

Evaluating the Effectiveness and Challenges of Wildlife Conservation Initiatives in the South West Region, Cameroon

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ABSTRACT

Wildlife holds immense ecological, economic, cultural, and scientific significance worldwide, and scientists estimate that around 50% of Earth's habitable land is still occupied by natural ecosystems that support wildlife, although this is rapidly declining due to human activities. The South West Region of Cameroon continues to face severe wildlife decrease, especially at a time when the conservation of wildlife is most essential. The major aims of this study were to evaluate the effectiveness and challenges of wildlife conservation initiatives in the South West Region of Cameroon. This study was investigatory and explanatory in nature, employing a mixed method approach, involving the qualitative and quantitative techniques. 300 respondents were selected through a clustered random sampling technique. Primary data were obtained from them through questionnaires, interviews, focus group discussions and field observations. These were complemented by secondary data obtained from published related articles, magazines, relevant literature and databases. Results revealed that the South West region harbours multiple species of wildlife which are of diverse significance.

Further results unveil that wildlife species have been decreasing over the years caused by institutional, economic, social and natural factors. A trend emerged showing that wildlife conservation activities, such as wetlands restoration, creation of natural reserves, regulations and penalties implementation, have been carried out by interrelated bodies to the best of their ability. However, extinction and degradation continue at a galloping pace especially between 2003 and 2013. Analysis revealed that interwoven factors such as: poverty, limited collaborations, the claim of customary rights, climate change and subsistence farming are the underlying factors of wildlife decrease in the South west region. The study concluded that wildlife conservation remains a paramount significance of UN SDGs 14 and 15, which targeted life below water and on land, and recommended that timely, objective and holistic adaptation strategies such as: effective land use planning, sustained funding, reinforcement of conservation reserves, community engagement and improved monitoring should be implemented by the concerned conservation bodies in order to revitalised the state of wildlife in the South West Region of Cameroon.

Keywords: Evaluating, effectiveness and challenges, wildlife conservation, South west region, Cameroon.

INTRODUCTION

Wildlife conservation is the deliberate and sustained effort to protect wild animals and plants (and their habitats) so that species populations and their ecosystems persist over time, while considering human needs, ecosystem services, and the interdependence of species and communities (Food and Agriculture Organization (FAO, 2025). The International Union for Conservation of Nature (IUCN), elucidated that conservation involves "the sustainable use and management of natural resources, including wildlife, forests, and water" (IUCN, 2016). Humankind has been dependent on wildlife biodiversity for centuries.

Apart from ecological services such as pollination, water and air purification, as well as nutrient cycling and soil formation, wildlife biodiversity also provides utilitarian value in the form of biological resources and adds aesthetic value to the natural environment (Rawat and Agarwal, 2015). Keith (2014), documented that wildlife

resources provide virtually all of humanity's food, nearly half of its medications, much of its clothes, all of its fuel and building materials and a portion of its mental and spiritual well-being. Despite the numerous benefits, there has been a drastic decline in wildlife biodiversity in recent years, mainly owing to unsustainable anthropogenic activity and its associated environmental impacts (Steffen et al., 2011).

Human impacts on the earth have been severe for millennia (Balter, 2013), and long before the industrial revolution, there have been a massive mega fauna extinction (Lorenzen et al., 2011) and habitats loss (Ellis et al., 2013). Since the late 1960s, a number of factors have contributed to rapid decreases in wildlife populations, including increased poaching, habitat loss and fragmentation, poorly controlled hunting, a lack of wildlife protection in national parks and civil wars (Lindsey et al., 2007; Pack et al., 2013).

Halpern et al., (2012) noted that humans have affected more than 75% of the terrestrial area and wildlife has endured catastrophic biodiversity reductions while species are disappearing at a greater rate than at any other time in Earth's history. Lindsey et al., (2007) and Pack et al., (2013) further indicated that since the late 1960s, a number of factors have contributed to rapid decreases in wild animal populations, including increased poaching, habitat loss and fragmentation, poorly controlled hunting, a lack of wildlife protection in national parks and civil wars.

In Latin America, the illegal exploitation of wildlife has significantly impacted species such as jaguars, parrots, and marine turtles. The demand for exotic pets, traditional medicine, and bushmeat has driven illegal hunting, threatening biodiversity and disrupting ecosystems (Nuñez et al., 2019). In North America, 3 billion birds have been lost over the past five decades (Rosenberg et al., 2019). Australia also faces significant poaching challenges, particularly concerning its unique fauna, such as kangaroos and koalas. These species are targeted for their fur, meat, and in the case of koalas, their body parts for traditional medicine (Goulding, 2017).

The World-Wide Funds (2024) stated that monitored wildlife populations in Africa have declined by 76% between 1970 and 2020, with a severe decline in key carnivores and substantial forest degradation that harbours most of the endangered animal species such as elephants, Monkeys, Pangolins, Kangaroos and Giraffes. Also, there has been 41% loss in natural forest precisely in West and Central African regions from 2015-2025. The (OSS, 2019), indicated that in Sahelian countries like Mali, Niger and Burkina Faso, natural forest loss accounted for approximately 15% of their coverage between 2000-2020.

In South-western Nigeria, agricultural activity, timber extraction, and hunting are major threats to populations of chimpanzees (Ogunjemite and Dansu, 2014), while in the Littoral region of Cameroon, increased human population density has been associated with permanent destruction of wildlife habitat. Furthermore, the loss of chimpanzee habitat in the Center Cameroon has been driven by uncontrolled burning by cattle grazing herdsman. Furthermore, the illegal timber exploitation, farming, hunting, bush fires, and advancing pastures are major threats to chimpanzee survival in North West Cameroon (Doubbé 2014; Morgan et al., 2011).

Though the United Kingdom has some of the strongest wildlife protection laws in Europe, wildlife degradation and extinction remain a concern due to demand in local and international markets, with perpetrators exploiting loopholes in enforcement (Dickie, 2019). Also, despite rigorous legal frameworks and policies such as the Environmental Protection and Biodiversity Conservation Act, illegal wildlife exploitation persists due to demand from both domestic and international markets (Mills, 2019).

Top-down approaches to conservation often exclude local voices, leading to policies that do not reflect the needs or knowledge of the communities (Borrini-Feyerabend et al., 2013). Zhang (2022) discussed how to strengthen conservation management and proposed corresponding measures through research on the current situation and conservation management of nature reserves.

The UNEP (2024), stated that the unprecedented degradation of wildlife and biodiversity in the wake of multiple mitigation and adaptation efforts, are instigated by over-exploitation of species, unsustainable resources use, climate change, extreme events, insufficient funding, governance weakness and limited implemented commitments. The issue of wildlife degradation has become a new-normal in the South West region of Cameroon, regardless of the endless conservation efforts implemented by local organizations,

government institutions, individual organizations and international collaborations to improve wildlife. Recent researches have examined the socio-economic and environmental significance of wildlife endowment in the South west region of Cameroon but few researches have been done on the interwoven factors responsible for the continuous decrease in wildlife population despite numerous conservation strategies.

On this foundation, this study has as its major objectives to: examine the spatial distribution of wildlife conservation parks, their intervention strategies, the factors responsible for the continuous wildlife decrease in the South west region and to propose co-design adaptation strategies that can revamp sustainable wildlife conservation.

