Ministry of Tourism and Wildlife

REPUBLIC OF KENYA

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Situational Analysis on the Adoption of Sustainable best Practices,

Evaluation of the Impact of Climate Change on the Tourism Sector in Kenya, and Design Appropriate Climate Response

and

Sustainable best practices in Line with Global Benchmarks

INCENTIVES AND DISINCENTIVES FRAMEWORK

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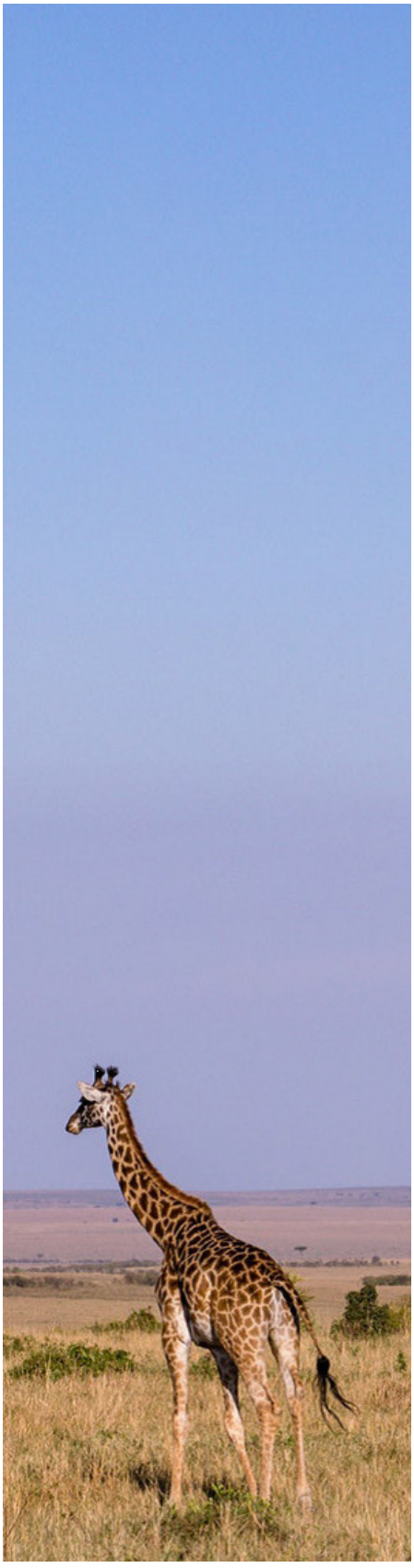
Mr. Vincent O. Bwire
Chair, Project Implementation Committee.

FOREWORD

The tourism sector in Kenya plays a significant role in driving social and economic development. Specifically, it contributes 10% to the Gross Domestic Product (GDP), provides 6% of direct formal employment, and consists of 4% of the National Gross Fixed Capital Formation (NGFCF). This contribution is projected to increase, with the sector's earnings expected to grow to Ksh 430 billion in 2024 and further reach Ksh 1.024 trillion by 2028, attributed to the anticipated rise in visitor numbers from 2.4 million in 2024 to 5.7 million in 2028. The sector also contributes to safeguarding cultural heritage, climate change mitigation, and environmental preservation. This demonstrates the vibrancy of the tourism sector in enabling Kenya to achieve sustainable development goals in a changing climate.



However, the tourism sector's contribution to the economy may be jeopardized due to the impacts of climate change. The Intergovernmental Panel on Climate Change (IPCC) data shows that with the rise in global temperatures due to emissions of greenhouse gases, climate-sensitive sectors such as tourism, which largely depend on natural resources, will be severely affected. The impacts include changes in destination attractiveness, increased operational costs (e.g., heating and cooling), limited water availability, reduced food diversity, infrastructure damage, and increased incidences of vector-borne diseases. These impacts may worsen, as the tourism sector's emissions are projected to rise by 25% in 2030 compared to 2016 emission levels.

Studies have shown that the hotel industry consumes significant quantities of resources and generates substantial amounts of waste. A five-star hotel for instance has been established to consume approximately 130 Megajoules of energy per guest per night, and on average, a guest generates 0.9 kg of waste daily. Additionally, daily water consumption per guest ranges from 170 to 440 liters, significantly higher than in a residential household.

Tourism and travel transport make significant contributions to global carbon emissions, with the aviation industry alone responsible for 2% of global emissions. Other tourism-related businesses also produce greenhouse gases, resulting in the tourism sector accounting for about 5% of global Carbon Dioxide (CO_2) emissions into the atmosphere.

It is in this context that during the twenty-fifth Conference of Parties (COP 25) of the United Nations Framework Convention on Climate Change (UNFCCC), the tourism sector declared a climate crisis. Parties were urged to embrace low-carbon pathways in their tourism activities. Kenya committed to this declaration, recognizing that its tourism sector is primarily nature-based, relying on wildlife-protected areas, natural landscapes, coastal ecosystems, and resources. The tourism sector must prioritize climate-resilient sustainable practices to minimize environmental degradation and preserve natural resources for future generations. This demands that adoption of best practices in sustainable tourism is paramount to mitigate adverse impacts on the environment, society, and culture, nurturing long-term climate-resilient positive outcomes. These practices aim to strike a balance between economic benefits, social responsibility, and environmental conservation.

In view of this, Kenya aims to remain globally competitive in the tourism sector as the destination of choice. This implies that the country has to develop actions, strategies, and programs that follow global benchmarks in order to curve the country's niche in the tourism sector. The country during the twenty-sixth Conference of Parties (COP 26) of the UNFCCC that was held in Glasgow, United Kingdom (UK) in 2021, pledged by 2030 to conserve and sustainably manage the tourism sector by committing to: restrict use of vehicular transportation within all national parks and game reserves that use non-fossil renewable energy; require all hospitality and tourism enterprises to adopt renewable energy and circular economy in their operations; mobilize the ecological assets in vast protected areas that act as carbon sinks to maximize on global carbon credit facilities available in order to raise additional resources to play an active role in meeting national goals of a net carbon neutral nation; restore degraded areas in national parks and games reserves with a concerted effort om reforestation; increase marine conservation areas network; establish a framework for documentation and measuring the economic impacts of climate change on tourism sector as basis of mainstreaming practical, quantifiable and accountable required measures on climate actions by tourism actors in the entire tourism value chain; and develop and enforce minimum sustainability standards that are in line with the global benchmarks for businesses in the sector that form the basis for operations of sustainable tourism businesses with accompanying incentives and disincentives.

This study generated various deliverables including; baseline report, best practices report, incentive and disincentives framework, system of environmental-economic accounting (SEEA) for the tourism sector, stakeholders engagement report, final and closure reports in response to undertaking a situational analysis on the adoption of sustainable best practices, evaluate the impacts of climate change on the tourism sector in Kenya and design appropriate climate response and sustainable best practices in line with global benchmarks. The key findings established and recommendations provided lays a foundation on how to track and report

Kenya’s progress in regard to commitments the country made during COP26.

I therefore welcome the stakeholders in Tourism Sector to take into consideration relevant findings and action areas for implementation so as to revitalize and spur growth of the tourism sector in Kenya. The Government of Kenya through the Ministry of Tourism and Wildlife remains steadfast in ensuring that right incentives and policy frameworks are place to provide required enabling environment for investment in tourism value chain.

Mr. David Gitonga
Ag. Chief Executive Officer,
Tourism Research Institute

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GLOSSARY OF TERMS

Adaptation	The process of adjustment to actual or expected climate and its effects. In human systems, adaptation seeks to moderate or avoid harm or exploit beneficial opportunities. In some natural systems, human intervention may facilitate adjustment to expected climate and its effects
Command and control instruments	Instruments including laws, regulations and licencing requirements that enable governments to exert control over certain aspects of development and operation.
Climate Change	Climate change refers to a change in the state of the climate that can be identified (e.g., by using statistical tests) by changes in the mean and/or the variability of its properties, and that persists for an extended period, typically decades or longer. Climate change may be due to natural internal processes or external forcing such as modulations of the solar cycles, volcanic eruptions, and persistent anthropogenic changes in the composition of the atmosphere or in land use
Disincentives	Economic, financial, voluntary, and regulatory barriers that discourage tourism enterprises from adopting climate change adaptation, mitigation, and sustainable tourism practices.
Economic instruments	Instruments influencing behaviour and impact through financial means and sending signals via the market.
Incentives	Economic, financial, voluntary, and regulatory instruments to promote the adoption of climate change adaptation, mitigation, and sustainable tourism practices by tourism enterprises.
Impacts	Effects on natural and human systems of extreme weather and climate events and of climate change. Impacts generally refer to effects on lives, livelihoods, health, ecosystems, economies, societies, cultures, services, and infrastructure due to the interaction of climate changes or hazardous climate events occurring within a specific time period and the vulnerability of an exposed society or system
Resilience	The capacity of social, economic, and environmental systems to cope with a hazardous event or trend or disturbance, responding or reorganizing in ways that maintain their essential function, identity, and structure, while also maintaining the capacity for adaptation, learning, and transformation.
Voluntary instruments	Instruments providing frameworks or processes that encourage voluntary adherence of stakeholders to sustainable approaches and practices.
Vulnerability	The propensity or predisposition to be adversely affected. Vulnerability encompasses a variety of concepts and elements including sensitivity or susceptibility to harm and lack of capacity to cope and adapt.
Resilience	The ability to withstand and recover from shocks and stresses to individuals, communities, businesses, and ecosystems
Return flows to the environment	The water that is released back into the environment after it has been used for irrigation, industrial purposes, or other purposes
Solid waste	Any garbage or refuse that is produced by households, businesses, and institutions. Solid waste can include things like food scraps, paper, plastic, and metal

Sustainability barriers	Factors that hinder sustainability and Sustainable practice
Sustainability communication	The process of communicating about sustainability to stakeholders
Sustainability drivers	Factors that help to promote sustainability
Sustainability education	The process of teaching people about sustainability through a variety of channels, such as schools, universities, and community organizations.
Sustainability reporting	The process of providing information about a Tourism enterprise's sustainability performance
Sustainability best practices	Methods or approaches that have been shown to be effective in a chieving sustainability goals
Sustainable planning and management	A process of developing and implementing plans and management practices that are designed to achieve sustainability goals. This process involves considering the environmental, social, and economic dimensions of sustainability
System of Environmental -Economic Accounting	A framework for measuring the economic and environmental dimensions of sustainability.
Tourism enterprises	Businesses and organizations that provide goods and services primarily to tourists and include accommodation, food and beverage services, passenger transport, travel agencies, and cultural and recreational activities
Tourism Industries	Sectors such as accommodation, transportation, food and beverage services, recreation, retail, travel agencies, and other indirect sectors, providing a comprehensive measure of the economic impact of tourism
Waste management	The process of collecting, transporting, treating, and disposing of waste.
Water flows	The movement of water resources between different environmental compartments, such as surface water, groundwater, and atmospheric water, accounting for both natural processes and human activities

LIST OF ABBREVIATIONS

BETA	Bottom-Up Economic Transformation Agenda
CBD	Convention on Biological Diversity
CBOs	Community-Based Organizations
CFA	Confirmatory Factor Analysis
CFI	Comparative Fit Index
CoP26	26th Conference of The Parties
CSR	Corporate Social Responsibility
EAC	East Africa Community
EFTs	Ecological Fiscal Transfers
EK	Ecotourism Kenya
EMCA	Environmental Management and Conservation Act
FGDs	Focus Group Discussions
GCF	Green Climate Fund
GDP	Gross Domestic Product
GFI	Goodness of Fit Index
GHG	Greenhouse Gas
GoK	Government of Kenya
GSTC	Global Sustainable Tourism Council
GTK	Green Tour Kenya
IBPs	Incentive-Based Conservation Programs
KAHC	Kenya Association of Hotelkeepers and Caterers
KATA	Kenya Association of Travel Agencies
KATO	Kenya Association of Tour Operators
KDC	Kenya Development Corporation
KenInvest	Kenya Investment Authority
KIIs	Key Informant Interviews
KPSGA	Kenya Association of Professional Tour Guides
KTB	Kenya Tourism Board
KTDGA	Kenya Tour Driver Guides Association
KTF	Kenya Tourism Federation
KWS	Kenya Wildlife Service

MDAs	Ministries, Departments, and Government Agencies
MITI	Ministry of Investment Trade and Industry
MMR	Mixed Method Research
MoE&NR	Ministry of Environment and Natural Resources
MoT&W	Ministry of Tourism and Wildlife
MSMEs	Micro, Small, and Medium Enterprises
NAP	National Adaptation Plan
NCCRS	National Climate Change Response Strategy
NCCS	National Climate Change Secretariat
NDA	National Designated Authority
NDC	Nationally Determined Contributions
NEMA	National Environment Management Authority
NFI	Normed Fit Index
NGOs	Non-Governmental Organization
PES	Payment for Ecosystem Services
PFM	Public Finance Management Act
PWDs	People Living with Disabilities
R&D	Research and Development
RMSEA	Root Mean Square Error of Approximation
SDGs	Sustainable Development Goals
SEM	Structural Equation Model
SMEs	Small And Medium Size Enterprises
STEPP	Sustainable Tourism – Eliminating Plastic Pollution
STERP	Sustainable Tourism for Effective Pandemic Response, Recovery, and Resilience
STPs	Sustainable Tourism Practices
TDGDP	Direct Gross Domestic Product
TF	Tourism Fund
TFC	Tourism Finance Corporation
TLI	Tucker-Lewis Index
T-O-E	Technical, Organizational and Environmental
TRA	Tourism Regulatory Authority

TRI	Tourism Research Institute
TVET	Technical Vocational Education and Training
UK	United Kingdom
UNFCCC	United Nations Framework Convention on Climate Change
UNWTO	United Nations World Tourism Organization
VAT	Value Added Tax
TSM	Tourism
TSA-RMF	Tourism Satellite Account Recommended Methodological Framework
UN	United Nations
UNCEEA	United Nations Committee of Experts on Environmental-Economic Accounting
UNEP	United Nations Environment Programme
UNEP-WC-MC	United Nations Environment Programme World Conservation Monitoring Centre
UNFCC	United Nations Framework Convention on Climate Change
UNSD	United Nations Statistics Division
UNWTO	United Nations World Tourism Organization
WASREB	Water Service Regulatory Board
WRA	Water Resources Authority
WSP	Water Service Provider
WWF	World Wide Fund for Nature

EXECUTIVE SUMMARY

The baseline survey of Kenya's tourism industry revealed low adoption levels of climate change adaptation and mitigation practices among tourism enterprises. The survey highlighted disparities in implementing sustainable practices based on enterprise categories, sizes, and locations. It is crucial to investigate the factors behind this inertia and these disparities. Additionally, assessing the effectiveness of the existing institutional, legal, and policy landscape, as well as available incentives and disincentives, is necessary for promoting climate action and sustainable tourism. This report presents a framework of incentives and disincentives designed to encourage the adoption and implementation of recommended climate action and sustainability practices.

