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An Examination of the Causes of Environmental Degradation from an Islamic Perspective in Marsabit County, Kenya

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Abstract

This study examined the causes of environmental degradation in Marsabit County, Kenya, from an Islamic ethical perspective. Environmental degradation in the county is driven by overgrazing, deforestation, poverty and unsustainable resource use, despite Islamic teachings that emphasise environmental stewardship, ecological balance and responsible resource utilisation. Guided by Liberative Social Solidarity Theory, the study adopted a descriptive survey design, combining quantitative and qualitative approaches. The target population comprised 217,079 Muslims in Moyale, Saku, North Horr and Laisamis sub-counties, with a planned sample of 384. Questionnaire respondents were selected using Simple random sampling, while purposive sampling identified key informants and focus group participants. Of 339 questionnaires distributed, 334 were completed, alongside 10 key informant interviews and 24 focus group discussions. Quantitative data were analysed descriptively using SPSS version 28.0, while qualitative data underwent thematic analysis. Findings showed that 87.4 per cent of adult and youth respondents identified overgrazing as a contributor to environmental degradation, while 75.3 per cent associated charcoal-driven deforestation with desertification. Among Madrasa learners, 89.2 per cent attributed land misuse and tree cutting to poverty and basic survival needs. The study identified interconnected drivers, including excessive grazing, deforestation, economic hardship, unsustainable livelihoods and climatic variability. It concludes that addressing environmental degradation requires translating Islamic environmental principles into practical conservation practices. The study recommends sustainable grazing arrangements, alternative livelihoods, environmental education and conservation initiatives involving religious and community leaders. It contributes evidence on the relevance of Islamic environmental ethics to natural-resource management in pastoral communities.

Kev terms: Causes, conservation, degradation, environment, Islam.

1.0 INTRODUCTION

Environmental degradation remains a major challenge worldwide because damage to ecosystems threatens livelihoods, public health and human well-being. Pollution, deforestation, climatic change and increasingly severe weather events are among the pressures documented in environmental research (Corvalan et al., 2005). Religious perspectives can complement scientific and policy responses by shaping how communities understand their duties toward nature. In Islam, people are entrusted with stewardship (khalifah), which entails caring for the Earth and using its resources responsibly (Pathan & Seth, 2025). Qur'anic teachings and the Hadith also emphasise moderation, the avoidance of waste and the maintenance of balance in creation (Foltz, 2003). Nevertheless, awareness of religious obligations does not necessarily eliminate harmful resource-use practices. In Marsabit County, Kenya, communities continue to experience tree-cover loss, heavy grazing pressure, water shortages and recurrent droughts, all of which affect pastoral and other livelihoods (Wanjara & Ogembo, 2023). These problems therefore need to be considered both as environmental processes and as questions of economic circumstances and ethical responsibility. This article examines the perceived causes of environmental degradation across Marsabit County, interpreting local evidence in relation to Islamic principles of ecological care.

2.0 LITERATURE REVIEW

Previous scholarship identifies environmental deterioration as the outcome of intersecting ecological and human pressures rather than a single cause. Singh and Kumar (2017) relate environmental harm to pollution and other human activities, while Ekka et al. (2023) highlight deforestation, intensive land use, livestock pressure and inadequate waste management. Oguge (2021) describes how changing climatic conditions exacerbate drought, flooding and related environmental stress. Economic development, modernisation and technology can also increase the intensity of resource exploitation when appropriate safeguards are lacking (Batchelor, 2024). The relationship between poverty and natural-resource use is especially important: households with limited livelihood choices may depend on activities that undermine ecosystems over time (Scherr, 2000). Religious ethics approaches environmental harm as a question of human obligations and social conduct as well as ecological processes (Mugambi & Vähäkangas, 2001). However, much of this literature discusses environmental problems at broad geographical scales or gives limited attention to how Muslim communities in northern Kenyan drylands understand their causes. The present investigation responds to that gap by combining the reported experiences of residents in four Marsabit sub-counties with Islamic concepts of stewardship, justice and ecological balance. It thereby connects environmental pressures, livelihood constraints and religious interpretation within one localised analysis.

Theoretical Framework

This study was guided by Liberative Social Solidarity Theory, which emphasises religion's role in addressing social, economic, and environmental injustices through collective responsibility and transformative action (Gutiérrez, 2009). The theory recognises that environmental degradation is not merely a physical phenomenon but is also influenced by poverty, socioeconomic inequalities, human activities, and institutional weaknesses. Within the Islamic context, Ramadan (2009) emphasises the responsibility of Muslims to apply religious teachings in addressing contemporary challenges, including environmental destruction. In examining the causes of environmental degradation from an Islamic perspective in Marsabit County, Kenya, the theory provides a foundation for understanding how human activities such as deforestation, overgrazing, charcoal burning, and unsustainable exploitation of natural resources

contribute to ecological deterioration. The framework draws upon Islamic principles such as Tawhid (unity of creation), Khalifah (stewardship), Amanah (trusteeship), and Mizan (balance), which emphasise humanity's responsibility to protect the environment and avoid wastefulness and destruction. Furthermore, the theory highlights how poverty, population pressures, limited environmental awareness, and inadequate institutional support may encourage practices that contradict Islamic environmental ethics. It also recognises the importance of religious teachings in promoting awareness of the moral consequences of environmental destruction. Therefore, Liberative Social Solidarity Theory provides a foundation for analysing the socioeconomic, human-induced, institutional, and ethical causes of environmental degradation in Marsabit County from an Islamic perspective.

3.0 METHODOLOGY

A descriptive survey design drawing on quantitative and qualitative data was employed to investigate environmental degradation from an Islamic perspective in Marsabit County. Fieldwork covered Moyale, Saku, North Horr and Laisamis sub-counties. The stated target population was 217,079 Muslims, including adults, youths, children attending Madrasa and Islamic religious leaders. A planned sample of 384 was derived from the Krejcie and Morgan (1970) sample-size table. The researchers report simple random selection for questionnaire groups and purposive recruitment of religious leaders and other information-rich participants. A total of 339 questionnaires were administered, and 334 usable forms were returned, a questionnaire response rate of 98.53 per cent. The questionnaire respondents comprised 76 youths, 120 Madrasa learners and 138 adult men and women. In addition to those 334 questionnaire responses, 10 key informants participated in interviews, while 24 people took part in focus group discussions. Questionnaires were administered according to respondent categories, with men and women answering the same questions, while children and youth responded to different sets of questions. Therefore, variations in sample sizes across tables reflect the questionnaire design rather than missing responses. Percentages were calculated based on the respondents who answered each question.