Problem Statement

The South West region of Cameroon, with its location along the Atlantic Coast and the proximity to the Gulf of Guinea which is characterized by warm ocean currents and moist maritime air, has over time been a hotspot of distinctive species of wildlife. The wildlife resources of this region possess transboundary and global significance.

For example, the conservation of migratory and endangered species encourages regional and international collaboration through conventions and agreements. Also, wildlife provides opportunities for international scientific research and global knowledge sharing about ecology and genetics, enhance climate regulation, cultural, and aesthetic importance as well as economic and tourism value.

Considering these multiple significances, wildlife population has witnessed a steady decline particularly in the 21st century. Currently, the population of certain endangered species have decreased, with a majority at risk of extinction. It is however, baffling that wildlife population keep decreasing despite the claim sustained and resolute conservation efforts by NGOs, government institutions, and local communities.

The accelerating degradation of wildlife within this ecological zone poses a significant threat to the attainment of the United Nations Sustainable Development Goals 14 and 15, which emphasize the protection of aquatic and terrestrial ecosystems. With regard to this, this research examines the trends and diversity of wildlife species in the South West region of Cameroon with particular emphasis on the underlying causes of their continued degradation which are currently not understood.

Study Area

The South West region of Cameroon is located approximately between latitude 3° North and 6° North and longitude 8° East and 10° East. To the west, it is bordered by the Federal Republic of Nigeria, to the north by North West Region of Cameroon, to the south by the Gulf of Guinea (Atlantic Ocean) and to the east by the Littoral Region. The regional capital is Buea which lies on the slopes of Mount Cameroon, the highest mountain in central and west Africa. Geographically, the South West Region is characterised by coastal lowlands and mangrove swamps near Limbe and Ideneau which are crucial for wildlife and other biodiversity. It is also characterised by volcanic highlands around Mount Cameroon with extensive Rainforests and fertile agricultural areas inland such as in Manyu and Ndian Divisions. Map 1 shows details of South West Region of Cameroon.

LITERATURE REVIEW

The literature review consists of the factors responsible for the continued wildlife degradation and sustainable strategies for wildlife protection and conservation.

Review on Contributing Factors for Wildlife Degradation

Increasing human activities such as commodity-led deforestation, extension of agriculture, urbanization, and wildfires are major drivers of forest loss worldwide (Curtis et al., 2018). These activities cause habitat loss, fragmentation, and destruction of natural ecosystems (Estrada et al., 2017). Although some primates show flexibility in human dominated landscapes (McLennan et al., 2017), habitat loss and degradation have resulted in a decline of about 75% of the world's primate species, of which 60% are endangered (Estrada et al., 2017, 2019). The populations of many other primate species, populations of chimpanzees (*Pan troglodytes*) throughout Africa have declined due to habitat loss, habitat degradation, poaching, and disease (Humble et al., 2016). In southwestern Nigeria, agricultural activity, timber extraction, and hunting are major threats to populations of chimpanzees (Ogunjemite and Dansu, 2014). In the Littoral and Southwest regions of Cameroon, the expansion of oil palm plantation and human population density is associated with permanent destruction of chimpanzee habitat (Morgan et al., 2011). The loss of chimpanzee habitat in central Cameroon is driven by uncontrolled burning by cattle grazing herdsmen (Morgan et al., 2011).

Review on Sustainable Wildlife Conservation Strategies

Preventing invasive species, introducing native vegetation, preventing over-exploitation of coastal services, and reducing chemical pollutants are strategies implemented to enhance the marine ecosystem's health (Goreau and Hilbertz, 2005). The success of wildlife restoration depends on the ecosystem, site selection, and techniques applied, as well as long-term monitoring of these projects (Bayraktarov et al., 2016). Microbiome-targeted interventions such as probiotics and microbiome transplants may be effective in mitigating biodiversity loss as well as increasing the resilience of wildlife and ecosystems (Peixoto et al., 2022). Kideghesho (2009) explored the possibilities of promoting traditional African cultural practices to prevent over-exploitation of wildlife resources and habitat loss in Tanzania and found that the inclusion of native communities in conservation strategies and the use of cultural practices are effective in mitigating global wildlife loss. Understanding and assisting wildlife reproduction is crucial in the conservation of at-risk species but may be hindered due to the lack of fundamental knowledge, limited access to wild species, and financial constraints (Le Gac et al., 2021). The backbone of conservation efforts is the protected areas, both terrestrial and aquatic areas, legally designated for long-term conservation of wildlife biodiversity (Pringle, 2017).

RESEARCH METHODS

This study was investigatory and explanatory in nature with a mixed research method, involving the qualitative and quantitative techniques. The investigatory approach facilitated inquiries on the distribution of wildlife conservation areas, conservation institution/organization, species of wildlife in the South west region of Cameroon and their trends, while the explanatory approach helped in providing the rationale for continued wildlife degradation and the wildlife strategic priorities for the future. The adoption of a mixed-method approach helped in analysing trends (wildlife population) and the perceptual aspects (state of wildlife and effectiveness of conservation techniques). With this approach, their inherent biases were eliminated. Focus group discussions, interviews and field observation were the main research techniques whereas, questionnaires, observation and interview guides, extraction forms, jotters, digital cameras and phones were the main research instruments. With these techniques and tools, data on wildlife conservation areas, conservation techniques, wildlife species, conservation challenges and propose co-design adaptation strategies were collected effectively. The study targeted household population proximal to wildlife environments, workers of wildlife institutions, NGOs, local council and community-based conservation groups, especially those who could provide evidences and testimonies of wildlife and their conservation techniques within the South west region. From these groups, 300 respondents were selected through a simple random sampling technique with 19 subsequent interviews conducted. The details of these were presented on Table 1.

Table 1: Questionnaire distribution in targeted communities in the Southwest region

Locality	Number of respondents	Percentage (%)
Buea	100	33.3
Limbe	80	26.7
Tiko	38	12.7
Muyuka	25	8.3
Nguti & Bangem	40	13.3
Bayang	20	6.7
Totals	300	100%

Source: Fieldwork (2025)

From Table 1, respondents were selected randomly and they provided information on the extent of wildlife composition and conservation initiatives in their localities. The selection of these sites was based on the testimonies recorded during preliminary field survey and with the directive and complaints presented by local experts and local authorities on wildlife population and degradation conditions. This helped the researcher to target sites with context-specific gaps on wildlife conservation.

