsible for forest governance.

Sustainable forest outcomes in Mabira therefore depend on more than regulation and enforcement. They require changes in the social and economic conditions that shape local choices. Expanding livelihood opportunities, addressing gender and generational inequalities in access to land and resources, and strengthening institutional accountability are central to reducing pressure on the forest. When communities perceive governance systems as fair and responsive, environmentally positive actions become more realistic and more durable.

This study contributes to sustainability research by demonstrating the value of narratives as analytical evidence and by showing how the Action-in-Context framework can clarify the link between everyday decisions and broader environmental outcomes. Forest sustainability in Mabira is best understood as a shared challenge shaped by context, power, and opportunity, rather than as a problem rooted solely in local behaviour.

6. PATENTS

Not applicable. The research reported in this article did not result in any patents or patent applications.

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Abbreviations

The following abbreviations are used in this manuscript:

AiC	Action in Context
FAO	Food and Agriculture Organization
NFA	National Forestry Authority
NGO	Non-Governmental Organisation
SCOUL	Sugar Corporation of Uganda Limited

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