The qualitative participants are treated as distinct from the questionnaire respondents, and no combined response rate is reported because the sampling denominators for all three activities have not been consistently documented. Interviews involved Islamic leaders and other knowledgeable informants, including Sheikhs, Hajis, Amirs and the Kadhi; group discussions included Maalimu and Tablik participants.

Before gathering data, the investigators obtained ethical approval from Chuka University and research authorisation from the National Commission for Science, Technology and Innovation (NACOSTI). Participation was voluntary, informed consent was sought, and confidentiality and anonymity were observed. Completed questionnaires were checked, coded and processed in SPSS version 28.0. Frequencies, percentages and tabular or graphic summaries were used to describe questionnaire responses. Interview and focus group material was transcribed, coded and reviewed for recurrent themes. The interpretation compared themes from the qualitative material with survey patterns, focusing on harmful land-use practices, pressures on forests and water, climatic stress, poverty and Islamic obligations concerning stewardship and conservation. Because the investigation was descriptive, its survey percentages describe respondents' reported perceptions rather than establish causation or demonstrate the prevalence of any practice among all residents of Marsabit County.

4.0 FINDINGS AND DISCUSSION

Causes of Environmental Degradation from an Islamic Perspective in Marsabit County, Kenya

Poor Agricultural Practices and Water Usage

Participants in focus groups in North Horr described cultivation on steep slopes and repeated monocropping as practices that expose soil to erosion and reduce its fertility. Accounts from Saku also identified excessive domestic and small-scale irrigation withdrawals as a strain on local water resources. A Moyale interviewee (R1, 2025) associated slash-and-burn cultivation with declining soil quality. Respondents linked these activities to an already difficult environmental setting characterised by irregular rainfall, lengthy dry periods, occasional floods and growing demand for land and water.

These accounts suggest that land-use decisions cannot be separated from the economic and ecological constraints under which they are made. Liberative Social Solidarity Theory directs attention to the social structures and material pressures that shape environmental vulnerability. On this interpretation, repeated cultivation, unsuitable farming locations and excessive water use are not merely technical mistakes; they also reflect limited choices, exposure to climatic shocks and uneven access to resources. A response grounded in solidarity would combine better land-management practices with support for households facing such pressures.

Tree Cutting and Littering

Questionnaires completed by 120 Madrasa learners indicated broad agreement that cutting trees and littering are religiously prohibited: 77 (64.2%) agreed, 39 (32.5%) strongly agreed, and 4 (3.3%) disagreed. Taken together, 96.7 per cent expressed agreement. This pattern suggests substantial awareness of obligations concerning protection of life (Hifz al-Nafs) and property or resources (Hifz al-Mal) (Abdul-Matin, 2010). Participants in Moyale focus groups nevertheless identified illegal logging, pressure on communal water, damaging farming techniques, expansion of settlements and weak governance as continuing sources of environmental strain.

The high level of agreement among Madrasa learners indicates that Islamic environmental messages have reached many children surveyed. However, awareness should not be confused with the absence of harmful practices. Focus group accounts suggested that tree removal can persist when income and fuel are scarce. Liberative Social Solidarity Theory helps explain this gap between moral commitments and the circumstances in which households make practical decisions. Conservation efforts consequently need to link faith education to realistic alternatives for everyday resource needs.

Land Misuse and Tree Cutting Driven by Survival

Economic necessity featured prominently in Madrasa learners' explanations of land misuse and tree cutting. Of 120 children, 90 (75.0%) agreed, and 17 (14.2%) strongly agreed that poverty and basic needs motivated these practices; 13 (10.8%) were undecided or disagreed. The combined agreement was 89.2 per cent. These responses indicate that young participants recognised the difficulty of conserving resources when families rely directly on them for survival. Islamic ideas of justice ('Adl), public welfare (Maslaha) and stewardship (Khilafah) point toward conservation measures that also protect livelihoods (Mahadi, 2025).

That 89.2 per cent of Madrasa respondents associated environmental harm with survival needs supports the theory's emphasis on the circumstances of disadvantaged households. It suggests that punishment or

moral instruction alone may be ineffective where alternative sources of fuel and income are unavailable. Measures that improve access to sustainable livelihoods would make it more practical for families to honour the environmental responsibilities emphasised in Islamic teaching.

Deforestation Causes Drought and Loss of Animals

Responses from children attending Madrasa in Marsabit County showed considerable awareness of the ecological consequences of deforestation. Of 120 respondents, 86 (71.6%) agreed, and 26 (21.7%) strongly agreed that deforestation leads to drought and loss of animal life, totalling 93.3 per cent affirmation. Only 6.7 per cent were undecided or disagreed. This demonstrates a high level of ecological awareness in the community, providing a strong foundation for the Islamic Theology of Nature. Ethical injunctions against destruction (Fasad) are reinforced when the tangible harms of deforestation are understood, highlighting the need for Hifz al-Bi'ah (protection of the environment) (Mwania, 2026). Conservation strategies should therefore focus on practical, faith-based solutions that mitigate deforestation rather than merely proving its impacts.

Poor Waste Disposal Harms Both Human Health and the Environment

Madrasa children also exhibited near-universal acknowledgement of the harmful effects of poor waste management. Out of 120 respondents, 81 (67.6%) agreed, and 37 (30.8%) strongly agreed that poor waste disposal harms both human health and the environment, totalling 98.4 per cent affirmation, with only 1 (0.8%) undecided and 1 (0.8%) disagreeing. This pattern reflects a successful integration of Islamic principles of stewardship (Khalifah) and trust (Amana) into environmental consciousness (Aridah et al., 2025; Pethbridge et al., 2021). FGDs in Laisamis Sub-County emphasised unplanned urbanisation, weak waste management, chronic water scarcity, and climate change as exacerbating factors for environmental deterioration, emphasising the need for culturally informed and sustainable resource management.

Pollution is Dangerous to Both People and Animals

Children's responses further demonstrated substantial awareness of the dangers of pollution to humans and animals. Among 120 respondents, 79 (65.9%) agreed, and 40 (33.3%) strongly agreed, totalling 99.2 per cent affirmation, with only 1 (0.8%) disagreeing. The responses therefore suggest that the Islamic concept of ecological balance (Mīzān) and protection of all creatures has been widely internalised, linking religious duty to practical environmental responsibility (Foltz, 2003; Bamiji, 2025). These findings underscore the potential for faith-informed conservation strategies that safeguard biodiversity and promote pro-environmental behaviour among youth in Marsabit County.