Table 2: Interviews conducted in targeted wildlife organization in the Southwest region

Wildlife	Number of Interviews	Percentage (%)
Mt Cameroon National Park	3	15.8
Botanical Garden	2	10.5
Limbe wildlife centre	2	10.5
Bismarck Fountain	1	5.4
Local council workers	2	10.5
Ministry of forest & wildlife	3	15.8
Takamanda wildlife park	2	10.5
Bakossi National Park	2	10.5
NGO workers	2	10.5
Totals	19	100%

Source: Fieldwork (2025)

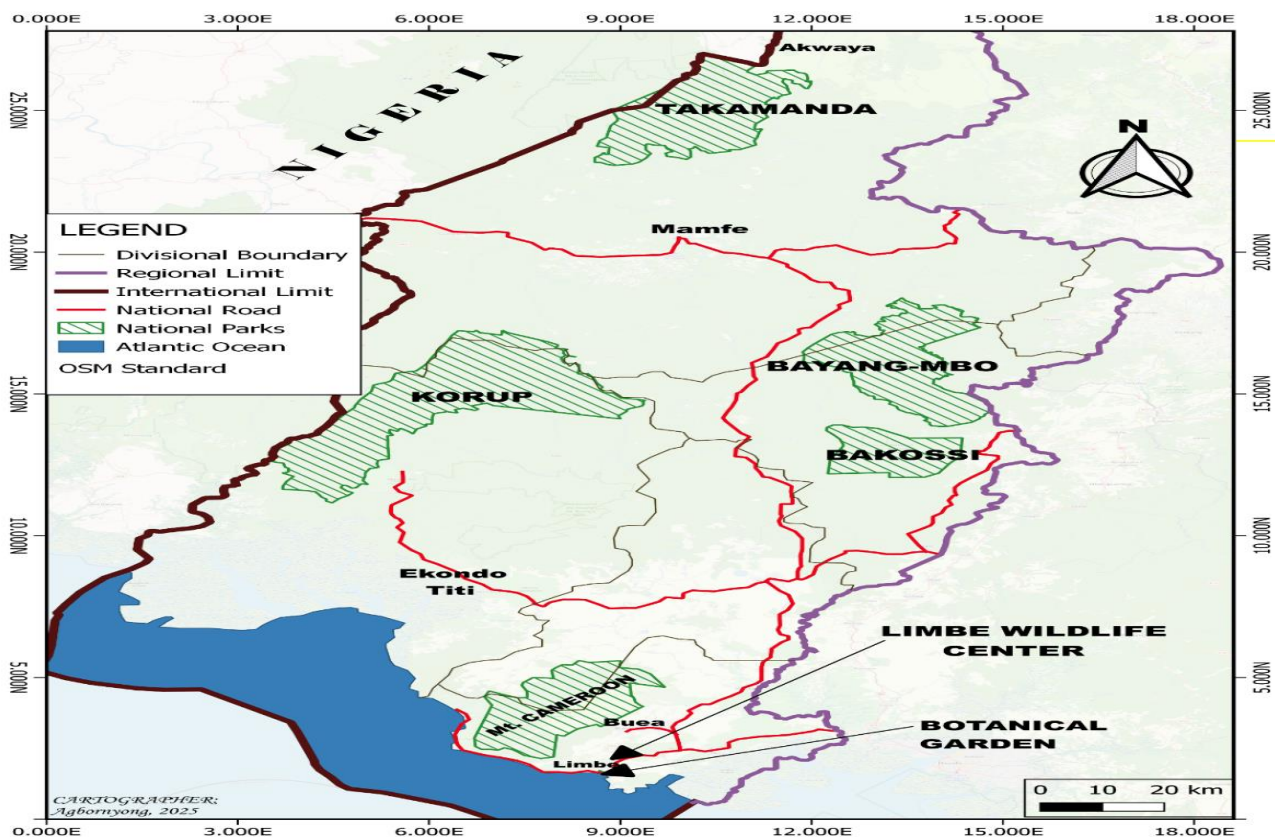
From Table 2, interviews were conducted with some key informants within targeted institutions, organizations and some wildlife experts across the South west region. This was done on the bases of their knowledge on wildlife, their engagement in wildlife activities, their collaborations with other wildlife organizations and their availability to respond to the interview questions presented by the researcher. With regard to the aims of the study which were to obtain data on the species of wildlife and their trends in the South West region of Cameroon, primary data were collected through questionnaires, interviews, focused group discussions, and interrogations which were supplemented with secondary data sorted from magazines, published related articles and wildlife institutional archives. Considering the barriers for sustainable wildlife conservation, primary data were also collected through questionnaires, interviews, focused group discussions and interrogations which were further supplemented with secondary data collected from published related articles, wildlife related organizations and hybrid library. The collected data (qualitative data) were analysed using content analysis that is, the perception on wildlife population, degradation condition and co-design strategies. Furthermore, the quantitative data (wildlife population and trend) were analysed using the descriptive and inferential statistical techniques. With the latter statistical techniques, frequencies, percentiles, relationships and projections were established. Results were presented on figures and tables, while plates were presented in order to show evidence of existing realities on ground. Ethic-wise, a signed research authorization was obtained from the department of geography while permission was sought the local authorities before entering and inquiring data from some wildlife conservation areas.

RESULTS

Results of this study have been analysed and presented in line with its aims and thus considering the spatial distributions of wildlife in targeted communities in the Southwest region, the common species, the roles of the different wildlife related institutions/organizations, perceptions on effectiveness of conservation initiatives, evidences of wildlife degradation, the various factors responsible for wildlife degradation and propose sustainable strategies of wildlife conservation.

Spatial distribution of wildlife in the South west region

The complex interplay of natural and anthropogenic factors such as topography, soil composition, microclimate, vegetation, human disturbance and exploitation have given rise to spatial occurrence of wildlife and multiple species within the South West region as presented on Map 2



Map 2: Spatial distribution of wildlife in the South west region

Source: Realized by Agbornyong (2025)

On map 2, the spatial distribution of wildlife areas across the South west region exhibits a fragmented and peripherally skewed pattern, with primary national parks clustered along international and regional administrative borders, such as Korup and Takamanda along the western frontier with Nigeria, which form critical transboundary corridors, while inland protected areas like Bayang-Mbo and Bakossi occupy central-eastern boundary zones. Stretching from the north to the coastal south at Mount Cameroon, these large-scale reserves exist as isolated habitat blocks separated by human settlements and road infrastructure, contrasting with the coastal periphery at Limbe where specialized ex-situ conservation facilities like the Limbe Wildlife Center and Botanical Garden are situated. These wildlife areas are characterised by different species of wildlife encouraged by underlying natural and human factors such as microclimate, vegetation cover, soil types, human activities and the topography. Within these conservation areas, we have wildlife such primates (drill, gorilla, Preuss's Red Colobus), large to medium mammals like African forest elephants, bushbuck; birds and reptiles.

Conservation Institutions/Organizations and Strategies

The thrive for sustainable wildlife conservation in the Southwest region is done by multiple organizations and with diverse and interwoven strategies.

Table 3: Wildlife conservation institutions/organizations and their roles in wildlife conservation in the Southwest region

Organizations	Main Roles in Wildlife Conservation
Ministry of forestry and wildlife	National policy, protected area designation & management, law enforcement for wildlife, oversight of rescue centres (co-manages LWC), implements national hunting/wildlife regulations.
Limbe wildlife centre (LWC)	Rescue, rehabilitation and release of illegally-traded or injured wildlife, conservation education and community outreach; runs school & public programmes to reduce bushmeat demand.
Buea Municipal Council (Environmental Dept/local Council)	Local waste and environment management, implementing local bylaws, community mobilization for sanitation/green initiatives, coordinating with MINFOF and NGOs on local conservation efforts and awareness.
University of Buea (forestry and wildlife dept)	Training future forestry/wildlife professionals; applied research on local ecosystems (Mount Cameroon); student outreach and technical support for inventories, field survey and monitoring.
EruDeF (Environment & Rural Development Foundation)	Landscape restoration, protected-area support, biodiversity surveys, community livelihood projects that reduce pressure on forest (alternative livelihoods, agroforestry)
Wildlife Conservation Society (WCS), Cameroon programme	Scientific research, protected-area management supports, community-livelihood projects, biodiversity monitory and policy advocacy; partner to government on park management.
GLOHA/Global Hand Cameroon (Community-based)	Livelihood improvement, community engagement in sustainable natural resource management, awareness campaigns to reduce destructive extraction.
Voice of Nature (voNat) & LINAT (Light for Nature)	Community-led biodiversity conservation and environmental education; runs local campaigns and tree-planting/school clubs.
ICENECDEV (Institute for Community and Environmental Development)	Environmental conservation education (school clubs), community awareness campaign, small-scale projects linking education and environment.
CCREAD Cameroon and other Community Development NGOs	Community mobilization, governance & livelihoods projects that indirect support conservation by addressing poverty and alternative incomes
Local consultancies/community forest groups	Support community forest management planning, environmental assessments, local mapping and participatory resource monitory.
Project/platform partnerships e.g. PASUDEV	Multi-partner projects linking NGOs, local communities and tourism to support habitat protection, education and alternative livelihoods
PSMNR (Program for Sustainable Management of Natural Resources)	Supporting wildlife activities by introducing innovative conservative techniques, introducing resilience species and taking statistics of wildlife population.