The report appraises the existing legal and regulatory framework for climate change adaptation, mitigation actions, and sustainable tourism in Kenya. Additionally, it assesses the prevailing institutional framework supporting these practices, evaluates the barriers and drivers influencing their adoption, and analyses the impact of existing incentives and disincentives. Furthermore, the report establishes a framework of incentives and disincentives to promote the adoption of climate adaptation, mitigation actions, and sustainable tourism practices in Kenya, along with the modalities for implementing this system.

The framework of incentives and disincentives report was developed using data from desk and empirical research. Desk research involved reviewing relevant literature, government reports, and research publications on climate change and sustainable tourism. Empirical research adopted an exploratory sequential mixed method, collecting quantitative data from a survey of 1,253 tourism enterprises. Qualitative data came from focus group discussions across 29 counties and interviews with key industry leaders. Analysis included content analysis for qualitative data and descriptive statistics, structural equation modelling, and regression analysis for quantitative data.

An appraisal of the prevailing legal and regulatory framework for climate change actions and sustainable tourism in Kenya reveals significant challenges. Limited stakeholder awareness, fragmented and overlapping regulations, and poor coordination between central and county governments undermine its effectiveness. Additionally, a top-down policy development approach results in regulations misaligned with current market trends, hindering effective adoption of sustainability practices. The report identifies various institutions involved in climate change adaptation, mitigation, and sustainable tourism, noting their distinct yet complementary roles and potential for synergistic collaboration. It emphasizes the need for coordinated efforts, enhanced enforcement capacities, prioritized financing in promoting climate change response and implementation of sustainable practices by the tourism sector. Additionally, it advocates for mechanisms to harmonize stakeholder interests and leverage NGOs' contributions to climate resilience and sustainability initiatives in tourism.

The report identified significant barriers and drivers influencing the adoption of climate change adaptation, mitigation, and sustainable tourism practices in Kenya. Key challenges include limited stakeholder awareness, regulatory fragmentation, and technological constraints.

Conversely, drivers such as robust governmental policies, organizational sustainability targets, and digital technologies facilitate adoption. Statistical analyses underscore the impact of these factors, showing a positive relationship with sustainable tourism practices, explaining substantial variances in social, environmental, and economic sustainability (BTOE = 0.54, t = 12.18, p <.001). Specifically, government policies on sustainable technologies enhance social and environmental sustainability by 19% and 18%, respectively, while digital payment technologies contribute a 13-14% improvement across all dimensions. These insights advocate for a holistic strategy integrating technology and organizational culture to advance Kenya's tourism sector towards comprehensive sustainability goals.

The survey of 1,246 tourism enterprises in Kenya evaluated the effectiveness of current incentives and disincentives in fostering sustainable tourism practices (STPs) and climate resilience strategies. Results indicate that while both incentives and disincentives were perceived as moderately impactful, with mean scores of 2.90 and 3.37 respectively, a notable 17% of enterprises found incentives insufficient, contrasting with only 2% for disincentives. This suggests a critical need to enhance incentive structures to better support sustainable practices and climate adaptation in the tourism sector. Economic incentives such as government grants, duty waivers, and affordable loans were identified as pivotal by stakeholders, highlighting their influence over command-and-control and voluntary measures. Confirmatory factor analysis within structural equation modelling identified specific incentives like access to green supply chains and carbon offset rebates as significant drivers of STP adoption. However, the study revealed an overall weak correlation between existing incentives/disincentives and STP adoption rates (BIncentives = BDisincentives = 0.03, p > 0.05) underscoring the necessity for bolstering incentives with tangible benefits such as financial rewards and improved funding access. Moving forward, prioritizing robust economic incentives is crucial for effectively implementing comprehensive sustainability practices across Kenya's tourism industry.

Expanding on the situational analysis and recommendations from the best practice report, the framework for incentives and disincentives presented in this report offers a structured approach to promote climate change adaptation, mitigation, and sustainable practices within Kenya's tourism sector. Based on comprehensive research and best practices, the framework identifies 11 priority practices crucial for sectoral improvement, including water and energy conservation, ecosystem restoration, and compliance with government policies. It aims to incentivize adoption through a combination of economic, command-and-control, voluntary, and supportive mechanisms. By focusing on resource conservation, ecosystem protection, compliance, and capacity building, the framework aligns closely with these best practices, fostering sustainability across the sector. It integrates examples of effective international strategies and provides an implementation matrix detailing objectives, priority areas, responsibilities, and timelines. This structured approach ensures a coordinated effort to enhance sustainability in Kenya's tourism industry, leveraging global insights and tailored strategies to drive comprehensive and effective implementation.

Introduction

CHAPTER ONE

1.0 INTRODUCTION

1.1 Background

The tourism industry, a vital economic engine worldwide, relies heavily on various incentives and disincentives to stimulate growth, sustainability, and equitable development. Incentives such as tax breaks, grants, and subsidies are commonly used by governments to attract investments, promote infrastructure development, and enhance the appeal of tourist destinations.

At the international level, countries have successfully implemented incentive programs to promote climate change response actions by their tourism industries. For example, Costa Rica offers tax breaks and certification schemes for sustainable tourism businesses (Honey, 2009), while Sweden provides tax incentives for eco-friendly hotel upgrades (Gössling & Buckley, 2016). Further, countries like Spain and Thailand offer significant tax reductions for hotel and resort developments, while nations such as New Zealand provide subsidies to support eco-friendly tourism initiatives (UNWTO, 2022). On the flip side, disincentives, including stringent visa regulations, high taxation, and restrictive policies, can impede tourism growth. The imposition of high entry fees in Bhutan, for example, serves to control tourist numbers and preserve its cultural and environmental integrity, balancing tourism benefits with sustainable practices (Smith, 2021).

Conversely, disincentives such as wastewater discharge fees and energy taxes on non-compliant businesses encourage responsible behavior (Becken & Hay, 2017). At the same time, Governments worldwide are adopting policies to promote sustainable tourism (UNWTO, 2023). Sustainable practices include zoning to control development (Gössling, 2015), limiting access to ecologically sensitive areas (Lindberg, 2011), disseminating codes of conduct for sustainable behavior (UNEP & UNWTO, 2005), and taxing energy use and waste treatment to encourage resource conservation (Becken & Hay, 2017). These efforts aim to minimize the adverse impacts of tourism and foster sustainable practices within the industry (Mowforth & Munt, 2014).

In Africa, the tourism sector presents a mosaic of opportunities and challenges shaped by both incentives and disincentives. Countries like South Africa and Morocco have implemented robust incentive programs, including tax reliefs and infrastructure investments, to boost tourism growth (African Development Bank, 2023). South Africa's focus on improving air connectivity and offering incentives for wildlife tourism has been particularly effective (Tourism South Africa, 2022). Conversely, the continent faces limited financial resources and inconsistent enforcement across African countries, hindering widespread adoption of sustainability measures in the tourism sector (World Travel & Tourism Council, 2022). In Kenya, the government has introduced several incentives, such as tax exemptions for tour operators and investment in national park infrastructure, to enhance its tourism appeal (Kenya Tourism Board, 2023). Limited financial resources, complex regulations, and lack of awareness hinder Kenyan tourism enterprises from adopting sustainable practices. (Daily Nation, 2023). Despite these hurdles, Kenya's commitment to promoting sustainable tourism through incentives for eco-friendly practices

showcases a balanced approach to leveraging its natural and cultural assets (UNEP, 2022).

Climate change impacts driven by global warming like rising sea levels, extreme weather events, and ecosystem disruptions portend significant threats to tourism destinations, impacting infrastructure, natural attractions, and visitor safety (Intergovernmental Panel on Climate Change [IPCC], 2022; Hall, 2013). International treaties like the Paris Agreement aim to address climate change by limiting global warming through emissions reduction by all sectors, including tourism (UNFCCC, 2015). At the same time, multinational efforts to promote sustainable tourism are gaining momentum through various initiatives and frameworks. For instance, the United Nations World Tourism Organization (UNWTO) actively promotes sustainable tourism practices through initiatives like the Sustainable Tourism – Eliminating Plastic Pollution (STEPP) Initiative (UNWTO, 2020).

Africa faces unique climate change challenges, heightening exposure to extreme weather and biodiversity loss (IPCC, 2018), endangering its vital tourism sector. The African Union's Agenda 2063 prioritizes sustainable development and climate resilience (African Union, 2015). Initiatives like the Sustainable Tourism for Effective Pandemic Response, Recovery, and Resilience (STERP) program aid African destinations in adopting sustainability (UNWTO, 2023), while regional efforts, including the African Tourism Strategic Framework, integrate climate adaptation and sustainable tourism continent-wide. The East African Community (EAC) acknowledges tourism's economic importance but emphasizes sustainable practices to protect vital environments. Efforts include zoning regulations, access limitations, and codes of conduct (EAC, 2023). Economic measures like energy taxes incentivize conservation (Becken & Hay, 2017), aiming to minimize tourism's environmental impact and ensure the long-term preservation of the region's natural wonders.

At the country level, South Africa incentivizes water conservation and energy efficiency in tourism, setting a regional climate-smart precedent (Rogerson & Sims, 2012). On the other hand, Seychelles exemplifies sustainable tourism incentives leveraging a green tax for conservation and endorsing eco-lodges (Becken & Hay, 2017). These examples showcase the efficacy of regional cooperation and policy enactment for sustainable tourism advancement.

In Kenya, tourism is recognized as a crucial contributor to the country's socio-economic development. However, climate change impacts such as coral reef bleaching and erratic rainfall patterns can jeopardize the country's iconic attractions like the coastline and national parks, potentially limiting tourism's contribution to the country's socio-economic development goals (Government of Kenya, 2018). The National Tourism Policy, Sessional Paper No.1 of 2010 on enhancing sustainable tourism acknowledges the need for sustainable tourism practices. The policy encourages tourism development that is environmentally, socially, and economically sustainable. Existing national initiatives aimed at promoting sustainability include the eco-rating certification scheme for tourism establishments (Ecotourism Kenya, n.d.). However, challenges like limited access to financing for implementing sustainable practices and a lack of awareness impede wider adoption (Government of Kenya, 2018). With regard to climate change, Kenya has made significant strides through policies such as the Climate Change Act

(2016) and the National Climate Change Action Plans (2018-2022 and 2023-2027). These policies provide a comprehensive national framework aimed at both climate adaptation and mitigation strategies. Despite these efforts, challenges persist in fully integrating sustainable practices within the tourism sector (Njoroge, 2020). This underscores the need for a structured framework of incentives and disincentives to encourage climate change adaptation and sustainable tourism practices by the tourism sector.

An effective system of incentives and disincentives is essential for promoting sustainable practices within Kenya's tourism sector Incentives serve to encourage tourism businesses to embrace climate-conscious technologies and approaches, while disincentives discourage environmentally detrimental behaviors. The framework presented in the current report aligns with Kenya's ambition to emerge as a frontrunner in sustainable tourism, bolstering the sector's ability to withstand climate change impacts and securing its longevity.

Building on this context, the report presents findings from a study that analyzed barriers and drivers to adopting climate resilience strategies and sustainable tourism practices among Kenya's tourism enterprises. The report recommends policy interventions and prescribes a framework of incentives and disincentives for fostering a climate-resilient and sustainable tourism sector in the country.

1.2 Rationale of the Incentives and Disincentives Framework Report

At the 26th Conference of Parties to the United Nations Framework Convention on Climate Change (UNFCCC) (COP26) in 2021, held in Glasgow, United Kingdom (UK), Kenya pledged to achieve net zero Carbon Emissions by 2030 and transition 100% of our energy needs to renewable sources. As part of this commitment, Kenya outlined several actions for conserving and managing the tourism sector. These include restricting vehicular transportation in wildlife-protected areas to those using non-fossil renewable energy by 2023, mandating all hospitality and tourism facilities to adopt renewable energy and circular economy practices by 2023, leveraging ecological assets in protected areas as carbon sinks for global carbon credit facilities, restoring degraded national parks and reserves through reforestation efforts, expanding marine conservation areas networks, and establishing and enforcing minimum sustainability standards aligned with global benchmarks for tourism enterprises.

Against the backdrop of Kenya's legislative efforts to mitigate climate change, such as the Climate Change Act (2016) and subsequent National Climate Change Action Plans, the Tourism Research Institute (TRI) conducted a nationwide survey to assess how well tourism enterprises were adopting climate resilience strategies and sustainable practices. This initiative aimed to compare Kenya's tourism sector with global standards, highlighting both areas of strength and improvement in sustainability efforts. Following this assessment, the survey prioritized best practices for climate change response and sustainability within Kenya's tourism industry. The current report provides a framework of incentives and disincentives aimed at promoting widespread adoption of these best practices among tourism enterprises across the country.

1.3 Objectives of the Incentives and Disincentives Framework

1.3.1 General Objectives

To outline a framework of incentives and disincentives for adopting climate change resilience strategies and enhancing the implementation of sustainable tourism practices among tourism enterprises in Kenya.

1.3.2 Specific Objectives

i. To undertake a situational analysis of the existing legal and regulatory framework for climate change adaptation, mitigation actions, and sustainable tourism in Kenya;

ii. To undertake a situational analysis of the existing institutional framework for climate change adaptation, mitigation actions, and sustainable tourism practices in Kenya;

iii. To assess the barriers and drivers to the adoption of climate change adaptation, mitigation actions, and sustainable tourism practices in Kenya;

iv. To assess the influence of existing incentives and disincentives for the adoption of climate change adaptation, mitigation actions, and sustainable tourism practices in Kenya; and

v. To recommend a framework of incentives and disincentives for the adoption of adaptation, mitigation actions, and sustainable tourism practices in Kenya.

Methodology

CHAPTER TWO

2.0 METHODOLOGY

2.1 Methodological Approach

The framework for incentivizing the adoption of climate change adaptation and mitigation practices and implementing sustainable tourism practices among Kenya's tourism enterprises was developed through desk research, stakeholders' engagement, and empirical research. The process aimed to secure stakeholder buy-in, and ensure inclusivity, transparency, and evidence-led policy design. The methodological approach's components are elaborated in the following section.