Overgrazing as a Major Cause of Environmental Degradation

Survey data from 214 youths, men, and women in Marsabit County revealed considerable awareness of overgrazing as a key driver of environmental deterioration. Of the respondents, 95 (44.4%) strongly agreed, and 92 (43.0%) agreed that overgrazing plays an important part in land degradation, totalling 87.4 per cent affirmation, while 12.6 per cent were undecided or disagreed. These results suggest that the community possesses substantial experiential knowledge of the ecological impacts of excessive livestock grazing in arid and semi-arid rangelands. The findings underscore the relevance of Islamic environmental principles, including responsible stewardship (Khalifah) and ecological balance (Mīzān), which support sustainable rangeland management practices such as traditional grazing rotations (Hima) (Zakari & Orole, 2025; Liniger et al., 2011).

Focus group discussions (FGDs) with Maalim and Tablik across Moyale, Saku, Laisamis, and North Horr confirmed that overgrazing is a primary anthropogenic driver of land degradation. Respondents consistently reported that excessively large herds strip vegetation cover, causing soil erosion, compaction, and nutrient loss, which accelerates desertification and reduces land fertility. These pressures are compounded by unsustainable agricultural practices, deforestation for firewood and charcoal, population growth, and climate change-induced droughts and erratic rainfall (R2, 2025; R3, 2025; R4, 2025; R5, 2025; R6, 2025; R1, 2025).

The FGDs further reported that socio-economic factors, including cultural reliance on livestock as wealth and limited alternative livelihoods, intensify overstocking and resource depletion. Consequently, pastoral communities face reduced capacity to sustain livestock or crops, increased food insecurity, and pressures on urban infrastructure due to migration from degraded rangelands. Overall, the evidence indicates a complex interplay between human activity and climatic factors, with overgrazing as the central driver of rangeland degradation, calling for integrated conservation strategies informed by both Islamic ethical principles and sustainable land management practices.

Climate Change and Environmental Impacts

Survey data from 120 children attending Madrasa in Marsabit County revealed considerable awareness of climate change effects, with 25 (20.8%) strongly agreeing and 84 (70.0%) agreeing that climate change manifests as less rainfall and higher temperatures, totalling 90.8 per cent acknowledgement. Some 9.2 per cent were undecided or disagreed, suggesting gaps in localised climate change knowledge or exposure to counter-narratives (Koissaba, 2026).

FGDs and interviews with religious leaders (Maalim and Tablik) across Moyale, Saku, Laisamis, and North Horr confirmed that climate change exacerbates environmental deterioration. Manifestations include prolonged droughts, erratic rainfall, rising temperatures, water scarcity, reduced grazing land, crop failures, and livestock losses, collectively undermining livelihoods and accelerating desertification (R6, 2025; R1, 2025; R7, 2025; R3, 2025). These findings highlight the importance of combining Islamic stewardship (Amana) with climate adaptation strategies to strengthen community resilience.

Overgrazing as a Driver of Environmental Degradation

Survey data from 214 youths, men, and women indicated that 95 (44.4%) strongly agreed and 92 (43.0%) agreed that overgrazing contributes to environmental deterioration (87.4% combined). Some 12.6 per cent were undecided or disagreed (Zakari & Orole, 2025; Liniger et al., 2011).

FGDs and interviews with Maalim and Tablik from Moyale, Saku, Laisamis, and North Horr consistently identified overgrazing as a primary anthropogenic factor, causing vegetation loss, soil erosion, compaction, and desertification. These pressures are compounded by deforestation, poor farming practices, population growth, and climate change, reducing land fertility and undermining pastoral and agricultural livelihoods (R2, 2025; R3, 2025; R4, 2025; R5, 2025; R6, 2025; R1, 2025). Socio-economic necessity and cultural reliance on livestock were noted as key drivers of unsustainable grazing practices.

Deforestation for Charcoal Burning

Among 214 youths, men, and women surveyed, 50 (23.4%) strongly agreed, and 111 (51.9%) agreed that deforestation for charcoal burning worsens desertification (75.3% total). A noteworthy share of 24.7 per

cent were undecided or disagreed, reflecting economic dependence on charcoal and energy poverty (Bailis, 2005; Kiruki et al., 2020).

FGDs and interviews confirmed that deforestation, largely for firewood, charcoal, and land clearing, significantly contributes to environmental deterioration. These pressures are compounded by overgrazing, poor agricultural practices, population growth, and climate change, leading to soil erosion, loss of biodiversity, and desertification (R2, 2025; R3, 2025; R5, 2025; R1, 2025; R7, 2025; R8, 2025).

Lack of Proper Waste Disposal

Survey results showed that 99 (46.4%) strongly agreed and 88 (41.1%) agreed that poor waste disposal contributes to environmental pollution (87.5% combined), while 12.5 per cent were undecided or disagreed. This pattern reflects a high awareness of the link between sanitation and environmental harm and supports the theological principle of cleanliness (Taharah) and prevention of harm (Darar). The large majority (87.5%) awareness connecting waste management deficits to pollution reinforces the theological imperative of cleanliness (Taharah) and the prevention of harm (Darar) as central pillars of community duty. The friction between high awareness and translation into consistent practice due to infrastructure limitations operationalises the theoretical challenge of moving beyond theoretical knowledge to implement practical communal solutions under the banner of social solidarity and reform (Yono et al., 2025; Jalloh et al., 2022).

Plastic Bags as an Environmental Threat

Among 214 youths, men, and women, 62 (29.0%) strongly agreed, and 100 (46.7%) agreed that plastic bags pose an environmental threat (75.7% total), while 24.3 per cent were undecided or disagreed. This indicates awareness of plastic pollution, though resistance persists due to economic and practical reliance on plastic, highlighting the need for community engagement informed by Islamic teachings on non-wastefulness (Isrāf) and land stewardship (Amana) (GELIL, 2026; Kiaka et al., 2025).

The majority awareness of 75.7 per cent regarding the environmental threat of plastic pollution establishes a societal basis for enforcing government bans, aligning secular law with the theological imperative to avoid wastefulness (Isrāf) and protect the trust (Amana) of the land. The notable minority resistance and strong disagreement regarding plastic bags highlight the challenge of economic dependence and utility, reflecting the theory's structural critique where materialist pressures and lack of affordable alternatives hinder behavioural change.

Environmental Degradation Threatens Livestock and Agriculture Livelihoods

Table 1 summarises the youth, men and women questionnaire respondents' recognition of whether environmental deterioration threatens livestock and agricultural livelihoods. This variable serves as a critical measure of the community's understanding of the direct economic and subsistence impacts of environmental decline, which is essential for evaluating the relevance of Islamic teachings on sustenance (Rizq) and the preservation of wealth in local resource management strategies in Marsabit County.