Source: Fieldwork (2025)

Table 3 presents the common wildlife institutions/organizations in the Southwest region and the various roles they play in promoting wildlife conservation. These roles range from community awareness campaigns, wildlife-based researches, provision of financial and material supports to community-based wildlife conservation initiatives, engagement in sustainable crop-animal farming which are environmentally friendly practices, landscape restoration programmes, rehabilitation of vulnerable wildlife like the case of the Limbe

Botanical Garden and the conservation of endangered species like the Case of the Mount Cameroon National Park. All these are aimed to improve, conserve, promote and sustain the composition and state of wildlife within conservation parks in the Southwest region. However, with all the aforementioned initiatives, the trend of wildlife decrease continues at a galloping pace, thus providing evidence of wildlife conservation gap.

The following photographs provide evidence of wild life conservation activities carried both community groups, NGOs and local government bodies.



Plate 1: Wildlife restoration initiatives in different part of the South west region, Cameroon

Source: Fieldwork and wildlife institution's archives (2026)

Plate 1 revealed the different conservation activities carried by the different conservation organization and groups within the South west region. This activity ranges from forest restoration, forest protection, mangrove and marshland protection and restoration, creation of reserves, forestation of degraded areas and afforestation. Upon all these initiatives, wildlife keeps decreasing without the underlying factors being understood.

Perceptions of the Effectiveness of Wildlife Conservation Strategies

Investigations revealed that perceptions vary amongst organizations and communities regarding the effectiveness of conservation initiatives implemented by different stakeholders in the Southwest region of Cameroon. A majority (40.8%) of the respondents complained that conservation initiatives are less effective, adding that some native species of plants and animals are decreasing and becoming rare to come across. The manager at Mount Cameroon National Park stated:

“Although we have invested enormous energy to promote wildlife conservation especially in the Eastern slope of Mount Cameroon, there is proof that some species are becoming rare. During the rainy season, we could see many elephants that escaped torrential rainfall from the interior of the park to the periphery, but today, this is rare to come by”

Furthermore, 24% of the respondents supported that wildlife conservation initiatives have been fairly effective (Fig 1).

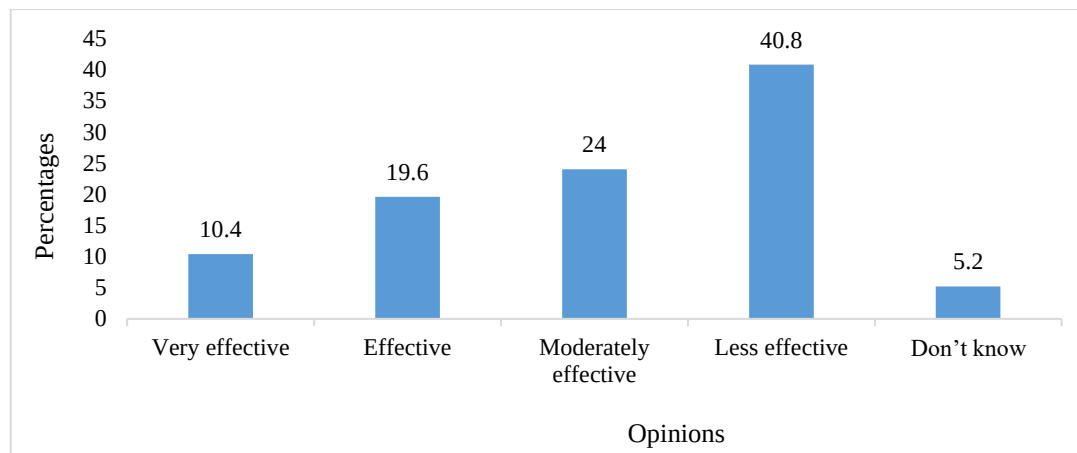


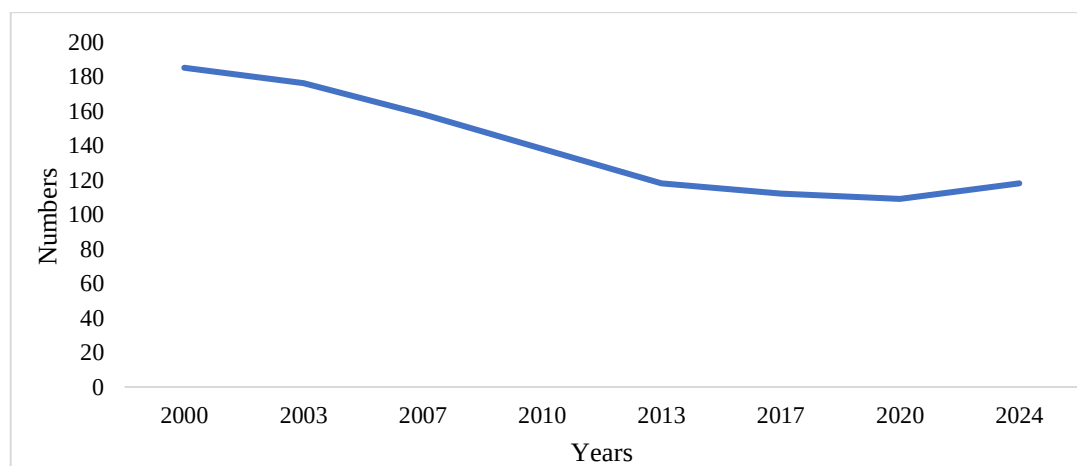
Figure 1: Respondents perceptions of the effectiveness of wildlife conservation initiatives

Source: Fieldwork (2025)

From Figure 1, 19.6% of the respondents confirmed that wildlife conservation initiatives have been effective in the Southwest region and 10.4% said that wildlife conservation initiatives have been very effective in the region. Some local community leaders around Mount Cameroon added that although some natural forests are fast disappearing, community forests are expanding as backups. The least (5.2%) of the respondents pointed out that they cannot determine the effectiveness of the conservation initiatives.

Empirical analysis of the trend of some key wildlife species

Empirical data on some key wildlife species (African forest elephant and Drill) on Mount Cameroon and Korup National parks were collected from 2000 to 2024 in order to examine their trend which further helped in determining whether the trend was high, slight decline, declining, moderate decline stable or continued decline. Graph 1 shows details of the trend of forest elephants in Mount Cameroon.