2.2 Desk Research

Desk research entailed an exhaustive examination of pertinent official reports by national and international organizations, national policy documents on climate change action and sustainability, existing legal and regulatory instruments, literature on relevant theories, and documentation on global best practices and policy frameworks for climate change adaptation, mitigation, and sustainable tourism. This review served as the foundation for the situational analysis and provided a benchmark for comparing the incentives and disincentives framework with global practices.

2.3 Stakeholder Engagement

The framework's development relied on nationwide stakeholder engagement, which included 24 Focus Group Discussions (FGDs) with participants from 29 counties. The FGDs gathered feedback from various participants, including enterprise owners, government representatives, and conservation groups. Key Informant Interviews (KIIs) gathered views from twenty-six (26) experts from sustainability advocacy and research organizations, county government departments, tourism trade organizations, Ministries, Departments, and Government Agencies (MDAs) to further enrich the process. A survey covering respondents (n = 1,246) from Class A to Class H tourism enterprises across the country was used to gather baseline data on barriers, drivers, incentives, and disincentives for adopting climate change action and sustainable tourism practices.

2.4 Research

The framework for incentives and disincentives was supported by two technical reports: the baseline survey report and the best practices report. Additionally, it included an analysis of the barriers, drivers, incentives, and disincentives for adopting and implementing climate change resilience strategies and sustainable tourism practices. The report relied on research data obtained using the Mixed Method Research (MMR) approach, which adopted the exploratory sequential mixed-method design to gather both qualitative and quantitative data. Qualitative data analysis relied on content and thematic analysis, while quantitative data analysis utilized descriptive statistics, structural equation modelling, and regression analysis techniques.

Situational Analysis

CHAPTER THREE

3.0 SITUATIONAL ANALYSIS

3.1 Legal and Regulatory Framework for Climate Change Adaptation, Mitigation Actions, and Sustainable Tourism in Kenya

This chapter delved into desk research to find out the situation on Kenya's legal and regulatory framework for climate change adaptation, mitigation actions, and sustainable tourism. Kenya's history of climate change action reflects a growing commitment to addressing environmental challenges over the past few decades. The country first acknowledged the impacts of climate change in its National Climate Change Response Strategy in 2010, which highlighted the need for adaptation and mitigation measures across various sectors (Government of Kenya, 2010). This was followed by the Climate Change Act of 2016, providing a comprehensive legal framework for integrating climate change responses into national development planning (Ministry of Environment and Natural Resources, 2016). Kenya also submitted its first Nationally Determined Contribution (NDC) under the Paris Agreement in 2015, pledging to reduce greenhouse gas emissions by 30% by 2030 (UNFCCC, 2015). More recently, the government has focused on sustainable practices in tourism and other sectors, emphasizing renewable energy and conservation initiatives to build resilience against climate impacts (Kenya Tourism Board, 2023).

Additionally, the National Green Fiscal Incentives Policy Framework of 2022 directs Kenya's economy toward a low-carbon, climate-resilient development path. It employs various fiscal and economic mechanisms to promote climate resilience and sustainable economic growth. These policy, legal, and regulatory frameworks provide the groundwork for incentivizing climate action and sustainable tourism practices among Kenya's tourism enterprises. Table 3.1 summarizes these key instruments.

Table 3.1 Policies, Strategies, Legal and Regulatory Instruments for Climate Change and Sustainable Tourism in Kenya

INSTRUMENT	DESCRIPTION/AIM	RELEVANCE/IMPLICATIONS
Strategies		
National Climate Change Response Strategy (2010) (GoK, 2010)	A strategy to institutionalize and systemize the management of climate change in Kenya	• Recognizes adaptation as the key climate change priority • Recommends the formulation of a climate change policy and law • Identifies sectoral adaptation (and mitigation) needs
NDC Financing Strategy (GoK, undated)	Provides financing needs for Kenya's climate priority actions and highlights funding gaps.	• Highlights the need for mobilizing resources from domestic and international public finance sources for climate change adaptation.
National Wildlife Strategy, 2030(MoT&W, 2018)	Outlines a framework and set of priority actions for coordination, effective implementation, and sustainability of wildlife conservation in Kenya	• Prescribes principles, objectives, standards, and incentives for the protection, conservation, and management of wildlife resources

INSTRUMENT	DESCRIPTION/AIM	RELEVANCE/IMPLICATIONS
Strategies		
National Tourism Strategy 2021-2025 (MoT&W, 2022)	Aim to prescribe the principles, objectives, standards, indicators, procedures and incentives for the development, management and marketing of sustainable tourism	• Aims at creating new and more diverse customer experiences and products; building a refreshed brand image and repositioning Kenya as an upmarket, sustainable destination; • Aims at developing enablers including unlocking alternative and innovative sources of funding and optimizing the adoption of digital innovations and new technologies by the sector
Policies		
National Climate Change Framework Policy (2016) Ministry of Environment and Natural Resources [MoE&NR] (2016)	Aims to facilitate a coordinated and effective government response to local, national, and global challenges and opportunities arising from climate change.	• Finance as key to the successful implementation of climate change adaptation and mitigation • Climate change action to be financed from a • diversity of domestic and international finance
National Policy on Climate Finance (2017) (GoK, 2017)	Aims to position Kenya to better access climate finance through diverse mechanisms both at the national and county levels	• Establishment of a mechanism to enhance the allocation of adaptation finance to match climate change mitigation.
	Aim to enhance Kenya's ability to mobilize and effectively manage and track adequate and predictable climate change finance.	• Establish mechanisms to mobilize internal and external climate finance; • Track, monitor, account for, evaluate and report on sources, applications and impacts of climate finance; • Enhance the capacity of the country to mobilize climate change finance to support sustainable development; and • Encourage and facilitate private sector participation in climate relevant financing opportunities.
Green Fiscal Incentives Policy Framework (GoK, 2022)	Provides a Framework to steer Kenya's economy into a desired low-carbon climate-resilient green development pathway through a variety of fiscal and economic mechanisms.	• Outlines, among others, policy goals and guiding principles, situational analysis of green fiscal reforms across key sectors in Kenya and green fiscal policy interventions; • Proposes fiscal incentives including carbon tax, rebates, subsidies, tax exemptions, ecological fiscal transfers, research grants, concessional loans, guarantees, interest rate subsidies, creation of a green bank to promote sustainable development
National Tourism Policy, Sessional Paper No.1 of 2010 on enhancing sustainable tourism in Kenya (GoK, 2010)	Aims to align tourism sector aspirations to the changes in the operating environment and provide a framework to enhance resilience and sustainability. Proposes a broad range of measures and actions responding to key tourism issues and challenges and seeks to mainstream tourism concerns into all sectors of society throughout the country	• Ensure sustainable tourism that enhances economic development, environmental sustainability and encourage community participation to ensure benefit trickle down to host communities. • Promote and support the provision of incentives and other economic instruments that enhance investment in the sector; • Promote and encourage innovation and uptake of modern technology in the sector.

Policy Instruments		
Kenya National Adaptation Plan (2015-2030) (GoK, 2016)	It consolidates adaptation plans from various sectors and aligns them with Kenya's development vision, including Vision 2030. Additionally, it communicates Kenya's adaptation plans to the UNFCCC.	• Outlines various adaptation actions over the short, medium and long term and aligns these to the vision 2030
National Climate Change Action Plans (2013 2018;2018-2022. 2023-2027)	Guides Kenya on priority climate change actions for low-carbon, climate-resilient development and achieving Nationally Determined Contributions (NDC) targets.	• Develops a comprehensive costing of Kenya's climate change adaptation needs for 5-year periods
The Nationally Determined Contributions (NDCs) (2015;2020)	Sets out Kenya's adaptation and mitigation contribution	• Kenya commits 10% (USD 43,927 million) of the adaptation budget and seeks 90% coverage from international actors.
County Climate Change Funds	Earmarks specific amounts of financial resources to climate action by counties (typically 1% or 2% of county development budgets)	• Prioritize and finance investments that seek to reduce climate risks while achieving adaptation priorities
The National Tourism Blue- print 2030 (GoK, 2017)	Provides a blue-print to propel the tourism sector's growth through a coordinated approach to tourism product development, institutional and stakeholder management, marketing, and the development of people in tourism.	• Defines the strategic direction for tourism in Kenya including the mission, vision and guiding principles; • Makes recommendations for the tourism grading system
Laws		
Environemental Management and Coordination Act, 1999	A framework law on environmental management and conservation	• Establishes institutions for implementation of all policies relating to the environment, and to exercise general supervision and coordination over all matters relating to the environment
Climate Change Act (2016)	Provides the legal and institutional framework for the mainstreaming of climate change in all development sectors	• Establishes a Climate Change Fund for the financing of priority climate change adaptation (and mitigation actions) through grants and loans
County Climate Change Acts	Establishes county legislation to institutionalize the management of climate change	• Establish County Climate Funds to commit a given percentage of budget to climate change management
Public Finance Management Act (PFM)	Provides a framework for tracking public expenditures, including those of climate finance	• Framework for tracking adaptation finance
Tourism Act 2011	Provides for the development, management, marketing and regulation of sustainable tourism and tourism-related activities and services, and for connected purposes	• Establishes the National Tourism Regulatory Authority with a mandate to formulate guidelines and prescribe measures for sustainable tourism throughout the country; Register, license and grade all sustainable tourism and tourist-related activities and services; and develop and implement a code of practice for the tourism sector; • Provides for mechanism for licensing tourism enterprises;

		• Describes the fiscal incentives that may be recommended for promoting sustainable practices in the tourism sector including customs and excise waivers, tax rebates, tax disincentives, and user fees.
Wildlife Conservation and Management Act 2013	Provides for the protection, conservation, sustainable use and management of wildlife in Kenya and for connected purposes.	• The Act establishes the Kenya Wildlife Service (KWS) as a body corporate for the management of wildlife resources and protected areas; • The Act mandates KWS to promote or undertake commercial and other activities for the purpose of achieving sustainable wildlife conservation
Public Private Partnership Act 2013.	Provides for the participation of the private sector in the financing, construction, development, operation, or maintenance of infrastructure or development projects of the Government of Kenya through concession or other contractual arrangements	• Provides a framework for partnership in invested for sustainable development of tourism infrastructure
Taxation laws (Various)	Incentivizing and promoting sustainable tourism typically offers tax breaks, credits, or deductions to businesses and individuals who engage in eco-friendly practices and invest in sustainable infrastructure and operations.	• Provide a basis through which the government can raise revenues, as well as provide incentives and disincentives to industry and commerce
Value Added Tax Act (2013)	Defines consumption taxes that are added to the value of goods and services at each stage of production or distribution.	• Applies tax incentives or reduced VAT rates to goods and services that support eco-friendly practices, such as energy-efficient accommodations, renewable energy and services that may be necessary as climate change interventions.
The East African Community (EAC) Customs Management Act, 2004 (revised. 2018)	An Act of the Community to make provisions for the management and administration of Customs and for related matters.	• Facilitates the enforcement of regulations related to environmentally friendly practices and the efficient management of goods and services across East African borders.

A desk review of the existing legal and regulatory framework for climate change adaptation, mitigation actions, and sustainable tourism in Kenya's tourism sector (table 3.1) highlighted several critical challenges. A significant barrier is the limited stakeholder awareness of national and county policies, environmental laws, and regulations governing climate change and sustainability activities (Ecotourism Kenya, 2023). Despite the multiplicity of laws and regulations relevant to climate change action and sustainable tourism, the lack of stakeholder awareness undermines the effectiveness of the existing legal and regulatory regime.

Additionally, the review found that sustainability and climate change laws and regulations were fragmented and driven by individual sector and institutional goals rather than unified, destination-wide objectives. This fragmentation implies a lack of synergy in implementation, with overlaps and duplicity of roles between implementing institutions (Green Tour Kenya, 2023). Moreover, the lack of coordination between central and county government agencies in

implementing the legal and regulatory framework resulted in inconveniences for private sector stakeholders and reduced compliance with the laws (Ministry of Tourism and Wildlife, 2020).

The review noted that the development of climate change and sustainability policies often followed a top-down approach, leading to outdated rules and regulations that do not conform to current market trends. This approach hinders the implementation of effective and contemporary sustainability practices within the tourism sector (Ecotourism Kenya, 2023).

The legal and regulatory framework for climate change adaptation, mitigation actions, and sustainable tourism in Kenya underscores the country's commitment to addressing environmental challenges while promoting economic growth and resilience. Strategies like the National Climate Change Response Strategy prioritize adaptation as a key climate priority and recommend the formulation of policies and laws, signalling a comprehensive approach to climate management. Additionally, the NDC Financing Strategy highlights the need for mobilizing resources from domestic and international sources, emphasizing the importance of adequate financing for effective climate change adaptation. These strategies provide a structured framework for addressing climate-related risks and fostering sustainable development practices.

In parallel, policies such as the National Tourism Strategy 2021-2025 focus on rejuvenating the tourism sector through sustainable practices and innovation, aiming to enhance Kenya's competitiveness as a tourist destination while promoting economic growth and community development. Similarly, the National Climate Change Framework Policy and National Policy on Climate Finance establish mechanisms for enhancing resource mobilization and tracking climate finance, ensuring that adequate funding is available for climate adaptation efforts. By aligning climate change priorities with sustainable tourism development, Kenya's legal and regulatory framework sets the stage for a coordinated approach to environmental management and economic prosperity.

3.2 Institutional Framework for Climate Change Adaptation, Mitigation Actions, and Sustainable Tourism Practices in Kenya

This section delved into desk research to find out the institutional framework for climate change adaptation, mitigation actions, and sustainable tourism practices in Kenya. Table 3.2 details the current institutions relevant to the process of adoption of climate change resilience strategies and implementation of sustainable tourism in Kenya and outlines the mandate/role of respective institutions.