Table 1: Environmental Degradation Threatens Livestock and Agriculture Livelihoods

		Frequency	Percent
	Strongly Agreed	84	39.3
	Agreed	103	48.1
	Undecided	9	4.2
	Disagreed	10	4.7
	Strongly Disagreed	8	3.7
	Sub-Total	214	100.0
	Children Attending Madrasa	120	
Total		334	

The responses showed an overwhelming consensus among the valid sample (n=214) on the stated threat. The questionnaire results showed that 84 (39.3%) of the youth, men and women respondents strongly agreed, and 103 (48.1%) agreed that environmental deterioration threatens livestock and agricultural livelihoods. Overall, a majority of 87.4 per cent of the sample demonstrated acknowledgement of the direct link between a declining environment and their economic well-being. Such extensive agreement is interpreted as strong evidence that the community possesses first-hand, immediate awareness of how environmental health translates into economic security in their arid and semi-arid setting, where both pastoralism and limited agriculture are key to survival. This awareness creates an opportunity for theological intervention, framing conservation as an act of preserving wealth and securing sustenance (Rizq), which is a core Islamic tenet. This interpretation accords with academic work that highlights the acute awareness of environmental-economic linkages among communities directly dependent on natural resources in vulnerable regions, where degradation poses an existential threat (Madukwe & Arodoye, 2026).

Some youth, men and women questionnaire participants were uncertain or disagreed. The questionnaire results showed that 9 (4.2%) were undecided, 10 (4.7%) disagreed, and 8 (3.7%) strongly disagreed. The total proportion that did not agree with the statement was 12.6 per cent. These differing responses may indicate a segment of the population might attribute threats to livelihoods primarily to non-environmental issues, such as market access, governance, or conflicts, rather than degradation alone. One possible interpretation is that this divergence highlights the need for a holistic approach that utilises Islamic teachings to motivate environmental protection as an indispensable element of broader economic resilience and stability, leveraging the concept of sustainable development (Mīzān) for future generations. This account is in keeping with scholarly literature confirming that while environmental awareness is high, communities sometimes downplay their own role in degradation, prioritising immediate economic activities over long-term conservation (Oba, 1985).

Soil Erosion is a Major Environmental Concern in the Area

Table 2 summarises the youth, men and women questionnaire respondents' recognition of whether soil erosion is a major environmental concern in the area. This variable measures the community's acknowledgement of a key process of land degradation relevant to their arid context, which is necessary for evaluating the efficacy of Islamic principles on land preservation and resource stewardship (Khalifah) in motivating soil conservation practices in Marsabit County.

Table 2: Soil Erosion is a Major Environmental Concern in the Area

		Frequency	Percent
	Strongly Agreed	71	33.2
	Agreed	92	43.0
	Undecided	11	5.2
	Disagreed	16	7.5
	Strongly Disagreed	24	11.1
	Sub-Total	214	100.0
	Children Attending Madrasa	120	
Total		334	

The responses showed a clear majority consensus among the valid sample (N=214) regarding the stated environmental concern. The questionnaire results showed that 71(33.2%) of the youth, men and women respondents strongly agreed, and 92(43.0%) agreed with the statement that soil erosion is a major environmental concern. Collectively, a significant majority of 76.2 per cent of the sample demonstrated acknowledgement of soil erosion as a primary threat. This strong majority agreement is interpreted as evidence that the community has a practical understanding of how the removal of topsoil affects land productivity and ecosystem health, which directly challenges their ability to fulfil the Islamic mandate of resource stewardship (Khalifah). This awareness offers a basis for promoting conservation techniques like terracing and planting trees, framing these actions as theologically essential to preserve the productivity of the land. This interpretation accords with academic work affirming that indigenous and local communities in semi-arid zones possess sophisticated knowledge regarding the causes and consequences of soil erosion, often linking it to unsustainable land use practices (Pazoki & Akhlaghi, 2026).

A noteworthy share of youth, men and women participants were either unsure or disagreed. The questionnaire results showed that 11 (5.2%) were undecided, 16 (7.5%) disagreed, and a notable 24 (11.1%) strongly disagreed. The total proportion not recognising soil erosion as a major concern was 23.8 per cent. The presence of this considerable minority, particularly the high rate of strongly disagreeing, is suggested to indicate that a segment of the population may view soil erosion as an unavoidable consequence of climate factors (flash floods) or as a less pressing issue compared to challenges like poverty and drought. These differences point to a need for theological guidance that explicitly links the prevention of soil loss to the protection of future sustenance (Rizq) and the long-term sustainability required by Islamic ethics, ensuring that environmental management is prioritised over short-term economic gains. This account is in keeping with scholarly literature documenting that, despite high awareness of soil degradation, behavioural change is often hindered by the fatalistic attribution of environmental problems to natural forces or divine will, requiring targeted religious and scientific literacy (Watson & Kochore, 2012).

Focus group discussions of the Maalim and Tablik from Moyale identified unsustainable agricultural practices, specifically the continuous farming without sufficient fallow periods or crop rotation, which severely diminishes soil fertility as an important contributor to ecological decline.

Lack of Awareness on Environmental Issues Worsens Degradation

Table 3 summarises the youth, men and women respondents' recognition of whether a lack of awareness on environmental issues worsens degradation. This variable measures the community's metacognitive understanding of the contribution of knowledge in conservation, which is vital for evaluating the perceived necessity of Islamic environmental education and awareness campaigns as a core strategy for combating environmental decline in Marsabit County.

Table 3: Lack of Awareness on Environmental Issues Worsens Degradation

		Frequency	Percent
	Strongly Agreed	82	38.3
	Agreed	99	46.3
	Undecided	9	4.2
	Disagreed	10	4.7
	Strongly Disagreed	14	6.5
	Sub-Total	214	100.0
	Children Attending Madrasa	120	
Total		334	

The questionnaire results showed that 82 (38.3%) of the youth, men and women respondents strongly agreed, and 99 (46.3%) agreed with the statement that lack of awareness worsens environmental deterioration. A significant majority of 84.6 per cent of the sample recognised that knowledge deficit is a significant factor in environmental problems. Such extensive agreement is interpreted as strong evidence that the community views education and awareness as indispensable tools for environmental protection. This finding provides direct support for the thesis's focus on Islamic teachings and strategies, as it confirms the community's belief that knowledge, specifically theological knowledge related to stewardship (Khalifah), is necessary to drive positive environmental action. This interpretation accords with academic work emphasising that successful conservation initiatives rely heavily on community perception that their knowledge level directly influences outcomes (Kiruki et al., 2020).