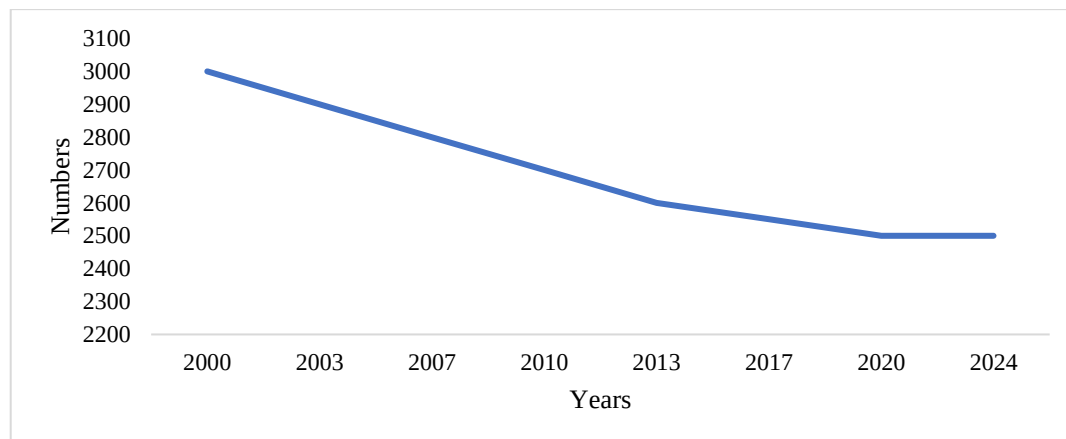


Graph 1: Trend of forest elephant population in Mount Cameroon from 2000-2024

Source: Mount Cameroon Reserve Archives (2025)

The African forest elephant population in Mount Cameroon shows an overall declining trend from about 185 individuals in 2000 to 118 in 2024. The sharpest decline occurred between 2003 and 2013, largely due to poaching, habitat degradation, and increasing human disturbance. After 2013, the population appears relatively

stable, with the 2024 IUCN report retaining the estimate of 118 elephants. Graph 2 further shows the details of the trend of Drill population in the Korup National Park



Graph 2: Trend of Drill population in the Korup National Park from 2000-2024

Source: Korup National Park Archives (2025)

Between 2000 and 2013, drill numbers declined gradually due to bushmeat hunting, habitat fragmentation, and forest degradation. From 2017 to 2024, the population appears relatively stable at around 2500 individuals, reflecting the importance of Korup National Park as one of the healthiest remaining strongholds for the species despite continuing conservation threats.

Challenges of Wildlife Conservation Initiatives/Efforts

Wildlife conservation initiatives in the Southwest region have been plagued with multiple challenges which range from institutional, economic, social and natural factors. The details of these are explained in the subsequent paragraphs:

Institutional Challenges

The continuous degradation of wildlife in the Southwest region is, to a large extent, explained by institutional lapses. These relate to the laws, policies, governance, and organizational capacity and how effective institutions manage, and support wildlife conservation. Wildlife institutions hold the key and fundamental decisions regarding sustainable wildlife conservation in the Southwest region, yet, certain factors have impeded their full operation. (Figure 2).

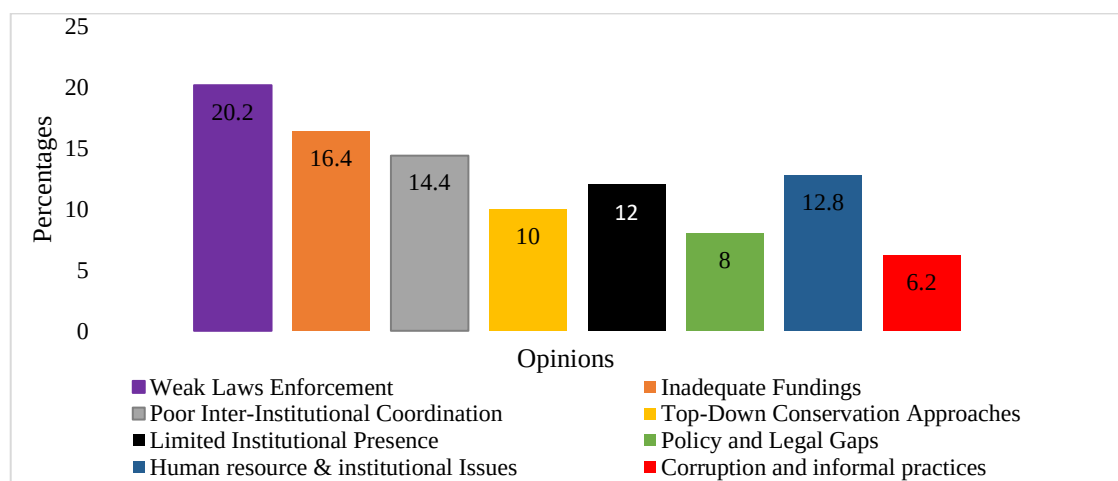


Figure 2: Institutional challenges for wildlife conservation in the Southwest Region

Source: Fieldwork (2025).

From Figure 2, 20.2% of the population acknowledged that wildlife conservation laws are weak in applications. They exist on paper, yet there are challenges of implementation, such as penalties on defaulters; 16.4% confirmed that most institutions lack the required funding to promote wildlife-based conservation researches and programmes that can enhance wildlife protection, preservation or compensation to the local population. A local farmer around the Mount Cameroon National Park stated: “most conservation organizations do not compensate us for conserving wildlife. We cannot keep conserving wildlife which provides most of our livelihoods while lingering in poverty. It is, first of all, our customary right to exploit wildlife.”

On the other hand, one of the conservation experts at the Korup National Park justified their funding weakness as such: “We often submit multiple funding requests to funding organizations and company on weekly basis, yet we receive few replies and those who decide to fund some of our conservation proposals take a lot of procedures. At times, the conservation funds which we expect at the start of the year come at the end of the year or in the next year. This makes conservation activities very difficult as most of the compensatory catchment communities fail to recognize such funding challenges.”

14.4% pointed out to the poor inter-institutional coordination between local councils, NGOs, traditional authorities, government ministries and universities. There are overlapping mandates and unclear responsibilities, which result in the duplication of efforts in some areas and neglect in others. Furthermore, 12.8% complained of human resource and institutional issues such as low staff, limited trainings and poor working conditions which affect conservation effectiveness, 12% said that there is limited institutional presence in some remote areas which promotes illegal exploitation and wildlife poaching, and 10% also attributed wildlife decline to the top-down conservation approaches such as national policies that neglect local inputs, communities treated as beneficiaries and not partners; and traditional institutions often excluded from decision making. In addition, 8% made criticisms of policy and legal gaps, stressing on existing conflicts between land tenure, forestry, and wildlife policies as well as the slow legal processes for wildlife crimes and 6.2% said that there has been recurrent corruption and informal practices, such as political interference in enforcement actions and bribery leading to illegal hunting, which undermines trust in conservation institutions.

Economic Challenges

Economic challenges affecting wildlife conservation are those which relate to money, livelihoods, and financial initiatives. These explain how economic pressures drive exploitation of wildlife or habitats. For instance, poaching for bushmeat and logging for agriculture (Figure 3).