Table 3.2 Institutional Framework for Climate Change Action and Sustainable Tourism Implementation in Kenya

Institution	Role
Public Institution	
National Climate Change Secretariat (NCCS)	• National Focal Point for the UNFCCC; • Coordinates climate change units in MDAs to mainstream climate change in the different economic sectors

Institution	Role
Public Institution	
Ministry of Tourism and Wildlife (State Department for Tourism)	• Mainstreaming climate change resilience strategies at the national level
Parliament	• Enabling legislation
County Assemblies	• Enabling legislations
National Treasury	• The National Designated Authority (NDA) for the Green Climate Fund (GCF); • Tracking and reporting national climate change finance; • Develop and oversee the implementation of a national policy on climate finance; • Coordination of climate finance actions and financing the green economy in the country
National Environment Management Authority (NEMA)	• Monitoring and enforcing compliance of climate change interventions.
Kenya Wildlife Service (KWS)	• Enforcing wildlife and habitat conservation interventions; • Oversee tourism development and regulations in the National Parks and Reserves;
Institution	**Role**
Public Institution	
Tourism Fund (TF)	• Finance the development of tourism products and services; • Finance the tourism research, tourism intelligence, and the national tourism information management system;
Kenya Development Corporation	• Provide financial assistance to investors or entrepreneurs in the tourism sector including small, medium, and community-based enterprises for the development, expansion, and maintenance of tourism activities and services
Tourism Research Institute (TRI)	• Undertake and co-ordinate tourism research and analysis including collecting and analyzing information on sustainable tourism and other emerging issues
Tourism Promotion Fund (TPF)	• Financing tourism research and development of standards in the tourism sector to promote sustainable development
Private Sector Partners	
Tourism Sector Enterprises	• Sustainable tourism product development and operation, quality service provision, and meeting sustainable tourism standards.
Tourism Trade Organizations • Kenya Association of Tour Operators (KATO) • Kenya Association of Travel Agencies (KATA) • Kenya Association of Hotelkeepers and Caterers (KAHC) • Kenya Tour Driver Guides Association (KTDGA) • Kenya Association of Professional Tour Guides (KPSGA) • Kenya Tourism Federation (KTF) Non-Governmental organizations • Kenya Tourism Federation (KTF)	• Promote climate change adaptation and mitigation by members; • Promote sustainable tourism product development and operation, quality service provision, and meeting sustainable tourism standards. • To promote a sustainable tourism sector through effective representation of private sector industry stakeholder interests

Institution	Role
Public Institution	
• Non-Governmental organizations	• Include non-governmental organizations, civil society organizations, and faith-based organizations; • Advocacy, education, training, and public awareness related to climate change; • Policy research and analysis, • Promotion of good governance; • Information sharing; • Gender mainstreaming in climate change.

The desk review revealed a diverse array of institutions engaged in climate change adaptation, mitigation, and sustainable tourism in Kenya (Table 3.2). While these institutions operate with distinct mandates, their roles often complement each other, suggesting the potential for synergistic collaboration to enhance effectiveness and efficiency. The review underscores the critical importance of coordinated institutional efforts, emphasizing the need for enhanced cross-sectoral coordination, strengthened enforcement capacities, prioritized financing for climate action institutions, and the promotion of sustainable practices. Moreover, the review advocates for the creation of mechanisms to harmonize stakeholder interests and leverage the valuable contributions of NGOs in advancing climate resilience and sustainability initiatives.

The institutional framework for climate change action and sustainable tourism implementation in Kenya involved a diverse range of public and private sector entities, each with specific roles and responsibilities. Public institutions like the National Climate Change Secretariat (NCCS) and the Ministry of Tourism and Wildlife played crucial roles in coordinating climate change initiatives and mainstreaming resilience strategies at the national level. Additionally, parliamentary and county assemblies enacted enabling legislation to support climate change adaptation and sustainable tourism development. The involvement of the National Treasury as the National Designated Authority for the Green Climate Fund underscored Kenya's commitment to mobilizing and managing climate finance effectively, ensuring adequate resources for climate-related initiatives and the transition to a green economy.

Furthermore, key agencies such as the National Environment Management Authority (NEMA), Kenya Wildlife Service (KWS), and the Tourism Regulatory Authority (TRA) are tasked with monitoring compliance, enforcing regulations, and overseeing sustainable tourism practices. Private sector partners, including tourism enterprises and trade organizations, are essential in driving sustainable tourism product development, promoting quality service provision, and advocating for climate change adaptation and mitigation measures. Non-governmental organizations play a vital role in advocacy, public awareness, policy research, and gender mainstreaming, contributing to a holistic approach to climate action and sustainable tourism in Kenya. Overall, the collaborative efforts of these institutions and stakeholders are essential for achieving Kenya's climate resilience and sustainable tourism goals, ensuring environmental conservation, economic prosperity, and societal well-being.

The analysis of Kenya's institutional framework for climate change action and sustainable tourism implementation reveals a diverse array of stakeholders with distinct roles and

responsibilities. These include public institutions like the National Climate Change Secretariat (NCCS) and the Ministry of Tourism and Wildlife, which coordinate climate change initiatives and mainstream resilience strategies at the national level. Additionally, parliamentary and county assemblies enact enabling legislation to support adaptation efforts. The involvement of the National Treasury as the National Designated Authority for the Green Climate Fund demonstrates Kenya's commitment to mobilizing and managing climate finance effectively. Key agencies such as the National Environment Management Authority (NEMA), Kenya Wildlife Service (KWS), and the Tourism Regulatory Authority (TRA) enforce regulations and oversee sustainable tourism practices.

This implies that a comprehensive and well-coordinated institutional framework is essential for addressing climate change and promoting sustainable tourism in Kenya. The involvement of various public and private sector entities, along with non-governmental organizations, highlights the importance of collaboration and synergy among stakeholders. It suggests that effective cross-sectoral coordination, strengthened enforcement capacities, and prioritized financing are crucial for promoting sustainable practices and achieving climate resilience.

3.3 Barriers and Drivers to the Adoption of Climate Change Adaptation, Mitigation Actions, and Sustainable Tourism Practices in Kenya

Findings from the best practice report on climate change resilience strategies and the implementation of Sustainable Tourism Practices (STPs) by tourism enterprises in Kenya reveal a notable disparity between government support for sustainable tourism, as outlined in policy documents, and the actual adoption of climate change actions and STPs by tourism enterprises nationwide. The best practices report identified significant gaps in climate change adaptation, mitigation, and sustainable tourism practices. Climate change adaptation lacks the adoption of renewable energy sources, conservation for historical sites, sustainable transport, coordination, research on best practices, and promotion. Meanwhile, mitigation suffers from poor waste recycling, reliance on old transportation fleets, limited ergonomic design, and inadequate communication of green actions. Furthermore, sustainable tourism practices face challenges such as insufficient finances for Corporate Social Responsibility (CSR), non-compliance with land use laws, and a lack of financial support for conservation efforts.

The diverse implementation of climate change adaptation, mitigation actions, and Sustainable Tourism Practices (STPs) highlights the importance of comprehending the factors driving or hindering their adoption. The report on the framework for incentives and disincentives utilized the Technological, Organizational, and Environmental (T-O-E) factors proposed by Tornatzky, Fleischer, and Chakrabarti (1990) to categorize the barriers and drivers affecting the adoption of climate change action and sustainable tourism practices by tourism enterprises. Additionally, the report employed structural equation modelling to evaluate the impact of these barriers and drivers on the adoption of climate change action and sustainable tourism practices within the tourism sector.

Results of the Confirmatory Factor Analysis (CFA) used to assess the unidimensionality and reliability of the measurement model in the SEM confirmed that eleven (11) items in the T-O-E framework loaded significantly on the latent variable - barrier/drivers of adoption of climate change mitigation, adaptation actions and tourism sustainability practices. The results in Table 3.3 show the resultant barriers and drivers in the measurement model.

Table 3.3 Measurement Model of Barriers and Divers for the adoption of Climate Change mitigation, adaptation and Tourism Sustainability Practices

	Factor Loading (λ)			**Cronbach's alpha (α)**	**Composite Reliability (CR)**
No. Latent Variable/ Indicators		**t-value**	**p-value**		
Drivers and Barriers (TOE)				**0.94**	**0.94**
Competitors' priorities	0.67	20.98	<0.001		
Level of habitat degradation	0.66	20.92	<0.001		
Policies on technology	0.90	26.61	<0.001		
Technological adaptability	0.85	25.78	<0.001		
Technological innovation	0.82	25.10	<0.001		
Technological capacity	0.82	25.12	<0.001		
	Factor Loading (λ)			**Cronbach's alpha (α)**	**Composite Reliability (CR)**
No. Latent Variable/ Indicators		**t-value**	**p-value**		
Drivers and Barriers (TOE)				**0.94**	**0.94**
Digital technology payment access	0.71	22.18	<0.001		
Managerial support for technology	0.86	25.90	<0.001		
Energy use efficiency	0.65	**			
Organizational sustainability targets	0.68	21.43	<0.001		
Performance measurement	0.66	21.73	<0.001		

Source. Tourism Research Institute Survey Data (2023)

The results presented in Table 3.3 confirm that all TOE indicators included in the measurement model demonstrated significant relationships with the latent variable - barriers and drivers ($t = 20.92 – 25.90$, $p < 0.001$). The factor loading coefficients of the indicators ranged from $\lambda = 0.65$ to 0.90, indicating a strong association between the TOE factors and the latent variable. These findings underscore the one-dimensionality (reliability) of the constructs, as indicated by Cronbach's alpha coefficients ($\alpha > 0.70$). Additionally, the composite reliability (CR) for all constructs was CR = 0.94, suggesting a satisfactory level of internal consistency (Hair et al., 1998).

The results confirm that competitors' priorities, the level of habitat degradation, policies on technology, technological adaptability, technological innovation, technological capacity, digital technology payment access, managerial support for technology, energy use efficiency, organizational sustainability targets, and performance measurement are reliable and critical factors that explain the propensity for the adoption of climate change adaptation, mitigation actions, and sustainable tourism practices by tourism enterprises in the country. These findings

imply that policies and measures aimed at modifying or leveraging these eleven factors are likely to influence the extent of adoption of climate change actions and implementation of sustainable tourism practices in the tourism sector.

To evaluate the marginal and relative influence of the TOE factors (barriers and drivers) on the extent of adoption of climate change adaptation and mitigation measures and the extent of implementation of sustainability practices, the analysis estimated a full structural equation model. This model examined both the unstandardized and standardized path coefficients for the relationship between TOE factors and the extent of implementation of climate change and sustainability practices.

An examination of the model fit indices confirmed that the TOE factors effectively accounted for the differences in the extent of adoption of climate change actions and sustainable tourism practices. Six model fit indices for the structural model exceeded the conventional thresholds for acceptability (Normed Chi-Square ($\chi 2/df$) = 4.61, Goodness of Fit Index (GFI) = 0.88, Comparative Fit Index (CFI) = 0.93, Tucker-Lewis Index (TLI) = 0.93, Normed Fit Index (NFI) = 0.91, Root Mean Square Error of Approximation (RMSEA) = 0.05). These results suggest that the structural model fitted the data well and could be relied upon to explain the influence of barriers and drivers on the extent of implementation of climate change action and sustainable tourism practices by tourism enterprises."

Table 3.4 displays the path coefficients or unstandardized regression weights (B) depicting the relationship between TOE factors (barriers/drivers) and the extent of implementation of climate change actions and sustainable tourism practices, emphasizing the marginal influence of these barriers/drivers on implementation extent.

Table 3.4 Result of the SEM- Drivers/Barriers, Incentives and Disincentives to Adoption of STP

Relationship	Path	Unstandardized Regression Weights (B)	T	P - Value	Conclusion
TOE => STPs	**Path_J**	**0.54**	**12.18**	**< 0.001**	**Supported**
Awareness => STPs	Path_H	0.09	3.65	< 0.001	Supported
Significance => STPs	Path_F	0.16	6.42	< 0.001	Supported
Incentives => STPs	Path_B	0.03	1.37	0.17	Fail to support
Disincentives => STPs	Path_D	0.03	1.35	0.18	Fail to support

Source: Survey Data, 2024

The highlighted results in Table 3.4 show that the path coefficient between TOE factors (barriers/drivers) and the extent of implementation of climate action and STPs was positive and statistically significant (BTOE = 0.54, t = 12.18, p <.001). These findings confirm that the eleven factors—competitors' priorities, the level of habitat degradation, policies on technology, technological adaptability, technological innovation, technological capacity, digital technology

payment access, managerial support for technology, energy use efficiency, organizational sustainability targets, and performance measurement—were important in determining the extent of implementation of STPs and climate change action. The positive sign on the factors implies that these factors were drivers that promoted the implementation of these practices. The results further confirm that policy interventions geared to enhancing the TOE factors collectively would promote the adoption of climate change adaptation and mitigation practices and implementation of STPs amongst enterprises in the tourism sector.

Results from KIIs and FGDs participants underscored technological challenges, notably limited access to expertise and information, especially regarding measuring carbon footprints and implementing emission reduction strategies. Moreover, there was reluctance to embrace new sustainable technologies, like e-ticketing. According to the informants, this technological inertia poses a significant hurdle to advancing sustainability in the tourism sector. Additionally, the scarcity of expertise in areas like wastewater management and the high costs of importing foreign technologies exacerbate the situation. Slow uptake of new technologies such as electric vehicles due to financial constraints and unclear climate change compliance among tour operators further compound the challenges.

FGDs and KIIs findings highlight organizational barriers impeding STPs and climate actions in Kenya's tourism. These encompass regulatory complexities, notably licensing requirements requiring streamlining. Moreover, there's a lack of information and awareness about sustainability practices, along with employment limitations due to insufficient education, training, and financial constraints hindering investment in sustainability. Affordability issues, resistance to change, and the need for governmental support are also noted, alongside a lack of expertise, institutional collaboration, and clear regulatory frameworks exacerbating effective implementation of sustainable measures.

To compare the relative influence of the barriers and drivers on the extent of tourism enterprises' adoption of climate change adaptation and mitigation actions and STPs, the analysis estimated ordinary least squares regression models and compared the standardized regression coefficients for the individual indicators of the barriers/drivers (βi). Table 3.5 shows the relative influence of T-O-E factors on the extent of implementation of social, environmental, and economic sustainability practices.

Table 3.5 Influence of T-O-E factors on the extent of implementation of social, environmental, and economic sustainability practices.

Technological, organizational & environmental Factors	Social Sustainability Practices		Environmental Sustainability Practices		Economic Sustainability Practices	
	β	*p*-value	β	*p*-value	β	*p*-value
Policies on technology	0.19	< 0.001	0.18	< 0.001	0.14	< 0.001
Performance measure	0.13	< 0.001	-	-	0.12	< 0.001
Digital technology and payment accelerators	0.13	< 0.001	0.14	< 0.001	0.14	< 0.001
Sustainability targets	0.08	0.01	0.08	0.01	0.12	< 0.001
Energy usage and efficiency	0.07	0.03	0.10	< 0.001	0.23	< 0.001
Technological innovativeness			0.09	0.02	0.08	0.04
Level of habitat degradation			0.09	< 0.001		
Model Fit Statistics						
R	0.47		0.54		0.57	
Adj R^2	0.22		0.29		0.32	
F	72.09		86.23		116.60	
p-value	< 0.001		< 0.001		< 0.001	

β = Standardized regression weight

Source: Survey Data, 2024 |

The results in Table 3.5 confirm that out of the 11 barriers/drivers, five (government policies on sustainability technology, enterprise use of performance measures, use of digital payment technology, presence of sustainability targets, and use of energy-efficient technologies) significantly explained 47% of the differences in the implementation of social sustainability practices (R=0.47;F=72.09; p<.05). Additionally, technological innovativeness and perceptions of habitat degradation, along with the initial five barriers/drivers, explained 54% of the differences in the implementation of environmental sustainability practices (R=0.54;F=86.23;p<.05). Furthermore, the results reveal that, out of seven barriers/drivers, six (excluding perceptions of habitat degradation) explained 57% of the variability in the implementation of economic sustainability practices (R = 0.57; F=116.60; p <.05).