Some youth, men and women survey participants expressed either uncertainty or direct disagreement. The questionnaire results showed that 9 (4.2%) were undecided, 10 (4.7%) disagreed, and 14 (6.5%) strongly disagreed. The total proportion that did not agree with the statement was 15.4 per cent. These differing responses may indicate that while most acknowledge the contribution of awareness, a segment may attribute degradation primarily to structural issues such as poverty, institutional failure, or climate change, rather than a mere lack of knowledge. One possible interpretation is that this disagreement highlights the need for educational strategies to not only disseminate theological concepts but also to empower the community to overcome systemic barriers, aligning with Islamic teachings that promote social justice and practical problem-solving in environmental affairs. This account is in keeping with scholarly literature documenting that awareness alone is often insufficient and structural and economic factors must be addressed alongside knowledge transmission for effective environmental governance (Cockerill, 2018).

Environmental Degradation Leads to Water Scarcity and Conflicts

Table 4 summarises the youth, women and men questionnaire respondents' recognition of whether environmental deterioration leads to water scarcity and conflicts. This variable measures the community's

understanding of the severe socio-economic consequences of ecological decline, which is vital for evaluating the contribution of Islamic teachings on peace (Salām) and water rights in promoting both conservation and conflict resolution in Marsabit County.

Table 4: Environmental Degradation Leads to Water Scarcity and Conflicts

		Frequency	Percent
	Strongly Agreed	61	28.5
	Agreed	101	47.2
	Undecided	7	3.3
	Disagreed	16	7.4
	Strongly Disagreed	29	13.6
	Sub-Total	214	100.0
	Children Attending Madrasa	120	
Total		334	

The responses showed a strong majority consensus among the valid sample (N=214). The questionnaire results showed that 61 (28.5%) of the youth, women and men respondents who participated in the questionnaire survey strongly agreed, and 101 (47.2%) agreed with the statement that environmental deterioration leads to water scarcity and conflicts. Collectively, a significant majority of 75.7 per cent of the sample recognised the connection between ecological health and social stability. This strong majority agreement is evidence that the community has a deep, localised understanding of the environmental conflict nexus, where resource depletion (especially water) fuels inter-communal tension. This awareness provides a crucial foundation for integrating Islamic teachings that mandate the equitable sharing of water and the pursuit of peace (Salām) into community-led conservation and resource governance initiatives. This interpretation accords with academic work that validates the lived experience of pastoralist communities in the Horn of Africa, where resource scarcity is recognised as a major catalyst for conflict and instability (Mengisteab, 2011).

A noteworthy share of youth, women and men questionnaire participants were either unsure or disagreed. The questionnaire results showed that 7 (3.3%) were undecided, 16 (7.4%) disagreed, and a significant 29 (13.6%) strongly disagreed. The total proportion that did not agree with the statement was 24.3 per cent. This degree of disagreement is suggested to indicate that while the relationship is clear to most, a segment of the population may view the conflicts as driven primarily by ethnic rivalry, historical grievances, or political manipulation, rather than solely by environmental factors. This divergence highlights the need for theological interventions that address both the conservation failure (environmental deterioration) and the behavioural failure (conflict), leveraging the concept of justice ('Adl) in resource distribution to ensure sustainable peace. This account is in keeping with scholarly literature documenting that while scarcity is a factor, conflicts in arid lands are multi-dimensional, often requiring political and social frameworks alongside environmental ones for resolution (Nori & Baldaro, 2018).

Poverty Contributes to Unsustainable Use of Natural Resources

Table 5 summarises the youth, women and men questionnaire respondents' recognition of whether poverty contributes to the unsustainable use of natural resources. This variable measures the community's understanding of the socio-economic drivers behind environmental destruction, which is crucial for

evaluating the relevance of Islamic teachings on wealth distribution and social justice (Zakāt and 'Adl) in developing equitable and sustainable conservation strategies in Marsabit County.

Table 5: Poverty Contributes to Unsustainable Use of Natural Resources

		Frequency	Percent
	Strongly Agreed	81	37.9
	Agreed	94	43.9
	Undecided	14	6.5
	Disagreed	15	7.0
	Strongly Disagreed	10	4.7
	Sub-Total	214	100.0
	Children Attending Madrasa	120	
Total		334	

Survey findings showed that 81 (37.9%) of the youth, women and men survey participants strongly agreed, and 94 (43.9%) agreed with the view that poverty contributes to unsustainable resource use. Collectively, a majority of 81.8 per cent of the sample recognised the strong link between economic hardship and environmental deterioration. Such extensive agreement shows that the community understands that conservation cannot be separated from economic empowerment. This pattern indicates that theological strategies must extend beyond mere ethics to incorporate the Islamic principles of social justice and poverty alleviation, such as promoting sustainable livelihoods that align with the conservation mandate of stewardship (Khalīfah). This interpretation accords with academic work that highlights the clear correlation between poverty and the unsustainable exploitation of common-pool resources in arid regions, where immediate survival often outweighs long-term environmental concerns (Ndegwa et al., 2020).

Some youth, women and men questionnaire participants were uncertain or disagreed. The questionnaire results showed that 14 (6.5%) were undecided, 15 (7.0%) disagreed, and 10 (4.7%) strongly disagreed. The total proportion that did not agree with the statement was 18.2 per cent. The presence of this minority is suggested to indicate that a segment of the population may view the degradation primarily as a result of factors other than poverty, such as greed, corruption, or poor governance. The variation underlines the need for theological discussions to address the full spectrum of drivers of environmental destruction, ensuring that while poverty is addressed, the Islamic prohibition of waste and excess (Isrāf) is also strongly applied to those with the means to conserve. This account is in keeping with scholarly literature confirming that while poverty drives unsustainable resource use, affluence and lack of regulation also contribute significantly to environmental decline, underscoring the need for multi-faceted interventions (Nori & Baldaro, 2018).

The interview schedule data emphasised a significant correlation between poverty and accelerating environmental deterioration in the county. The Haji from Laisamis noted that impoverished communities often resort to the unsustainable use of natural resources purely for survival (R6, 2025). This dependence manifests in detrimental practices such as deforestation for firewood and charcoal production, severe overgrazing, and the persistence of unsustainable farming methods. These harmful actions are fueled by a crucial lack of affordable alternatives or modern technologies. Furthermore, the interviewee stressed that

poverty inherently limits the community's ability to invest in environmentally friendly practices, thereby preventing the adoption of crucial sustainable solutions.