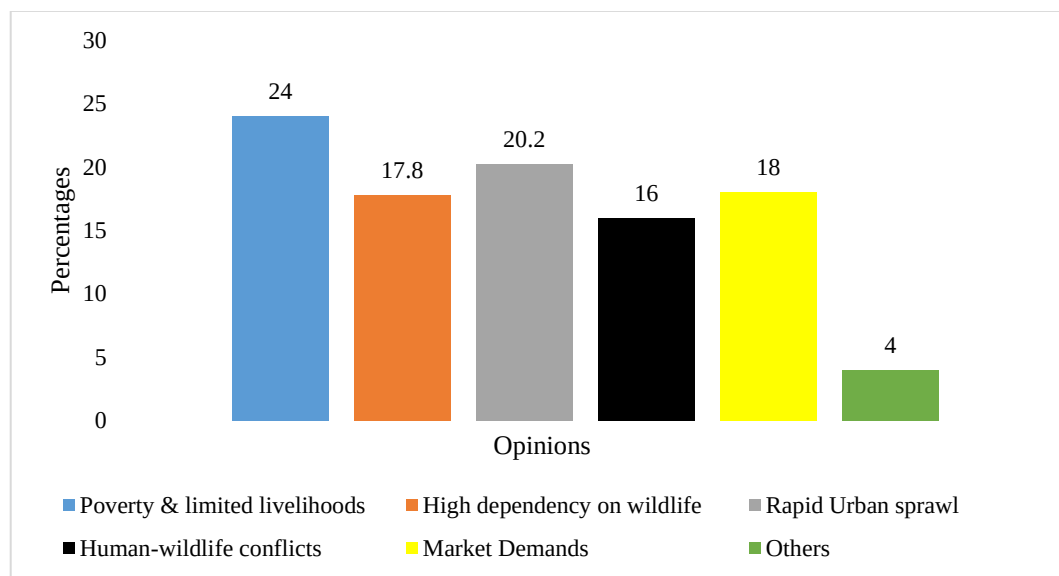


Figure 3: Economic challenges for wildlife conservation in the Southwest Region

Source: Fieldwork (2025)

As presented on Figure 3, 24% of the population acknowledged that poverty and limited livelihood options have caused most of the local population to continuously intrude for valuable resources, 20.2% complained of rapid urban sprawl, which has been affecting conservation areas, especially their margins, resulting in species extinction, and 18% attributed wildlife degradation to high market demands within local markets in most urban areas. Furthermore, 17.8% said that there is a high dependency on wildlife for protein and income, thus, bush meat is culturally valued and economically profitable. These make conservation challenging, leading to continuous wildlife extinction. Additionally, 16% attested that there is human-wildlife conflict where livestock are attacked by farmers for destroying crops and this can be through the destruction of habitat with wildfires which ignores conservation laws, while 4% made mention of other challenges.

Social Challenges

Social challenges have also contributed to a larger extent to wildlife conservation in the Southwest region of Cameroon in multiple ways. These relate to people's culture, behaviour, knowledge and participation. During the course of field survey, 26% of the population complained that there is limited knowledge on conservation and the significance of wildlife in most of the local communities, and 24% pointed out that cultural norms and traditions in which some wildlife species are believed to have spiritual or healing powers, some are used in ritual sacrifices, ancestral worship, or secret society practices. All these have instigated targeted killings of specific species including threatened ones (Figure 4).

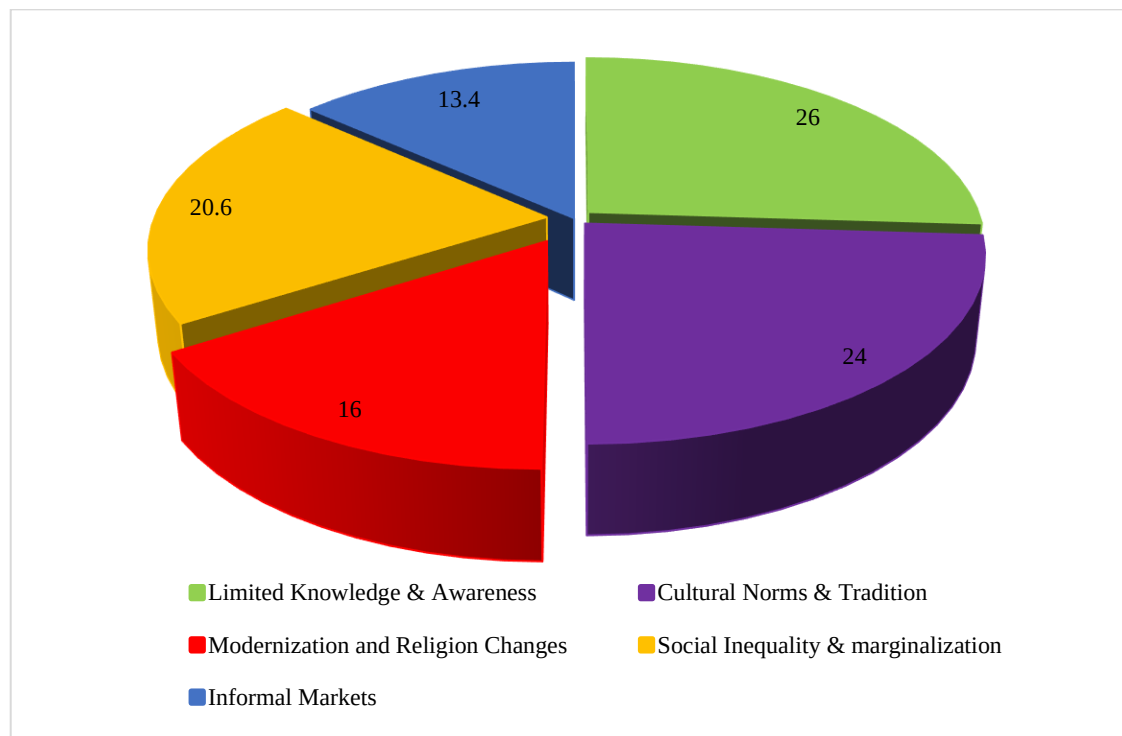


Figure 4: Social challenges for wildlife conservation in the Southwest region

Source: Fieldwork (2025)

From Figure 4, 20.6% of the population stated that many rural and forest-edge communities have limited or insecure land tenure and a majority of the local communities are excluded from conservation decisions which encourage illegal hunting, logging, encroachment as survival strategies, 16% said that modernization and religious changes, such as urban lifestyle, new belief systems, Christianity and Islam have weakened traditional taboos that once protected sacred forests and certain species, leading to increased hunting and habitat use. And 13.4% acknowledge that the existence of informal markets, where illegally exploited wildlife is sold, have been the main challenge of wildlife conservation in the Southwest region.

Natural Challenges

Apart from the anthropogenic factors affecting wildlife extinction in the Southwest region of Cameroon, natural factors have also added to the course. These relate to environmental and ecological conditions beyond direct human control. As indicated by 32.4% of the population, wildfires, storms and floods have enhanced the trend of wildlife extinction. Wildfires are ignited by local farmers operating around the peripheries of wildlife, storms are affecting wildlife across coastal areas like Limbe and Tiko, while floods have increasingly affected both upslope and downslope areas due to increasing deforestation and poor land use management by the local population.