Overall, the results in Table 3.5 support the notion that technological factors, including government policies on technology adoption, use of digital payment technologies, availability of energy-efficient technologies, and enterprise innovativeness; organizational factors such as performance measurements and sustainability targets; and perceptions of habitat degradation are important drivers for the adoption of STPs by tourism enterprises. The results suggest that a holistic approach targeting improvements in technology, organizational culture, and awareness of environmental damage could significantly promote the implementation of social, economic, and environmental STPs in the tourism sector, accounting for 47% to 57% of the variability.

Moreover, the results confirm that, in relative terms, government policies promoting sustainable technologies were the most significant drivers for implementing social and environmental sustainability practices, accounting for a 19% and 18% improvement, respectively. Importantly, digital payment technologies were the second most significant drivers for social, environmental, and economic STPs, with improvements in technology promoting STPs adoption across all three dimensions by 13% to 14%. As expected, the availability of energy-efficient technologies was the most significant driver for the adoption of economic sustainability practices, suggesting that the cost-reduction gains from these technologies are important to tourism enterprises in the country.

The results imply that prioritizing policies to enhance access to sustainability technologies, such as tax incentives for investing in sustainable energy appliances and the enhancement of digital payment infrastructure, would significantly promote the adoption of economic and social sustainability practices. While promoting environmental awareness improves the adoption of economic sustainability practices, it would drive the implementation of environmental sustainability practices to a greater extent.

Based on their relative importance in influencing the implementation of STPs across the three dimensions of sustainable practices (Table 3.5), the barriers and drivers were ranked by their relative impact on the extent of implementation of STPs. Table 3.6 presents this ranking by their importance across social, environmental, and economic sustainability dimensions.

Table 3.6 Ranking of Barriers and Drivers for Implementation of STPs and Climate Change Action

Position	Barriers/Drivers
1	Policies on technology
2	Digital technology and payment accelerators
3	Energy usage and efficiency
4	Performance measure
5	Sustainability targets
6	Technological innovativeness
7	Level of habitat degradation

Source: Research Data, 2023

The ranking in Table 3.6 confirms the importance of technological factors—policies on technology, access to digital technology, payment accelerators, and energy use efficiency—as top drivers for implementing sustainable practices across the social, environmental, and economic dimensions. On the other hand, although stakeholders' perception of the level of habitat degradation was a significant driver for the implementation of environmental sustainability practices, this factor was ranked least impactful across the three sustainability dimensions. Organizational factors, including performance measurement and adoption of sustainability targets, occupied the middle positions in the importance ranking across the three sustainability dimensions. These results underscore the critical role of technology in promoting sustainability, suggesting that policy and investment should prioritize technological advancements to achieve comprehensive sustainable practices.

The findings from the best practice report on climate change resilience strategies and sustainable tourism practices in Kenya underscore a significant disparity between government policy support and actual implementation by tourism enterprises. Identified gaps encompass climate change adaptation, mitigation, and sustainable tourism practices, highlighting deficiencies such as a lack of renewable energy adoption, poor waste management, and inadequate financial resources for conservation efforts. This incongruity emphasizes the need to understand the factors influencing adoption or hindrance of these practices.

Utilizing the Technological, Organizational, and Environmental (T-O-E) framework, the study categorized barriers and drivers affecting the adoption of climate change action and sustainable tourism practices. Results of Confirmatory Factor Analysis (CFA) confirmed significant relationships between these factors and the adoption of practices, indicating their critical roles. These findings suggest that policies targeting modification or leveraging of these factors could significantly impact the adoption of climate change actions and sustainable tourism practices. Structural equation modelling further validated the effectiveness of the T-O-E factors in explaining variations in implementation extent, providing insights into their marginal influence. Thus, addressing these factors could enhance the adoption of climate change actions and sustainable tourism practices in the tourism sector, aligning with national sustainability goals.

3.4 Incentives and Disincentives for the Adoption of Climate Change Adaptation, Mitigation Actions, and Sustainable Tourism Practices in Kenya

Incentives and disincentives play pivotal roles in shaping the adoption of climate change adaptation, mitigation actions, and sustainable tourism practices in Kenya. Recognizing the significance of incentivizing environmentally friendly behaviors while discouraging detrimental practices, policymakers and stakeholders have devised a multifaceted framework aimed at promoting sustainable practices across various sectors.

This section delves into the diverse range of incentives and disincentives employed to encourage the adoption of climate-resilient strategies and sustainable tourism practices in Kenya. From tax breaks and subsidies to regulatory measures and certification schemes, these mechanisms aim to foster a conducive environment for environmentally responsible practices while addressing the challenges posed by climate change and unsustainable tourism

development. Through an exploration of these incentives and disincentives, we uncover the intricate interplay between policy interventions, economic considerations, and environmental imperatives in driving sustainable development in Kenya's tourism sector.

While Kenya's Green Fiscal Incentives Policy Framework is not tourism-specific, it touches on the sector's current sustainability incentives and disincentives. The policy framework aims to guide Kenya's economy towards a low-carbon, climate-resilient green development path. The policy proposes fiscal and economic measures to alter consumption patterns, boost revenue, and attract private investment in climate-friendly projects. Additionally, it outlines strategies for government bodies to mobilize climate finance from various sources, including private, public, and international entities (GoK, 2022).

The Green Fiscal Incentives Policy Framework prioritizes forestry, wildlife, and tourism as key sectors in Kenya's climate efforts (GoK, 2022). However, the framework majorly focuses on fiscal actions for forestry, such as incentivizing tree cultivation and promoting clean energy solutions, it suggests measures like Ecological Fiscal Transfers (EFTs) to empower counties in environmental preservation. The framework also proposes Payment for Ecosystem Services (PES) schemes and integrating afforestation into carbon tax design. For tourism, without mentioning specifics, it advocates for reviewing fiscal options to boost ecotourism.

A review of Kenya Investment Authority (KenInvest) documents reveals a lack of a specific incentive package for sustainable tourism investments. KenInvest offers incentives for various sectors but does not specify any for tourism. However, incentives in the energy sector, such as VAT exemption for solar and wind energy equipment, biogas, and sustainable fuel, may apply to tourism. Zero-rating of VAT for solar and lithium-ion batteries, as well as electric vehicles, could also benefit the tourism sector (Ministry of Investment Trade and Industry [MITI], 2024).

A survey of 1,246 tourism enterprises in Kenya assessed how current incentives (10) and disincentives (6) influenced the adoption of STPs and climate change resilience strategies using a five-point Likert scale (1 = not at all impactful, 5 = very impactful). The results suggested that the current incentives and disincentives were seen as "moderately impactful" (Mean = 2.90, SD = 1.16) and (Mean = 3.37, SD = 0.81), respectively. However, 17% of the enterprises opined that the incentives were not at all impactful, compared to 2% who thought that the disincentives were not at all impactful. The results suggest that tourism enterprises as a whole considered the incentive and disincentive regime inadequate. However, compared to incentives, most enterprises felt that the disincentives were impactful (98%). These findings support the need to bolster the incentives regime to promote the adoption of sustainable tourism practices and climate change adaptation practices among tourism enterprises.

Additional insights from FGDs and KIIs identified economic incentives for tourism enterprises, including government grants, duty waivers, and affordable loans for eco-friendly infrastructure. Tax holidays, carbon trading, and payment for ecosystem services were proposed. Additional suggestions encompassed government subsidies, a Green Fund, low-interest loans, and government tenders for sustainable enterprises. Figure 3.1 shows the prevalence of incentives cited by KIIs and FGD participants.

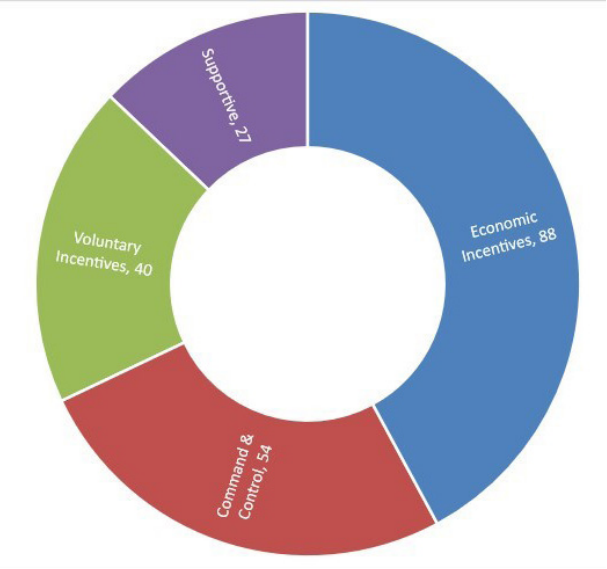

Figure 3.1 Key Informants and FGD participants' Identification of Incentives for the adoption of climate change Strategies and Sustainable Tourism Practices

Source: Research Data, 2024

Figure 3.1 suggests the dominance of economic incentives (88 references) prioritized by the KIIs and FGD participants compared to command and control (54 references), voluntary incentives (40 mentions), and the importance of a supportive environment like marketing support (27 citations). The results highlight the perception that, although the current economic incentives were deemed inadequate as suggested by the survey results, they have the potential to drive the adoption of climate change adaptation and mitigation practices and STPs to a greater extent than command and control measures, voluntary initiatives, and the creation of a supportive environment. This emphasizes the need to bolster the existing economic incentives and explore new alternatives.

The KIIs and FGDs highlighted command-and-control mechanisms as the second most discussed incentives for STPs and climate action adoption by tourism enterprises (Figure 3.1). These measures included penalties, fines, licensing, and facility classification.

Voluntary strategies ranked third for promoting STP and climate change strategies. Figure 3.2 shows a Hierarchical chart of the frequency of mentions of voluntary practices for incentivizing STP and Climate change actions during the FGD and KIIs.

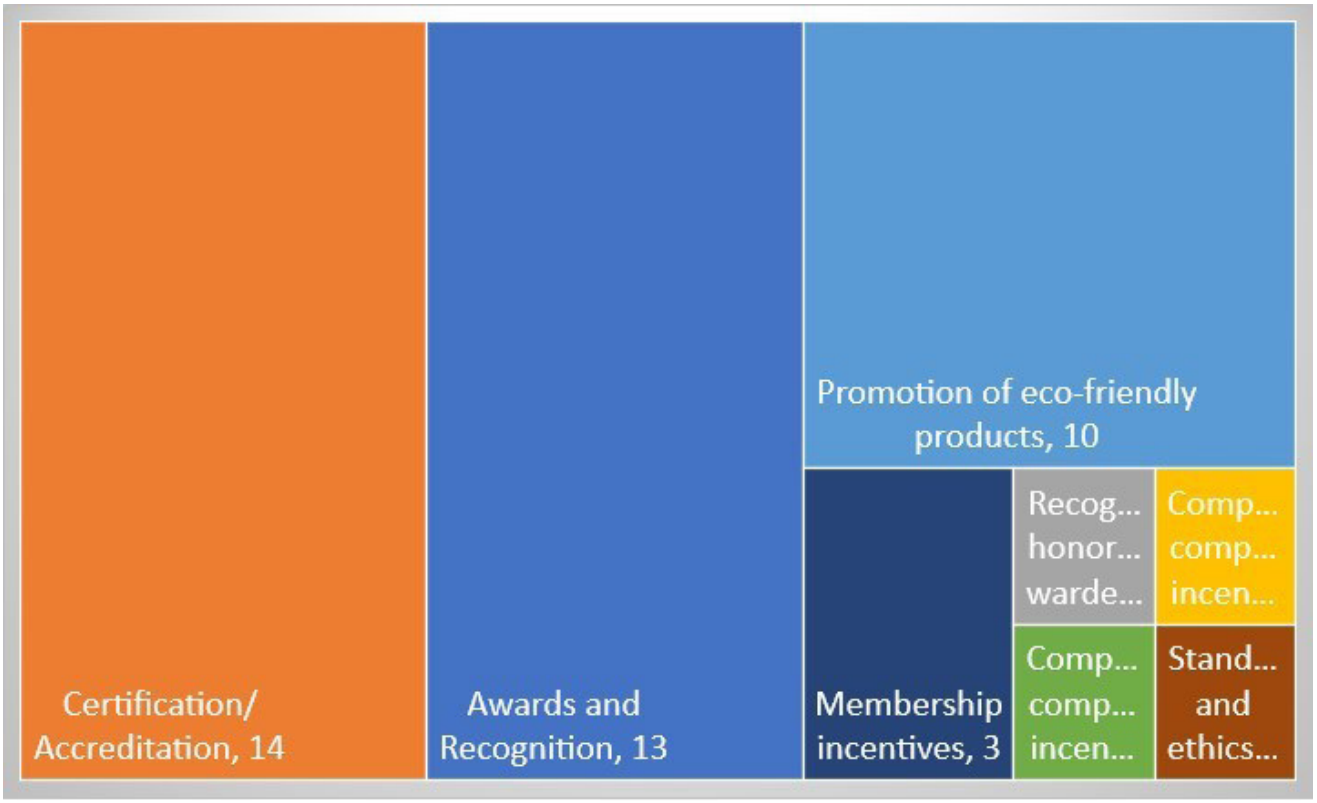

Figure 3.2 Hierarchical chart showing the frequency of mentions of voluntary practices for incentivizing STP and Climate change actions during the FGD and KIIs

Source: Survey Data, 2024

The dominant voluntary initiatives in Figure 3.2 include certification and accreditation programs like those promoted by Ecotourism Kenya (EK), awards and recognitions for best-performing enterprises, membership in industry organizations promoting sustainable tourism, promotion of eco-friendly products, industry self-regulation, and subscription to ethical codes.

The analysis of quantitative data to examine the extent of the influence of current incentives and disincentives regime on implementation of STPs and climate change response actions by tourism enterprises relied on SEM. Table 3.7 show results of the CFA for the measurement of incentives and disincentives.