An examination of the root causes of ecological decline revealed that poverty is a significant factor fueling environmental deterioration in the region. The Haji from Moyale explained that communities lacking financial resources inevitably have limited access to sustainable alternatives. This limitation forces poor families to rely heavily on unsustainable practices, such as consuming firewood and charcoal for cooking, which is a direct cause of deforestation (R1, 2025). Furthermore, the lack of capital prevents investment in essential environmental solutions like solar energy or efficient farming techniques. Ultimately, the survival demands imposed by poverty redirect the community's focus, severely limiting their ability to participate in necessary conservation programs.

An investigation into the socio-economic drivers of environmental damage established a clear link between poverty and accelerated resource degradation. The Haji from Saku Sub-County explained that the immediate pressure of poverty forces people to overuse natural resources in fundamentally unsustainable ways. Since resource use becomes a simple "means of survival," communities act without considering the long-term consequences for the ecosystem (Noor, R7, 2025). This survival imperative manifests in specific detrimental practices. Examples cited included the practice of cutting down trees for firewood, engaging in intense overgrazing of livestock, and pursuing other resource-depleting activities that directly degrade the environment.

Floods Cause Environmental Damage

Table 6 summarises the youth, men and women questionnaire respondents' acknowledgement of whether floods cause environmental damage. This variable measures the community's awareness of the detrimental impacts of extreme weather events, which is necessary for assessing the relevance of Islamic teachings on disaster preparedness, resilience (Sabr), and adapting to the forces of nature in conservation strategies in Marsabit County.

Table 6: Floods Cause Environmental Damage

		Frequency	Percent
	Strongly Agreed	71	33.2
	Agreed	90	42.0
	Undecided	7	3.3
	Disagreed	13	6.1
	Strongly Disagreed	33	15.4
	Sub-Total	214	100.0
	Children Attending Madrasa	120	
Total		334	

The questionnaire results showed that 71 (33.2%) of the youth, men and women respondents strongly agreed, and 90 (42.0%) agreed with the statement that floods cause environmental damage. Collectively, a significant majority of 75.2 per cent of the sample recognised the environmental damage caused by flooding. This strong majority agreement is interpreted as evidence that the community has a practical understanding of the environmental risks associated with high rainfall events common to arid and semi-

arid regions, such as flash floods and soil erosion. This finding reinforces the need for theological strategies to incorporate practical measures, aligning the Islamic concepts of prudence and proactive stewardship (Khalīfah) with disaster risk reduction and environmental planning like flood control and proper drainage. This interpretation accords with academic work that validates the high local awareness of disaster risks, particularly among communities in arid lands that are frequently subjected to both drought and intense, destructive rainfall (Zakari & Orole, 2025).

A noteworthy share of youth, men and women survey participants expressed either uncertainty or direct disagreement. The questionnaire results showed that 7 (3.3%) were Undecided, 13 (6.1%) disagreed, and a notable 33 (15.4%) strongly disagreed. The total proportion not acknowledging flood damage was 24.8 per cent. The presence of this significant minority, particularly the high strongly disagreed rate, is suggested to indicate that a segment of the population may view heavy rainfall or flooding not primarily as a source of damage, but as a necessary source of water and pasture rejuvenation in their drought-prone environment, or may attribute the damage solely to poorly constructed infrastructure rather than the environmental event itself. The variation underlines the need for theological and scientific education to address the dual reality of floods as both a necessary resource and a destructive force, leveraging the concept of ecological balance (Mīzān) to promote sustainable land use that minimises flood damage while maximising water harvesting. This account is in keeping with scholarly literature documenting the complex and often contradictory perceptions of rainfall in dryland communities (Mengisteab, 2011).

Quarrying Activities

Table 7 summarises the youth, women and men questionnaire respondents' recognition of the presence of quarrying activities as an environmental factor in the area. The question implicitly seeks to establish the community's acknowledgement of localised industrial impact on the environment, which is necessary for evaluating the relevance of Islamic principles on land protection and minimising harm (Darar) in regulating resource extraction activities in Marsabit County.

Table 7: Quarrying Activities

		Frequency	Percent
	Strongly Agreed	68	31.8
	Agreed	140	65.4
	Disagreed	1	0.5
	Strongly Disagreed	5	2.3
	Sub-Total	214	100.0
	Children Attending Madrasa	120	
Total		334	

The questionnaire results showed that 68 (31.8%) of the youth, women and men questionnaire respondents strongly agreed, and 140 (65.4%) agreed with the proposition related to quarrying activities. Collectively, a majority of 97.2 per cent of the sample either affirmed the activity or its impact. This near-unanimous agreement is interpreted as strong evidence that quarrying is a highly visible, acknowledged, and potentially significant environmental factor within the community's consciousness in Marsabit County. The extent of recognition provides a strong theological opportunity to engage the community on Islamic guidelines for managing non-renewable resources, framing regulation as essential for fulfilling the

stewardship (Khalīfah) mandate and preventing the destructive practices associated with quarrying. This interpretation accords with academic work that validates community awareness of resource extraction activities in dryland areas, where the sudden onset of such industrial activities often leads to highly recognisable environmental and social disruption (Gratzfeld, 2003).

Only a small proportion of youth, women and men questionnaire respondents expressed disagreement. The questionnaire results showed that 1 (0.5%) disagreed, and 5 (2.3%) strongly disagreed. No respondents were undecided. The minimal incidence of disagreement suggests resistance to the issue is extremely low, confirming that quarrying is not a contested subject in terms of its local presence or impact visibility. One possible interpretation is that the tiny minority represents statistical noise rather than a significant contrary view. This account is in keeping with scholarly literature confirming that environmental consciousness rapidly heightens in communities where resource extraction leads to immediate, localised negative externalities such as dust, noise, and land degradation (Naanyu et al., 2024).

The near-unanimous agreement (97.2%) recognising quarrying activities provides a strong theological opportunity to engage the community on Islamic guidelines for managing non-renewable resources and preventing destructive industrial practices. This high visibility of industrial impact mirrors the theory's focus on confronting immediate systemic pressures that disrupt local ecosystems and challenge communal stewardship.

Encroachment of People in the Forest Area

Table 8 summarises the youth, women and men questionnaire respondents' recognition of the encroachment of people into the forest area. This variable measures the community's acknowledgement of the direct pressure exerted by human settlement or activity on forest ecosystems, which is essential for evaluating the relevance of Islamic teachings on resource zoning and the protection of natural sanctuaries (Hima) in conservation efforts in Marsabit County.