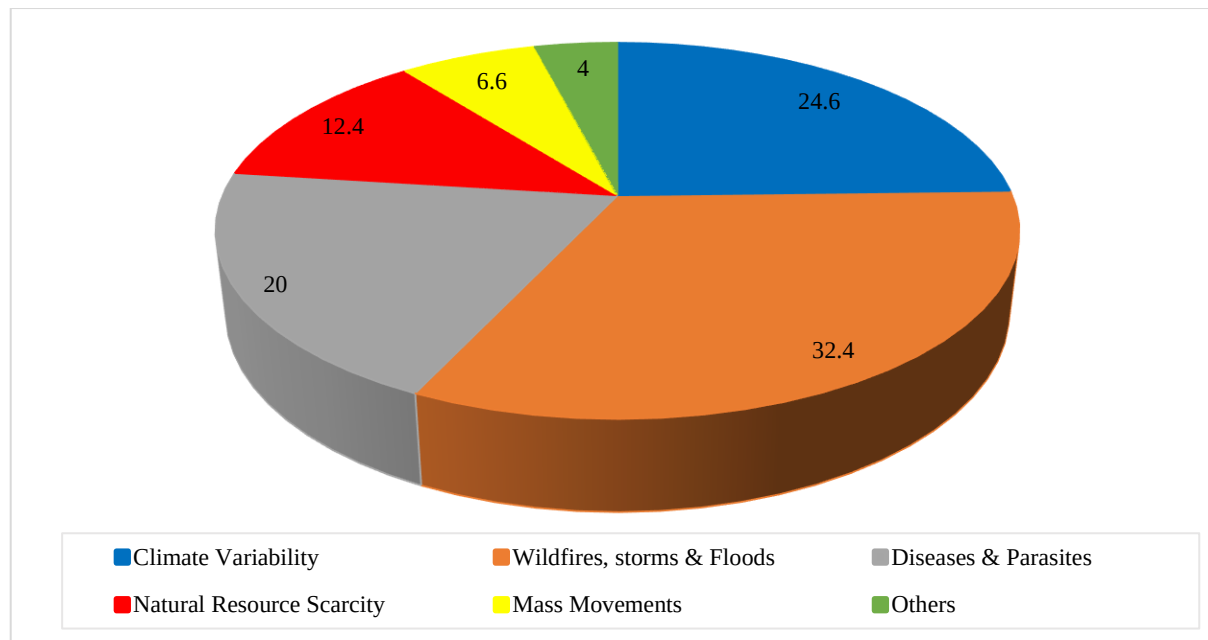


Figure 5: Natural challenges for wildlife conservation in the Southwest region

Source: Fieldwork (2025)

From Figure 5, 24.6% of the population pointed out that climate variability, which has been manifesting in the form of increasing temperatures, floods and heatwaves brought-forth unsustainable conditions for wildlife existence, 20% complained of diseases and pests such as the natural outbreaks of zoonotic and wildlife-specific diseases which lead to the reduction in fitness and survival of wildlife population, and 12.4% attributed it to the scarcity of natural resources such as seasonal shortages of water and soil nutrients enhanced by the negative change in environmental conditions, and 4% made mention of natural migration patterns to comfortable areas caused by natural environmental changes or disturbance. Plates 2 show evidence of some factors responsible for continuous wildlife degradation in the South west region of Cameroon.





Plates 2: Evidence of Anthropogenic factors affecting wildlife conservation within protected areas in the South west Region

Fieldwork (2026)

Plate 2 “A” gives an evidence of bushfire around the Mount Cameroon wildlife area, ignited by farmers during farm preparation. Bush burning affects bee farming which is essential for wildlife conservation. Plate 2 “B” shows deforestation in the Korup National Park for domestic and industrial uses, 2 “C” shows the practice of illegal hunting by the local population in protected areas and Plate 2 “D” gives more evidence on deforestation for smallholder farming activities around the Bakossi National Park. Couple with the natural factors, these have beeb critical barriers for wildlife conservation in the South west region of Cameroon and there is an urgent need for collaboration and objective implementation of community-based wildlife conservation programs.

Proposed sustainable strategies of promoting wildlife conservation

Considering the perspectives of the respondents, if the following measures are implemented, wildlife conservation will witness significant progress in the South west region of Cameroon.

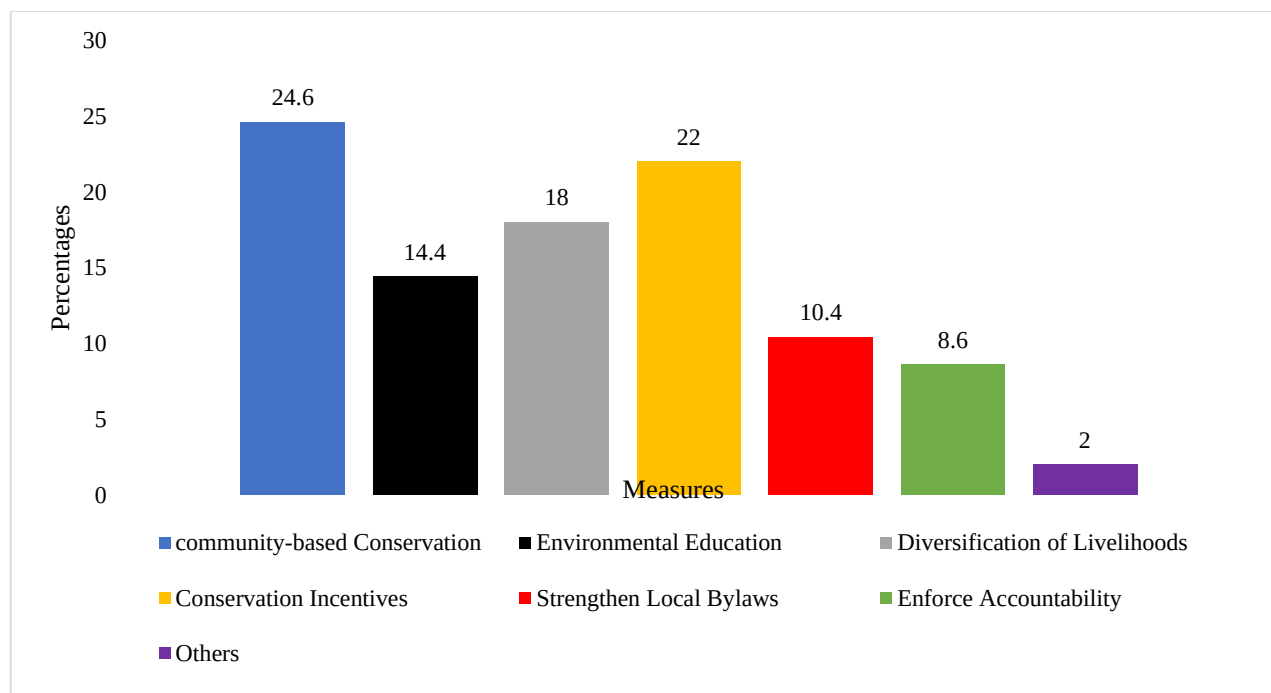


Figure 6: Proposed measures for improving wildlife conservation in the South west region

Source: Fieldwork (2026)

From Figure 6, 24.6% of the respondents suggested that community-based conservation should be encouraged in the South west region, 22% said that conservative incentives like fish ponds, and wholesale capitals should be provided by conservation organizations and institutions to the local populations, and 18% said that the local population should diversify their livelihoods activities to relieve the over dependency on forest resources. Furthermore, 14.4% said that environmental education should be encouraged to create awareness on the significance of wildlife conservation and reduce the rate of unsustainable exploitation, 10.4% acknowledged the strengthening of local bylaws on wildlife conservation, 8.6% proposed accountability by the various conservation institutions and NGOS, whereas, 2% said that more reserves should be created and urban sprawl controlled.