Table 3.7 Reliability Indices for the Measurement Model of incentives/disincentives for the adoption of climate change and sustainable tourism best practices

No. Latent Variable/ Indicators	Factor Loading (λ)	t-value	p-value	Cronbach's alpha (α)	Composite Reliability (CR)
Incentives for Adoption of CC and STP				**0.95**	**0.94**
1 Access to Green Supply Chains		0.72	29.53	<0.001	
2 Carbon offset rebate		0.76	31.22	<0.001	
3 Carbon Credit Trading		0.79	35.78	<0.001	
4 Emission trading systems		0.80	33.63	<0.001	
5 Tax exemption and subsidies		0.72	25.52	<0.001	
6 Concessional Loans		0.78	30.44	<0.001	
7 Lower Interest rate and subsidies		0.72	27.27	<0.001	
8 Climate Change fund		0.83	35.95	<0.001	
9 Access to greener technology transfer		0.79	32.74	<0.001	
10 Green certification and recognition		0.81	33.49	<0.001	
11 Green bonds		0.86	**		
Disincentives for adoption of CC and STPs				**0.92**	**0.92**
1 Laws and Regulations			0.88	18.19	<0.001
2 Fines and Penalties			0.96	**	

Results of the CFA used to assess the unidimensionality and reliability of the measurement model in the SEM confirmed that eleven items—access to green supply chains, carbon offset rebates, carbon credit trading, emission trading systems, tax exemptions and subsidies, concessional loans with lower interest rates, climate change funds, access to greener technology, green certification and recognition, and green bonds—were considered incentives and significantly loaded on the latent variable "incentives for adoption of climate change mitigation, adaptation actions, and tourism sustainability practices" (λ = 0.72 - 0.86). On the other hand, only two items—laws and regulations, and fines/penalties—loaded significantly onto disincentives (λ = 0.88 - 0.96). The results suggest that the eleven initiatives explained 72 -86% of the variability in the incentive, and the two items explained 88% -96% of the variability disincentives. These results imply that an effective incentives and disincentives regime or framework should include these items.

The results of the structural model to investigate the influence of the incentives and disincentives on the extent of implementation of STPs are depicted in Table 3.8.

Table 3.8 Path Coefficients -Influence of Incentives and disincentives implementation of STPs by tourism enterprises in Kenya

Relationship	Path	Unstandardized Regression Weights (B)	T	P - Value	Conclusion
TOE => STPs	Path_J	0.54	12.18	< 0.001	Supported
Awareness => STPs	Path_H	0.09	3.65	< 0.001	Supported
Significance => STPs	Path_F	0.16	6.42	< 0.001	Supported
Incentives => STPs	Path_B	0.03	1.37	0.17	Fail to support
Disincentives => STPs	Path_D	0.03	1.35	0.18	Fail to support

Source: Survey Data, 2024

The highlighted results in Table 3.8 reveal that current incentives and disincentives were inadequate in promoting the adoption of STPs (B_Incentives=B_Disincentives = 0.03, t = 1.37, t = 1.35, p > 0.05ns). This finding suggests a weak incentive framework and implies that strengthening incentives with tangible rewards like financial incentives, tax breaks, or funding access is essential for effective STP implementation.

The analysis also examined the mediating influence of the current incentives/disincentive regime on the influence of the barriers/drivers on the adoption of STPs. Table 3.9 shows the results of the mediation effect:

Table 3.9 Mediating Influence of Incentives/Disincentives on the Influence of T-O-E Factors on Implementation of STPs

Path	Estimate (B)	95% Bootstrap CI Lower Bound	95% Bootstrap CI Upper Bound	P-value	Conclusion
TOE => STPs	0.54	0.46	0.64	< 0.001.	Supported
TOE => Incentives => STPs	0.02	-0.02	0.06	0.25	Not Supported
TOE => Disincentives => STPs	0.01	-0.01	0.02	0.27	Not Supported
Model Fit Indices:	χ^2/df) = 4.605, GFI = 0.88, IFI = 0.93, TLI = 0.92, CFI = 0.93, and RMSEA = 0.05				

Additionally, the results indicate that the currently available incentives do not mediate the relationship between barriers/drivers to STP implementation and the level of STP implementation by tourism enterprises (B = 0.02, p = 0.25 ns). Similarly, the considered disincentives, such as command and control measures, do not mediate the relationship between factors driving STP adoption and the level of adoption in the tourism industry (B = 0.01, p = 0.27, ns). These findings suggest that the incentives do not enhance the influence of drivers on the adoption

of STPs, nor do they mitigate the negative impact of barriers on STP adoption by tourism enterprises. Likewise, the disincentives do not amplify the negative influence of barriers on STP adoption. The results thus confirm the ineffectiveness of the current regime of incentives and disincentives in promoting the implementation of sustainable tourism practices in the face of existing barriers and drivers.

The analysis then evaluated the relative impact of incentives and disincentives on social, economic, and environmental STP implementation. Findings are presented in Table 3.10.

Table 3.10 The relative influence of Incentives and Disincentives on the extent of implementation of STPs by Kenya's Tourism Enterprises

Incentives and Disincentives	Social Sustainability Practices			Environmental Sustainability Practices			Economic Sustainability Practices		
	B	β	*p*-value	B	β	*p*-value	B	β	*p*-value
Access to greener technology transfer	0.22	0.26	< 0.001	.224	.306	< 0.001	0.25	0.31	< 0.001
Access to green supply chains	0.18	0.22	< 0.001	.270	.381	< 0.001	0.26	0.34	< 0.001
Climate change fund	-0.14	-0.18	< 0.001	-	-	-	-0.12	-0.16	< 0.001
Green certification and recognition	0.13	0.16	< 0.001	-	-	-	0.10	0.14	0.001
Concessional Loans	-0.08	-0.10	0.03	-.101	-.143	< 0.001	-0.06	-0.08	0.038
Laws and regulations	0.10	0.08	< 0.001	.054	.052	.048	0.10	0.09	0.001
Tax exemption and subsidies	-0.07	-0.10	0.03	-	-	-	-	-	-
Carbon Credit Trading				-	-	-	-0.100	-0.125	0.001
Green Bonds				-.095	-.131	.001			
Model Fit Statistics									
R	0.39			0.46			0.50		
$Adj\ R^2$	0.15			0.21			0.24		
F	32.12			65.61			57.64		
p-value	< 0.001			< 0.001			< 0.001		

B= unstandardized regression weights; β = Standardized regression weight

Table 3.10 reveals that a combination of nine incentives and disincentives collectively contributed to 39% to 50% of the variance in social, environmental, and economic sustainability practices implementation ($R = 0.39 - 0.50$; $F = 32.12 – 65.61$, $p < 0.001$). These results support the conclusion that the incentives and disincentives adequately explain the differences in the implementation of STPs by tourism enterprises.

Regarding the relative influence of the incentives and disincentives on the implementation of STPs, the results in Table 3.10 confirm varying strengths: The most impactful incentive for social sustainability practices was access to greener technology transfer, accounting for 26% of the influence, compared to laws and regulations which influenced 8% of the extent of implementation.

For environmental sustainability practices, access to green supply chain opportunities was the most significant incentive, with increased access contributing to the enhanced implementation of STPs by 27%, compared to laws and regulations which had a 5% influence. Similar results were observed for economic sustainability practices, where enhanced access to green procurement opportunities promoted the extent of implementation of STPs by 34%, as compared to command-and-control disincentives which had a 9% influence.

Based on their relative importance in influencing the implementation of STPs across the three dimensions of sustainable practices (Table 3.10), the incentives and disincentives were ranked to identify the most impactful initiatives. Table 3.11 presents this ranking by their importance in promoting social, environmental, and economic sustainability practices.

Table 3.11 Ranking of Incentives and Disincentives for Implementation of STPs and Climate Change Action

Position	Incentive/Disincentive
1	Access to green supply chain opportunities
2	Access to greener technology transfer
3	Climate change fund
4	Green certification and recognition
5	Concessional loans
6	Laws and regulations
7	Carbon credit trading
8	Tax exemption and subsidies
9	Green bonds

The ranking in Table 3.11 confirms the importance of economic incentives – Access to green supply chain opportunities, access to green technology, and climate change funds in promoting the implementation of sustainable tourism practices compared to command-and-control measures – laws and regulations and voluntary measures such as green certification and recognition. Therefore, the results imply that prominence should be given to implementing economic incentives in the design of an effective incentive and disincentive framework for implementing STPs in Kenya's tourism sector.

Framework

CHAPTER FOUR

4.0 FRAMEWORK FOR INCENTIVES AND DISINCENTIVES FOR CLIMATE CHANGE ACTION AND SUSTAINABLE TOURISM PRACTICE

4.1 Framework Overview

The framework for incentives and disincentives proposes a regime to promote and enhance the adoption of climate change adaptation, mitigation, and sustainable practices in Kenya's tourism sector. The framework is based on the recommendations of the best practices report, which prescribed minimum practices for climate change adaptation, mitigation, and sustainable tourism for the sector. The report prioritized and recommended 11 best practices with benefits for the tourism sector. The following emerged as the best practices for promotion and adoption:

1. Water conservation practices
2. Energy conservation and efficiency
3. Ecosystem restoration and environmental conservation
4. Product market diversification
5. Change in product use and shifting to open-air spaces
6. Waste management
7. Capacity building, training, and research
8. Compliance with government policies and regulations
9. Protection of fragile ecosystems and watersheds
10. Investment in carbon offset projects
11. Use of electric vehicular transportation systems

The incentives and disincentives report analyzed Kenya's current legal, policy, and institutional framework to identify barriers and drivers affecting the adoption and implementation of climate change adaptation, mitigation, and sustainable tourism practices within the tourism sector. Additionally, it assessed how the existing incentives and disincentives regime influences the adoption and implementation of these practices. The strengths, weaknesses, and opportunities identified in policy, regulations, institutions, barriers, drivers, incentives, and disincentives provide a foundation for designing an effective framework.

The overall objective of the framework of incentives and disincentives is to incentivize the adoption of the recommended best practices through a regime of economic/financial, command-and-control, voluntary, and supportive mechanisms. The specific objectives of the framework, aligned with the outcomes of the recommended best practices, are:

a. To promote resource conservation and efficiency through the implementation of climate change adaptation, mitigation, and sustainability practices in the tourism sector.
b. To enhance ecosystem protection and restoration through the implementation of climate change adaptation, mitigation, and sustainability practices by the tourism sector.
c. To enhance compliance and market adaptation through the adoption of climate change adaptation, mitigation, and sustainability practices by the tourism sector.
d. To enhance capacity for the adoption of climate change adaptation, mitigation, and sustainable tourism practices by the tourism sector.

4.2 Best Practices and Incentives on Climate Change Mitigation and Adaptation Measures and Adoption of Sustainable Tourism Practices

The best practices report on climate change mitigation and adaptation measures, alongside the adoption of sustainable tourism practices, revealed compelling insights into effective strategies for addressing the challenges posed by climate change. In the realm of climate change mitigation and adaptation, the report highlights a multitude of best practices aimed at enhancing resilience, reducing emissions, and promoting sustainable resource management. These practices encompass a diverse range of approaches, including high-efficiency water use, advanced water treatment technologies, reforestation projects, and strategic environmental planning. By adopting these measures, communities and industries can better withstand the impacts of climate change while contributing to global efforts to curb greenhouse gas emissions and preserve natural ecosystems.

4.2.1 Incentives to Climate Change Mitigation and Adaptation Measures

This section presents various incentives designed to encourage the adoption of climate change mitigation and adaptation measures. These incentives are crucial for motivating stakeholders, including governments, businesses, and communities, to implement practices that reduce greenhouse gas emissions and enhance resilience to climate impacts. By providing financial support, regulatory advantages, and educational resources, these incentives aim to accelerate the transition towards sustainable development and environmental stewardship. The adoption of these measures not only contributes to global efforts in combating climate change but also ensures long-term economic and social benefits for all involved parties. Table 4.1 presents a compilation of best practices for climate change adaptation and mitigation, along with potential incentives for their implementation in Kenya and real examples from other countries. Each best practice is accompanied by suggested incentives that can encourage adoption in Kenya, along with real-world examples of successful initiatives from various countries.

Table 4.1 Incentives for Climate Change Mitigation and Adaptation Measures

BEST PRACTICES	INCENTIVES	EXAMPLES FROM OTHER COUNTRIES
Water conservation practices	• Tax rebates or duty waivers for tourism enterprises investing in sustainable technology for water management; • Subsidies or grants for the installation of water harvesting systems, such as rainwater collection tanks or greywater recycling systems	• Australia offers rebates for installing water-saving appliances; • Singapore invests in advanced water treatment technologies.
Energy conservation and efficiency	• Tax rebates or duty waivers for tourism enterprises investing in climate-smart and sustainable technology; • Low-interest loans tailored for tourism enterprises adopting climate-smart and sustainable technology; • Green bonds or financial instruments for tourism enterprises to raise funds for climate-smart and sustainable technology at favorable rates.	• In the United States, the Federal Investment Tax Credit (ITC) provides tax incentives for businesses, including tourism enterprises, investing in renewable energy technologies • In Germany, the KfW Bankengruppe offers low-interest loans and financing programs for businesses to invest in energy-efficient technologies, including tourism enterprises; • In Sweden, the Swedish Energy Agency issues green bonds to finance energy efficiency projects, including those undertaken by tourism enterprises.
Ecosystem restoration and environmental conservation	• Certification and recognition programs for tourism enterprises that actively engage in reforestation and conservation efforts; • Grants or subsidies for tourism enterprises that invest in reforestation and conservation projects.	• Brazil implements reforestation programs in the Amazon; • Costa Rica rewards communities for biodiversity conservation
Product market diversification	• Enhance access to capital for investment in new sustainable and climate-resilient tourism products/ experiences particularly targeting SMEs and CBOs; • Streamline the procedure for approving the development of new tourism facilities in less visited wildlife-protected areas; • Preferential access to international tourism exhibitions and marketing activities by KTB;	• Tourism Australia Indigenous Tourism Fund provides grants and loans to support Indigenous tourism businesses in developing sustainable products. • Tourism New Zealand offers preferential access and funding for SMEs to participate in international tourism trade shows and marketing campaigns.