Table 8: The Encroachment of People in the Forest Area

		Frequency	Percent
	Strongly Agreed	61	28.5
	Agreed	142	66.3
	Undecided	1	.5
	Disagreed	9	4.2
	Strongly Disagreed	1	.5
	Sub-Total	214	100.0
	Children Attending Madrasa	120	
Total		334	

The questionnaire results showed that 61 (28.5%) of the youth, men and women respondents strongly agreed, and 142 (66.3%) agreed with the proposition. Collectively, a majority of 94.8 per cent of the sample recognised the issue of human encroachment into the forest area. This near-unanimous agreement is interpreted as strong evidence that forest encroachment is a widely recognised and palpable environmental and land-use challenge in the community. The extent of recognition creates an opportunity for implementing theological strategies, leveraging the Islamic concept of the protected area (Hima), which

mandates the establishment and respect of conservation zones to prevent the destructive pressure of uncontrolled human activity. This interpretation accords with academic work that highlights the visibility and perceived threat of human settlement and resource extraction at forest margins in Kenyan drylands, making it a critical community concern (Nzau et al., 2018).

Only a small proportion of youth, women and men survey participants expressed either uncertainty or direct disagreement. The questionnaire results showed that 1 (0.5%) was undecided, 9 (4.2%) disagreed, and 1 (0.5%) strongly disagreed. The total proportion not acknowledging the encroachment was 5.2 per cent. The minimal incidence of disagreement suggests resistance to the factual acknowledgement of encroachment is very low. One possible interpretation is that this small minority may be disconnected from forest areas or may perceive the "encroachment" as legitimate utilisation rather than an unauthorised threat. This account is in keeping with scholarly literature confirming high levels of communal awareness regarding boundary violations, where the conflict between conservation goals and local livelihood needs is a frequent point of tension (Petursson et al., 2011).

Population Growth

Kabanda (OI, 2025) noted that population growth increased pressure on finite local resources, with unsustainable agricultural practices, including slash-and-burn techniques, also contributing significantly to land degradation.

Cultural Beliefs or Traditions that Worsen Environmental Degradation

Evidence gathered through Focus Group Discussions (FGDs) and interview schedule data across Moyale, North Horr, Saku Sub-County, and Laisamis consistently indicates that deeply embedded cultural practices, reinforced by socio-economic constraints, are key drivers of environmental deterioration in the region.

Across all sites, a dominant issue is the cultural and economic value attached to large livestock herds. Livestock serve not only as a primary livelihood source but also as a symbol of wealth and social status. Consequently, pastoralists maintain herd sizes that exceed the land's carrying capacity, resulting in persistent overgrazing. This practice places unsustainable pressure on fragile rangelands, inhibits vegetation regeneration, and accelerates soil erosion and desertification (FGDs, Moyale; North Horr; Saku; Laisamis). Interview data further corroborate this, indicating that traditional pastoralism, when practised without regulated grazing systems, leads directly to land degradation and depletion of water resources (R5, 2025; R4, 2025).

The over-reliance on forest resources is another critical factor contributing to environmental decline. Communities depend heavily on firewood and charcoal for domestic energy and for cultural functions such as communal gatherings and rituals. This continuous extraction, often without reforestation, has significantly reduced forest cover and biodiversity (FGDs, Moyale; North Horr). Interview respondents emphasised that deforestation has diminished access to essential resources, including medicinal plants and food sources, while increasing the distance required to collect firewood (R3, 2025). Additionally, unsustainable tree harvesting practices were identified as placing long-term strain on the already fragile ecosystem (R1, 2025; R6, 2025).

Unsustainable agricultural practices further exacerbate environmental stress, particularly in Saku Sub-County and surrounding areas. Techniques such as slash-and-burn farming, land clearing, and continuous

cultivation without soil conservation measures contribute to declining soil fertility and increased erosion (FGDs, Saku; Laisamis). These practices, often carried out on marginal lands, weaken ecological resilience and accelerate land degradation (R2, 2025; R3, 2025).

A significant underlying driver of these practices is the lack of alternative livelihood opportunities. Communities are compelled to depend heavily on pastoralism and natural resource extraction due to limited economic options. This dependence intensifies pressure on land, forests, and water resources, creating a cycle of environmental deterioration and poverty (FGDs, Saku; R4, 2025).

Communal land tenure systems also contribute to the problem. The absence of clearly defined ownership or regulatory mechanisms leads to unmanaged resource use, where no single entity assumes responsibility for sustainable land stewardship. This has resulted in unchecked grazing and resource depletion, particularly in Laisamis (FGDs, Laisamis).

Despite the predominantly negative impacts, some positive cultural elements were identified. Practices such as traditional land stewardship and the preservation of sacred groves demonstrate an inherent capacity for environmental conservation within local cultures. However, these practices are increasingly undermined by modern socio-economic pressures and are insufficient to offset widespread degradation (R3, 2025).

Modern Lifestyles

The interview data indicate that both traditional livelihood practices and emerging socio-economic changes are significant contributors to environmental deterioration.

In North Horr, pastoralism was identified as a primary driver, particularly through overgrazing, which strips vegetation, accelerates soil erosion, and contributes to desertification, ultimately reducing rangeland productivity (R2, 2025). Additionally, poor farming practices such as over-cultivation were reported to deplete soil fertility, resulting in lower crop yields and increased threats to food security.

At the same time, modern socio-economic shifts are intensifying environmental pressures. In Moyale, urbanisation and changing lifestyles have led to increased consumption of water and energy, alongside rising waste generation, especially from plastics and non-recyclable materials (R1, 2025). Industrialisation further contributes to pollution and resource depletion, while growing reliance on fossil fuels exacerbates climate change impacts.

Similarly, in Saku Sub-County, increased demand for consumer goods has driven higher levels of waste production, particularly persistent plastics. Industrial activities such as mining and construction were also identified as key sources of environmental deterioration. The continued dependence on fossil fuels was emphasised as a major factor contributing to air pollution and intensified climate change pressures (R3, 2025).

Effects of Population Growth on the Environment in Laisamis

The interview data consistently show that population growth is a major driver of environmental deterioration across Laisamis, Moyale, and Saku Sub-County.

In Laisamis, increasing population size has intensified demand for key natural resources such as land, water, and fuel, leading to overgrazing, soil fertility depletion, and deforestation. Expanding urban settlements have also created waste management challenges, resulting in pollution of water sources and public spaces (R6, 2025).

Similarly, in Moyale, population growth has heightened pressure on essential resources including land, water, firewood, and food. This has led to overexploitation of land for farming and grazing, alongside a significant rise in waste production. Inadequate waste management systems have further contributed to widespread environmental pollution and ecosystem degradation (R1, 2025).