DISCUSSION, CONCLUSION AND RECOMMENDATIONS

Discussion

Analysis of findings revealed that the Southwest region of Cameroon is characterised by multiple wildlife species which exist spatially within geographical areas; determined by the prevailing environmental conditions and anthropogenic factors. Wildlife conservation centers have been created in some key areas where wildlife species are facing a decrease, vulnerability or extinction for protection and conservation purpose. The common wildlife centres in the Southwest region are: the Korup National Park, Takamanda national park, Mt. Cameroon National park, Bakossi national park, Limbe wildlife center and the Botanical Garden, the Bayang-Mbo National park. Around these wildlife centers, conservation efforts are implemented by NGO organizations like EruDeF, Voice of Nature, LINAT, and government and local government initiatives such as the university of Buea, ministry of forestry and wildlife, and the local councils. Additionally, there are initiatives led by local communities where community-based forests are created and controlled by local community dwellers. Investigations established results that these wildlife organizations/institutions promote their conservations by educating the local communities, restoring degraded wetlands and mangrove, creating community awareness on the significance of wildlife conservation, promoting sustainable land use activities, controlling anthropogenic activities around the peripheries of the national parks and rehabilitating vulnerable wildlife species. The evidence of multiple species of wildlife, existing conservation centers and local-based initiative groups reflect the findings of Forbodeh et al., (2007) who in investigating the priority setting for conservation in the South west region noted that wildlife was of different species and particularly in one of the key areas targeted in this study, that is, the Bayang-Mbo National park. Also, the WWW (2007) mentioned in its scientific paper that the African continent has multiple species of wildlife while OSS (2019) confirmed that West and Central Africa have been blessed with multiple species such as pangolins, forest elephants, monkeys, bush birds and chimpanzees and among others. These therefore mean that conservation is necessary and we must put in place measures to sustain these multiple species of wildlife.

Established findings revealed that although there have been multiple wildlife conservation activities in the Southwest region of Cameroon over time, there exist contradicting perceptions on the effectiveness of conservation initiatives of promoting, protecting, conserving and sustaining wildlife in the aforementioned region. Apart from the 5.2% of the population who admitted that they cannot determine the effectiveness of conservation initiatives in this region, 40.8% of the population stated that the initiatives are less effective, 24% confirmed that the initiatives are moderately effective and 19.9% acknowledged that wildlife conservation initiatives are effective while 10% confirmed that they are very effective. However, the difference in opinion, with perceptions tilting toward less effective views, suggests that either the initiatives are not well implemented, coordinated, maintained or there is little collaboration between partnering organizations and institutions, as well as the intervening socio-economic or political factors. This was confirmed in the work of Rosenberg et al., (2019) which confirmed that in North America, 3 billion birds have lost over the past five decades because of little to poor conservation efforts. Findings on wildlife degradation particularly in Africa appear in multiple scientific papers by UNEP (2024). This however confirms the multiple stresses posed by both natural and anthropogenic activities on wildlife.

Further results have also revealed that multiple factors are responsible for wildlife decrease and extinction in the South west region of Cameroon. The factors are of institutional (weak laws, inadequate funding), economic

factors (poverty, limited livelihood, human wildlife conflicts), social factors (cultural norms and traditions), and natural challenges (climate change, storms, flood), all these concise and thus, affecting wildlife population negative and resulting to their degradation and population reduction. These findings complement that of Ogunjemite and Dansu (2014) who observed that in the South-western Nigeria, agricultural activity, timber extraction, and hunting were major threats to populations of chimpanzees. Also, Doumbé (201 and Morgan et al., (2011) scientific papers revealed that in the Littoral region of Cameroon, increased human population density was associated with permanent destruction of wildlife habitat and the loss of chimpanzee habitat in the Center Cameroon was driven by uncontrolled burning by cattle grazing herdsman, meanwhile the illegal timber exploitation, farming, hunting, bush fires, and advancing pastures were major threats to chimpanzee survival in North West Cameroon. These findings act as support for more conservation efforts and sustained strategies around wildlife endowed environments and notify us that if timely conservation efforts are not put in place, most of the wildlife especially the endangered species are going to be extinct. Conservation practices such as creation of protected areas, introduction of native species, prevention of over exploitation, encouraging community-based conservation, enforcement of conservation laws and involvement on traditional rulers in conservation planning as proposed in the scientific papers of Usongo (2026), Forboseh et al., (2007), Dickie (2019), Bayraktarov et al., 2016, Kideghesho (2009) and Le Gac et al., (2021) are very essential at the moment and should be encourage in all wildlife endowed areas, globally.

Conclusion

The South West region harbours multiple species of wildlife which exist in different ecological environments with regard to the prevailing environmental conditions. This wildlife provides cultural, economic, political, touristic and environmental significance that go beyond regional and national levels to international levels. Over the years, the number of these species and their trends have witnessed a continued decline caused by random and uncontrolled anthropogenic activities which have been compounded by natural factors. Wild fires, deforestation, settlement expansion, poaching and climate change are among the major factors responsible for wildlife degradation in the South West region of Cameroon, coupled with weak institutional policy, poor community collaborations, unsustain wildlife funding, and inadequate education and awareness campaigns on the relevance of wildlife resources. Wildlife institutions, NGOs, local councils and local community initiative groups have implemented diversified adaptation strategies to rescue and restore affected wildlife to ensure their sustainability in the South West Region of Cameroon. What baffles most wildlife organizations and the general population is that, in spite of the multiplicity of adaptation strategies adopted, the recorded achievements have proven seasonal, whereas wildlife extinction continues to progress at an unprecedented and accelerating pace. Recognizing that wildlife conservation constitutes a regional, national and transboundary priority, and considering the findings of the study, we brought out multiple co-design adaptation strategies for sustainable wildlife conservation and stable wildlife population in the South west region of Cameroon.

Recommendations

This study recommends that the following proposed strategies be implemented comprehensively and within an appropriate timeframe to restore declining wildlife populations in the South West Region of Cameroon:

The local community dwellers should participate in wildlife monitoring (forest stewards) and report illegal activities to the appropriate authorities. They should also be trained in sustainable farming, forest exploitation, hunting, and fishing to prevent overexploitation and encourage livelihood diversification. More so, clean energy sources such as organic materials (crop residues and animal waste) should be promoted in order to limit the rate of forest fuel wood exploitation. Local poultries, piggery, and domesticated species of animals should be encouraged to deviate people's interest from the exploitation of forest resources. More so, the government and related bodies should replicate successful policies from progressing communities in degraded regions such as agroforestry, afforestation, and wetland restorations. Sustained land use planning, allocation of wildlife endowed areas from farming and settlement areas, should be effectively developed. In addition, the local council should engage fully in forest restoration and conservation programs and sponsors wildlife related researches. NGOs should also support and train local communities in sustainable forest conservation. They should create and promote community-based forest and provide tangible conservation incentives for the local

communities that have embraced forest conservation. The roles of the traditional rulers should be considered during environmental assessment programs and wildlife management programs.

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