BEST PRACTICES	INCENTIVES	EXAMPLES FROM OTHER COUNTRIES
Change in product use and shifting to open-air spaces	• Certification programs for green buildings. • Access to technical assistance and training on green construction practices.	• The United States offers tax incentives for LEED-certified buildings
Waste management	• Certification and recognition programs for tourism enterprises that implement effective waste reduction and management practices; • Financial grants or subsidies for tourism enterprises investing in advanced waste reduction and management technologies	• In Costa Rica, the Certification for Sustainable Tourism (CST) program recognizes hotels and tour operators that meet rigorous waste management and sustainability standard; • In Japan, the Ministry of the Environment offers subsidies for businesses, including tourism enterprises, that invest in advanced waste reduction and recycling technologies
Capacity building, training, and research	• Financial assistance or subsidies for employees to attend certification programs or pursue additional education in sustainable tourism; • Tax breaks or incentives to tourism enterprises that demonstrate a commitment to employee training and capacity building in sustainable tourism practices; • Recognition or awards to tourism enterprises that actively participate in and contribute to employee training and capacity building programs focused on sustainability and climate change adaptation.	• In Canada, the Canadian Tourism Human Resource Council provides financial assistance and grants to employees and businesses in the tourism sector for training in sustainable tourism practices; • In Sweden, businesses can receive tax incentives for investing in employee training and education related to sustainability, including sustainable tourism practices; • In the United Kingdom, the Travelife Certification scheme recognizes tourism businesses that excel in sustainability practices, including employee training and capacity building in sustainable tourism.
Compliance with government policies and regulations	• Expedited processing and reduced fees for enterprises that maintain a clean compliance record; • Reduced insurance premiums for enterprises that maintain a clean compliance record;	• In Singapore, the Business Excellence (BE) initiative offers faster processing times and reduced fees for companies that demonstrate good compliance and governance practice; • In the United States, some states offer reduced insurance premiums to businesses that maintain a clean compliance record with environmental regulations.

BEST PRACTICES	INCENTIVES	EXAMPLES FROM OTHER COUNTRIES
Protection of fragile ecosystems and watersheds	• Certification programs recognizing tourism enterprises that adhere to strict visitor guidelines and trail management practices; • Government grants or subsidies for tourism enterprises that comply with regulations on riparian ecosystem protection; • Access to technical assistance and training programs to help tourism enterprises implement effective visitor guidelines and trail management strategies;	• In the United States, the Leave No Trace Center for Outdoor Ethics provides certification to tourism enterprises that demonstrate adherence to strict environmental guidelines and sustainable practices in outdoor recreation. • In Australia, the National Landcare Program offers grants to tourism enterprises that participate in riparian ecosystem protection and restoration projects. • In Canada, Parks Canada provides technical assistance and training to tourism operators to implement effective visitor management practices in national parks and protected areas
Investment in carbon offset projects	• Tax credits or financial incentives for tourism enterprises participating in carbon offset projects.	• In the United Kingdom, the Carbon Emissions Reduction Target (CERT) scheme provided financial incentives and tax credits to businesses, including tourism enterprises, participating in carbon offset projects.
Use of electric vehicular transportation systems	• Tax credits or rebates for tourism enterprises purchasing electric vehicles; for tourism enterprises that adopt electric vehicles (EVs) in their fleets	• In the United States, the federal government offers tax credits up to $7,500 for the purchase of electric vehicles (EVs), which tourism enterprises can utilize to incentivize EV adoption. • In China, the Ministry of Transport and local governments provide awards and recognition to tourism enterprises that demonstrate leadership in adopting electric vehicles in their fleets.

4.2.2 Disincentives for Non-Compliance on Climate Change Mitigation and Adaptation Measures

Table 4.2 presents a comprehensive overview of best practices for climate change adaptation and mitigation, along with potential incentives and disincentives for their implementation in Kenya. Additionally, real-world examples from various countries illustrate successful initiatives. The table highlights a range of strategies aimed at promoting sustainability, resilience, and environmental stewardship, providing valuable insights for policymakers, businesses, and stakeholders involved in addressing climate change challenges.

Table 4.2 Disincentives for Non- Adaptation Measures for climate change mitigation

Best Practices	Disincentives	Examples from Other Countries
Water conservation practices	• Enhance enforcement of licensing requirements for water abstraction and liquid waste disposal	• In Australia, strict enforcement of licensing requirements ensures that tourism enterprises comply with regulations for water abstraction and liquid waste disposal.
Energy conservation and efficiency	• Ecological tax pollution	• In France, an ecological tax is imposed on businesses, including tourism enterprises, based on their carbon emissions, incentivizing energy conservation and efficiency measures.
Ecosystem restoration and environmental conservation	• Fines or penalties for tourism enterprises found to be in violation of regulations on ecosystem protection.	• In Costa Rica, tourism enterprises can face fines and penalties for violating regulations on ecosystem protection, encouraging compliance with environmental conservation laws.
Change in product use and shifting to open-air spaces	• Enforce green building codes and standards; • Enforce zoning laws that require integration with natural surroundings	• In Singapore, strict enforcement of green building codes ensures that new tourism developments integrate with natural surroundings and adopt sustainable building practices. • In Canada, zoning laws mandate that tourism developments must integrate with natural surroundings, promoting sustainable land use and reducing environmental impact.
Waste management	• Mandatory regulations requiring tourism enterprises to adhere to waste management standards and practices, with penalties for non-compliance	• In Japan, strict waste management regulations enforce compliance among tourism enterprises, ensuring adherence to standards and practices for waste reduction and recycling.

Best Practices	Disincentives	Examples from Other Countries
Compliance with government policies and regulations	• Fines and possible revocation of licenses for non-compliance; • Implementing regulatory inspections with penalties for businesses found not providing necessary staff training; • Increased insurance premiums for enterprises that do not maintain a clean compliance record	• In Malaysia, regulatory inspections enforce penalties on businesses that fail to provide adequate staff training, ensuring compliance with government policies and regulations. • In Australia, tourism enterprises may face higher insurance premiums if they have a poor compliance record, encouraging adherence to regulatory requirements.
Protection of fragile ecosystems and watersheds	• Fines or penalties for tourism enterprises found to be in violation of regulations on riparian ecosystem protection.	• In Costa Rica, tourism enterprises can incur fines and penalties for violating regulations on riparian ecosystem protection, promoting conservation of fragile ecosystems.
Investment in carbon offset projects	• Fines or penalties for tourism enterprises failing to meet carbon emission reduction targets. • Suspension of permits or licenses for non-compliance with carbon offset requirements.	• In Sweden, businesses, including tourism enterprises, may face fines for failing to meet carbon emission reduction targets, driving compliance with carbon offset requirement • In Canada, permits or licenses for tourism operations may be suspended if they do not comply with carbon offset requirements, ensuring adherence to environmental regulations.
Use of electric vehicular transportation systems	• Regulations mandating a percentage of tourism enterprise fleets to be electric by a certain date, with penalties for non-compliance	• In Norway, regulations require a certain percentage of tourism enterprise fleets to be electric by specific deadlines, with penalties for non-compliance, promoting the adoption of electric vehicles.

Summary of Findings

CHAPTER FIVE

5.0 SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.1 Summary of Key Findings

The findings of this report are structured into five areas aligned with its objectives: an analysis of the existing legal and regulatory framework for climate change adaptation, mitigation actions, and sustainable tourism in Kenya; an analysis of the existing institutional framework for climate change adaptation, mitigation actions, and sustainable tourism practices in Kenya; an assessment of barriers and drivers to the adoption of climate change adaptation, mitigation actions, and sustainable tourism practices; an assessment of the influence of existing incentives and disincentives for the adoption of climate change adaptation, mitigation actions, and sustainable tourism practices; and recommendations for a framework of incentives and disincentives for the adoption of adaptation, mitigation actions, and sustainable tourism practices in Kenya. The findings from each of these components are summarized in the following subsections.

5.1.1 Legal and Regulatory Framework for Climate Change Adaptation,Mitigation actions, and Sustainable Tourism in Kenya

The review of Kenya's existing legal and regulatory framework for climate change adaptation, mitigation actions, and sustainable tourism highlights several critical challenges. One significant barrier is the limited stakeholder awareness of national and county policies, environmental laws, and regulations governing climate change and sustainability activities. Despite numerous laws and regulations relevant to climate change action and sustainable tourism, this lack of awareness undermines their effectiveness. Additionally, sustainability and climate change laws and regulations are fragmented and driven by individual sector and institutional goals rather than unified, destination-wide objectives, leading to a lack of synergy, overlapping roles, and reduced compliance. The lack of coordination between central and county government agencies further complicates implementation, causing inconveniences for private sector stakeholders.

The review noted that the development of climate change and sustainability policies often followed a top-down approach, leading to outdated rules and regulations that do not conform to current market trends. This approach hinders the implementation of effective and contemporary sustainability practices within the tourism sector. Despite these challenges, Kenya's commitment to addressing environmental challenges is evident in strategies like the National Climate Change Response Strategy, which prioritize adaptation and recommend the formulation of comprehensive policies and laws. The NDC Financing Strategy emphasizes the need for mobilizing resources from domestic and international sources, highlighting the importance of adequate financing for effective climate change adaptation. Furthermore, policies such as the National Tourism Strategy 2021-2025 focus on rejuvenating the tourism sector through sustainable practices and innovation, aiming to enhance Kenya's competitiveness as a tourist destination while promoting economic growth and community development. By aligning climate change priorities with sustainable tourism development, Kenya's legal and

regulatory framework sets the stage for a coordinated approach to environmental management and economic prosperity.

5.1.2 Institutional Framework for Climate Change Adaptation, Mitigation Actions, and Sustainable Tourism Practices in Kenya

The institutional framework involves a range of public and private sector entities, with key public institutions like the National Climate Change Secretariat (NCCS) and the Ministry of Tourism and Wildlife coordinating national climate change initiatives, legislative bodies enacting supportive laws, and the National Treasury managing climate finance. Agencies such as the National Environment Management Authority (NEMA), Kenya Wildlife Service (KWS), and the Tourism Regulatory Authority (TRA) enforce regulations and oversee sustainable practices. The desk review revealed a diverse array of institutions engaged in climate change adaptation, mitigation, and sustainable tourism in Kenya, each with distinct but complementary mandates, indicating potential for synergistic collaboration to enhance effectiveness and efficiency. The review highlights the importance of coordinated efforts, emphasizing enhanced cross-sectoral coordination, strengthened enforcement capacities, prioritized financing for climate action institutions, and the promotion of sustainable practices. It advocates for mechanisms to harmonize stakeholder interests and leverage NGO contributions in advancing climate resilience and sustainability initiatives.

5.1.3 Barriers and Drivers to the Adoption of Climate Change Adaptation, Mitigation Actions, and Sustainable Tourism Practices

The analysis identified several barriers and drivers to adopting climate change adaptation, mitigation, and sustainable tourism practices in Kenya. Key barriers include limited stakeholder awareness of national policies, fragmented and overlapping regulations, lack of coordination among government agencies, and technological challenges such as limited access to expertise and high costs of sustainable technology. Additionally, there is resistance to new technologies like electric vehicles and inadequate training and financial constraints hindering investment in sustainability. Confirmatory factor analysis confirmed that competitors' priorities, the level of habitat degradation, policies on technology, technological adaptability, technological innovation, technological capacity, digital technology payment access, managerial support for technology, energy use efficiency, organizational sustainability targets, and performance measurement are reliable and critical factors influencing the adoption of these practices.

Conversely, drivers for adoption include strong governmental policies on sustainable technology, the presence of organizational sustainability targets, performance measurements, and the use of digital payment and energy-efficient technologies. Structural equation modelling showed a significant positive relationship between these factors and the implementation of sustainable tourism practices (BTOE = 0.54, t = 12.18, p <.001). Regression analysis indicated that five factors—government policies on sustainability technology, enterprise use of performance measures, use of digital payment technology, presence of sustainability targets, and use of energy-efficient technologies—explained 47% of the differences in social sustainability

practices (R=0.47; F=72.09; p<.05), while these and two additional factors explained 54% of environmental sustainability practices (R=0.54; F=86.23; p<.05). Six of the seven factors explained 57% of economic sustainability practices (R=0.57; F=116.60; p<.05).

Furthermore, enhancing access to sustainable technologies through tax incentives and improved digital infrastructure is crucial. Government policies promoting sustainable technologies accounted for a 19% improvement in social sustainability and 18% in environmental sustainability. Digital payment technologies drove a 13-14% improvement in sustainability practices across all dimensions. These findings suggest a holistic approach, integrating technological advancements and organizational culture shifts, to promote comprehensive sustainability practices in Kenya's tourism sector.

5.1.4 Existing Incentives and Disincentives for Adoption of Climate Change Adaptation, Mitigation Actions, and Sustainable Tourism Practices

The survey of 1,246 tourism enterprises in Kenya assessed the impact of current incentives and disincentives on adopting sustainable tourism practices (STPs) and climate change resilience strategies. The results indicated that both incentives and disincentives were perceived as «moderately impactful,» with mean scores of 2.90 and 3.37, respectively. However, 17% of enterprises found incentives not impactful, compared to only 2% for disincentives. This suggests that tourism enterprises view the current incentive regime as inadequate compared to disincentives. The findings underscore the need to strengthen incentives to promote sustainable practices and climate change adaptation in the tourism sector.

Focus group discussions (FGDs) and key informant interviews (KIIs) identified economic incentives, such as government grants, duty waivers, and affordable loans for eco-friendly infrastructure, as crucial. Suggestions also included tax holidays, carbon trading, and government tenders for sustainable enterprises. Economic incentives were deemed more influential (88 mentions) compared to command-and-control measures (54 mentions) and voluntary incentives (40 mentions). Despite the perceived inadequacy of current economic incentives, they have greater potential to drive the adoption of sustainable practices compared to other measures.

The confirmatory factor analysis (CFA) within the structural equation modelling (SEM) framework revealed that eleven items—such as access to green supply chains, carbon offset rebates, and tax exemptions—significantly influenced the adoption of climate change actions and STPs. However, the SEM results showed that current incentives and disincentives were inadequate in promoting STP adoption (BIncentives = BDisincentives = 0.03, p > 0.05). This highlights a weak incentive framework, indicating the necessity of enhancing incentives with tangible rewards like financial incentives, tax breaks, and funding access for effective STP implementation.

The analysis also indicated that the existing incentives and disincentives do not mediate the relationship between barriers/drivers and STP adoption (B = 0.02, p = 0.25 ns for incentives; B = 0.01, p = 0.27 ns for disincentives). Nonetheless, a combination of nine incentives and

disincentives explained 39% to 50% of the variance in the implementation of social, economic, and environmental sustainability practices. The most impactful incentives included access to greener technology transfer and green supply chain opportunities, contributing significantly more than command-and-control disincentives like laws and regulations. This emphasizes the importance of prioritizing economic incentives in designing an effective framework for implementing STPs in Kenya's tourism sector.