In Saku Sub-County, increased population density has intensified demand for land, water, and vegetation, driving deforestation and overgrazing. These processes have degraded soil quality and reduced the land's capacity to sustain livelihoods, ultimately affecting both the environment and the well-being of local communities (R7, 2025).

Role of Poverty in Environmental Degradation

According to (R6, 2025), poverty is a significant causative factor of environmental deterioration in Marsabit County. The Haji from Laisamis explained that impoverished communities, driven by the need for survival, are often forced to adopt unsustainable practices. A critical example cited was the reliance on firewood and charcoal due to the lack of alternative energy sources, which directly contributes to deforestation. Furthermore, the lack of financial resources inhibits investment in modern solutions, such as sustainable farming techniques or water conservation methods. This forces communities to overexploit the land and natural resources, thereby limiting the adoption of conservation and perpetuating a cycle of degradation.

Dangers or Consequences of Environmental Degradation

The synthesis of findings from FGDs and interview data across Moyale, North Horr, Saku Sub-County, and Laisamis reveals that environmental deterioration has severe, multidimensional consequences affecting both ecosystems and human livelihoods, with impacts spanning present and future generations.

A dominant immediate effect across all areas is water scarcity, driven by reduced rainfall, overuse of water resources, and declining environmental capacity to retain water. This shortage affects drinking water, irrigation, and livestock survival, and in many cases has escalated into conflicts over limited resources (FGDs, Moyale; North Horr; Saku; Laisamis (R8, 2025; R2, 2025); R1, 2025). Closely linked to this is the decline in agricultural productivity, caused by soil erosion, land degradation, and reduced soil fertility, leading to crop failure and diminished grazing capacity (FGDs, all sites; R7, 2025; R3, 2025).

Environmental deterioration has also led to significant loss of biodiversity, including the disappearance of vegetation, wildlife habitats, and essential plant species used for food and medicine. This ecological decline weakens the natural support systems that communities depend on for survival (FGDs, all sites; R6, 2025; R1, 2025). In more severely affected areas such as Laisamis and North Horr, desertification and the expansion of barren land have resulted in the loss of arable land and pasture, further intensifying livelihood challenges (FGDs, Laisamis; R2, 2025).

These environmental stresses directly translate into food insecurity, as both farming and pastoral systems become less productive. The decline in crop yields, livestock health, and access to natural resources

undermines household food supply and income (FGDs, all sites; R5, 2025; R4, 2025). Consequently, poverty levels have increased, with many households losing their primary sources of livelihood. This has forced some communities to rely on external aid or migrate in search of alternative opportunities (R1, 2025; R3, 2025).

The accounts additionally reveal growing social and health challenges. Environmental deterioration contributes to the spread of waterborne diseases, respiratory illnesses from pollution, and increased competition over scarce resources, sometimes resulting in conflict (R1, 2025). Additionally, the displacement of both people and wildlife due to habitat loss and resource scarcity further destabilises local systems (R7, 2025; R6, 2025).

From an economic perspective, ecological decline has severely disrupted pastoralism and agriculture, the region's primary livelihood sectors. Reduced grazing land, livestock deaths, irregular rainfall, and soil depletion have made both herding and farming increasingly unreliable, weakening household economic stability (R2, 2025; R3, 2025; R1, 2025).

Looking ahead, the long-term implications are critical. Continued degradation threatens future access to essential resources such as food, water, and productive land, potentially leading to chronic poverty, large-scale displacement, and heightened conflict over scarce resources. The loss of biodiversity and ecosystem resilience further reduces the region's capacity to adapt to climate change, worsening vulnerability for future generations (R6, 2025; R1, 2025).

Overall, the findings demonstrate that environmental deterioration in Marsabit County creates a reinforcing cycle of ecological decline, economic hardship, and social vulnerability, posing a serious threat to both current and future sustainability.

Community Response to Environmental Degradation

According to R6 (2025), the local community's reaction to the dangers of environmental deterioration is varied, encompassing both local initiatives and coping mechanisms. The Haji from Laisamis reported that immediate responses often involve local efforts such as tree planting and increased water conservation. However, these grassroots efforts are frequently informal and lack coordinated, sustainable impact. In response to resource depletion, some community members opt to migrate in search of better grazing and water, while others adapt their traditional farming and pastoral practices to cope with the changing climate. The interviewee concluded that although there is a growing awareness of conservation needs, the overall effort requires more coordinated interventions to be effective.

5.0 CONCLUSION AND RECOMMENDATIONS

Conclusion: The inquiry identified several interacting explanations for environmental degradation in Marsabit County. Questionnaire respondents and qualitative participants repeatedly highlighted grazing pressure, tree cutting for domestic energy and charcoal, inappropriate cultivation, waste disposal problems, soil erosion and water shortages. They also drew attention to prolonged drought, occasional damaging floods, settlement expansion and population-related pressure on scarce resources. Of the 214 surveyed youths and adults, 87.4 per cent agreed that overgrazing contributes to environmental degradation, while 75.3 per cent linked charcoal-related deforestation to desertification. Among the 120 Madrasa learners, 89.2 per cent agreed that poverty and basic needs underlie damaging land-use and

tree-cutting practices. These are reported perceptions, not independently measured environmental impacts. Across interviews and group discussions, participants explained that the value attached to large herds and limited livelihood alternatives can encourage resource use beyond ecological limits. These findings are consistent with the central concern of Liberative Social Solidarity Theory: environmental damage must be understood alongside structural disadvantage and everyday survival demands. Islamic teachings concerning stewardship (Khalifah), balance (Mīzān), justice ('Adl) and avoidance of waste provide an ethical framework for addressing these concerns, but practical conservation requires more than religious awareness. Accessible energy, coordinated grazing systems, sustainable livelihoods, appropriate waste management and community education are needed to reduce pressure on natural resources. Taken together, the findings add locally grounded insight into how ecological challenges and religious duties intersect in northern Kenyan pastoral communities.

Recommendation: Religious institutions, community organisations and local authorities should coordinate practical action against land degradation across Marsabit County. Islamic leaders and the Muslim Youth Association could support environmental education through mosque activities and community forums, while local agencies provide technical guidance on pasture management, reforestation and waste disposal. Conservation programmes should prioritise affordable alternatives to charcoal and firewood, strengthen water management and expand livelihood choices for vulnerable households. Madrasa programmes can connect Islamic principles of stewardship and moderation with age-appropriate practical activities. Community-led monitoring and cooperation between faith groups, pastoralists and public authorities would help align environmental responsibilities with local economic realities.

Limitations of the Study

The vast and remote geographical area increased travel costs and time requirements. To address these challenges, a research assistant was employed to facilitate efficient data collection.

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