5.1.5 Framework of Incentives and Disincentives for Adoption of Adaptation, Mitigation Actions, and Sustainable Tourism Practices in Kenya

The framework for incentives and disincentives proposes a regime to promote and enhance the adoption of climate change adaptation, mitigation, and sustainable practices in Kenya's tourism sector. This framework is based on recommendations from a best practices report, which identified 11 priority practices with substantial benefits for the sector. These best practices include water and energy conservation, ecosystem restoration, product market diversification, waste management, capacity building, compliance with government policies, protection of fragile ecosystems, investment in carbon offset projects, and the use of electric vehicles. The report's findings provided a foundation for structuring the framework around these essential practices.

The overall objective of the framework is to incentivize the adoption of the recommended best practices through economic/financial, command-and-control, voluntary, and supportive mechanisms. Specifically, the framework aims to promote resource conservation and efficiency, enhance ecosystem protection and restoration, ensure compliance and market adaptation, and build capacity for sustainable tourism practices. These objectives align with the identified best practices, ensuring a targeted and effective approach to fostering sustainability within Kenya's tourism sector. By addressing these areas, the framework seeks to create a supportive environment that encourages widespread adoption of climate-friendly and sustainable practices among tourism enterprises.

The framework for incentives and disincentives identifies measures aligned with best practices for adopting climate change adaptation, mitigation, and sustainable tourism. It presents examples of similar incentives and disincentives from other countries to illustrate effective strategies. The framework includes an implementation matrix detailing objectives and priority areas for climate adaptation and mitigation, specific best practices, aligned incentives and disincentives, responsibilities for implementation, and timeframes. This structured approach ensures a comprehensive and coordinated effort to promote sustainability in Kenya's tourism sector by leveraging proven global strategies and clearly defining roles and timelines for effective implementation.

5.2 Conclusion

The study concludes that Kenya's current legal and regulatory framework for climate change adaptation, mitigation actions, and sustainable tourism faces significant challenges, primarily stemming from limited stakeholder awareness and fragmented governance structures. These obstacles undermine the effectiveness of existing laws and regulations, contributing to compliance issues and overlapping responsibilities among implementing bodies. The top-down approach to policy development has resulted in outdated regulations that do not align with current market dynamics, further impeding the adoption of sustainable practices within the tourism sector. Despite these challenges, Kenya demonstrates a strong commitment to addressing environmental issues through strategic frameworks like the National Climate Change Response Strategy and the NDC Financing Strategy, which emphasize adaptation and resource mobilization. Moving forward, aligning climate priorities with sustainable tourism initiatives will be crucial for advancing environmental management and fostering economic resilience in Kenya.

The study concludes that Kenya's institutional framework for climate change adaptation, mitigation, and sustainable tourism encompasses a diverse array of public and private sector entities with distinct yet complementary roles. The study emphasizes the potential for synergistic collaboration among these entities to enhance operational efficiency and effectiveness. It highlights the critical need for improved cross-sectoral coordination, strengthened enforcement capacities, targeted financial support for climate actions, and the alignment of stakeholder interests. The study underscores the importance of integrated, collaborative approaches to address environmental challenges and promote sustainable development effectively.

The study concludes that Kenya faces multifaceted challenges and promising opportunities in advancing climate change adaptation, mitigation, and sustainable tourism practices. Identified barriers such as limited awareness of national policies, fragmented regulations, and technological constraints underscore the need for targeted interventions. Conversely, strong governmental policies on sustainable technology, coupled with organizational sustainability targets and technological innovations, serve as pivotal drivers towards implementation. Structural equation modelling confirms these factors significantly enhance sustainable tourism practices, highlighting their critical role in fostering environmental, social, and economic sustainability. Moreover, the positive impact of government policies on sustainable technologies and digital payment infrastructures underscores the potential for policy-driven improvements in sustainability outcomes. Moving forward, integrating technological advancements and fostering organizational readiness will be essential for Kenya to achieve comprehensive and effective sustainability practices in its tourism sector, ensuring environmental stewardship alongside economic and social benefits.

The study finds that current incentives and disincentives in Kenya's tourism sector play a moderately impactful role in promoting sustainable tourism practices (STPs) and climate change resilience strategies. While economic incentives like government grants and tax exemptions are acknowledged as pivotal by stakeholders, there is a widespread perception among tourism

enterprises that these incentives are insufficiently effective compared to disincentives. Key findings highlight the necessity of bolstering incentives to better support STP adoption and climate change adaptation efforts within the sector. Confirmatory factor analysis underscores the significant influence of various incentives such as access to green supply chains and carbon offset rebates on driving these practices. However, structural equation modelling reveals a weak correlation between current incentives/disincentives and STP adoption rates, suggesting a need for more robust policy frameworks that incorporate tangible benefits like financial rewards and enhanced funding access. Moving forward, prioritizing economic incentives over command-and-control measures is crucial for fostering comprehensive sustainability practices and ensuring the tourism sector's resilience to climate change in Kenya.

In conclusion, the report proposes a robust framework for incentives and disincentives aimed at promoting the widespread adoption of climate change adaptation, mitigation, and sustainable practices within Kenya's tourism sector. Based on identified best practices, the framework is designed to incentivize these practices through a mix of economic, command-and-control, voluntary, and supportive mechanisms. The objectives of the framework align closely with these practices, focusing on resource efficiency, ecosystem protection, compliance with regulations, and capacity building. Drawing lessons from successful international examples, the framework offers a structured implementation matrix that outlines clear objectives, priority areas, aligned incentives and disincentives, implementation responsibilities, and timelines. By adopting this comprehensive approach, Kenya can create an enabling environment that encourages tourism enterprises to embrace sustainable practices effectively, contributing to both environmental stewardship and economic resilience in the face of climate change challenges.

5.3 Recommendations

5.3.1 Recommendations for the Tourism Enterprises in Kenya

- Enhance training programs to build tourism enterprises' capacity in adopting sustainable technologies and practices.
- Adopt recognized best practices in water and energy conservation, waste management, and ecosystem protection through tailored incentives and certification programs.
- Foster partnerships with NGOs and academia to promote knowledge sharing and innovation in sustainable tourism practices.
- Develop performance metrics aligned with social, economic, and environmental sustainability goals to incentivize continuous improvement and transparency among tourism enterprises.

5.3.2 Recommendations for Policy Makers and Regulators

- Improve stakeholder awareness of national policies and regulations through targeted educational campaigns and capacity-building programs.
- Streamline governance structures to minimize overlaps and enhance coordination between central and county-level authorities, ensuring more effective implementation of climate change and sustainability laws.

- Foster collaboration among legislative bodies, such as the National Climate Change Secretariat and relevant ministries, to develop unified, destination-wide objectives that promote synergies and facilitate compliance
- Introduce robust financial incentives such as grants, tax holidays, and preferential loans for tourism enterprises investing in eco-friendly infrastructure and sustainable practices.
- Establish a transparent mechanism for accessing climate finance, leveraging both domestic resources and international support to fund climate adaptation and mitigation initiatives effectively.

5.3.3 Recommendations for Future Research

- Conduct in-depth studies to assess the actual impact of existing incentives and disincentives on the adoption of sustainable tourism practices across different regions and enterprise sizes in Kenya.
- Investigate the potential of emerging technologies such as renewable energy integration, smart tourism solutions, and sustainable mobility options (e.g., electric vehicles) in enhancing the resilience of tourism enterprises to climate change impacts.

Implementation Matrix

CHAPTER SIX

6.0 IMPLEMENTATION MATRIX

This section presents the implementation matrix for both incentives and disincentives aimed at the adoption of climate change practices and the adaptation and mitigation of climate change measures. The matrix outlines a comprehensive framework to encourage stakeholders, including governments, businesses, and communities, to embrace sustainable practices. By leveraging a combination of financial incentives, regulatory measures, and educational programs, the matrix seeks to promote proactive engagement in climate action. Additionally, it incorporates disincentives such as fines, penalties, and regulatory restrictions to deter non-compliance and unsustainable practices. This dual approach ensures that both positive reinforcement and corrective measures are in place, fostering a holistic and effective strategy for combating climate change and promoting environmental sustainability. Tables 5.1 and 5.2 represent the implementation frameworks for incentives and disincentives.

Table 6.1 Implementation Matrix for Incentives

Priority/Objective	Activity/Best Practice	Incentive	Key Performance Indicator	Responsibility	Timeframe
Efficient utilization of water resources	Implementing efficient water use, harvesting and conservation practices	Providing tax rebates or duty waivers for tourism enterprises investing in sustainable technology for water management	% Eligible applicants	National treasury	Within five (5) years
		Providing subsidies or grants for the installation of water harvesting systems, such as rainwater collection tanks or greywater recycling systems	Loan utilization Rate (%)	Tourism Fund	Within five (5) years
Adoption of climate smart and sustainable energy practices and technologies	Implementing energy efficiency technologies	Providing tax rebates or duty waivers for tourism enterprises investing in climate-smart and sustainable technology;	% Eligible applicants	National treasury	Within five (5) years
		Offering green bonds or financial instruments for tourism enterprises to raise funds for climate-smart and sustainable technology at favourable rates;	Bonds uptake (Ksh.)	National Treasury	Within five (5) years

Priority/Objective	Activity/Best Practice	Incentive	Key Performance Indicator	Responsibility	Timeframe
		Providing access to low-interest loans tailored for tourism enterprises adopting climate-smart and sustainable technology.	Loan utilization (%)	Tourism Fund	Within five (5) years
Ecosystem restoration and conservation	Undertaking tree planting and reforestation projects;	Undertaking certification and recognition programs for tourism enterprises that actively engage in reforestation and conservation efforts	No of certified enterprises	TRA	Within 2 years
	Participating in environmental conservation activities	Providing grants or subsidies for tourism enterprises that invest in conservation projects.	Loan utilization Rate (%)	Tourism Fund	Within five (5) years
Product and market diversification	Diversifying tourism products and markets	Enhancing access to capital for investment in new sustainable and climate-resilient tourism products/ experiences	Loan utilization (%)	Tourism Fund	Within five (5) years
		Streamlining the procedures for approving the development of new tourism facilities in less visited wildlife-protected areas to expedite the process.	No. of new facilities approved	KWS/ KenInvest	Within 2 years
		Providing preferential access to international tourism exhibitions and marketing activities by KTB	No. of enterprises participating	KTB	Within 2 years
Change in product use and shifting to open-air spaces	Adopting eco-friendly building materials and designs.	Implementing certification programs for green buildings.	No. of certified enterprises	TRA	Within 2 years
		Providing access to technical assistance and training on green construction practices.	Participation rate (No.)	Tourism Fund	Within 2 years
Waste reduction and management	Implementing waste reduction and management practices (3Rs)	Implementing certification and recognition programs for tourism enterprises that implement effective waste reduction and management practices	No. of certified enterprises	TRA	Within 2 years

Priority/Objective	Activity/Best Practice	Incentive	Key Performance Indicator	Responsibility	Timeframe
		Providing financial grants or subsidies for tourism enterprises investing in advanced waste reduction and management technologies	Loan Utilization Rate (%)	Tourism Fund	Within five (5) years
Employee training/ capacity building	Enhancing continuous employee capacity building, training, and research	Providing financial assistance or subsidies for employees to attend certification programs or pursue additional education in sustainable tourism	Loan Utilization Rate (%)	Tourism Fund	Within five (5) years
		Offering tax breaks or incentives to tourism enterprises that demonstrate a commitment to employee training and capacity building in sustainable tourism practices	% Eligible applicants	National treasury	Within five (5) years
		Implementing a recognition or awards program for tourism enterprises that actively participate in and contribute to employee training and capacity-building programs focused on sustainability and climate change adaptation.	No. of certified enterprises	TRA	Within 2 years
Enforcement	Complying with legal and regulatory requirements	Expediting processing and reduced fees for enterprises that maintain a clean compliance record.	Processing Rate (days)	TRA	1 year
		Reducing insurance premiums for enterprises that maintain a clean compliance record.	No. of eligible applicants	Insurance Companies	Within five (5) years
Ecosystems and Watershed Protection	Participating in the protection of fragile ecosystems and watersheds	Implementing certification programs to recognize tourism enterprises that adhere to strict visitor guidelines and trail management practices	No. of certified enterprises	TRA	Within 2 years

Priority/Objective	Activity/Best Practice	Incentive	Key Performance Indicator	Responsibility	Timeframe
		Providing government grants or subsidies for tourism enterprises that comply with regulations on riparian ecosystem protection	Loan Utilization Rate (%)	Tourism Fund	Within five (5) years
		Providing technical assistance and training programs to implement effective visitor guidelines and trail management strategies	Loan Utilization Rate (%)	Tourism Fund/ TRA	Within five (5) years
Emissions Reduction	Investing in carbon offset projects	Providing tax credits or financial incentives for tourism enterprises participating in carbon offset projects	% Eligible applicants	National treasury	Within five (5) years
	Transitioning to electric vehicular transportation systems	Providing tax credits or rebates for tourism enterprises purchasing electric vehicles	% Eligible applicants	National treasury	Within five (5) years
		Implementing a recognition and awards program for tourism enterprises that adopt electric vehicles (EVs) in their fleets	No. of certified enterprises	TRA/KWS	Within 2 years
Efficient utilization of water resources	Implementing efficient water use, harvesting and conservation practices	Enhancing enforcement of licensing requirements for water abstraction and liquid waste disposal	Compliance rate (%)	TRA/ Enterprises / Water Services Regulatory Board	Within 2 years
Ecosystem restoration and conservation	Participating in environmental conservation activities	Introducing fines or penalties for tourism enterprises found to be in violation of regulations on ecosystem protection	Compliance rate (%)	TRA/ Enterprises / NEMA/KWS	Within 1year
Change in product use and shifting to open-air spaces	Adopting eco-friendly building materials and designs.	Enforcing green building codes and standards;	Compliance rate (%)	TRA/Building Authority/County Governments	Within 1year

Priority/Objective	Activity/Best Practice	Incentive	Key Performance Indicator	Responsibility	Timeframe
		Enforcing zoning laws that require integration with natural surroundings	Compliance rate (%)	TRA/Building authority/County Governments/NEMA	Within 1year
Waste reduction and management	Implementing waste reduction and management practices (3Rs)	Implementing Mandatory regulations requiring tourism enterprises to adhere to waste management standards and practices, with penalties for non-compliance	Compliance rate (%)	TRA/ Enterprises / NEMA	Within 1year
		Implementing regulatory inspections with penalties for businesses found not providing necessary staff training;	Compliance rate (%)	TRA/ Enterprises	Within 1year
		Increasing insurance premiums for enterprises that do not maintain a clean compliance record	Compliance rate (%)	TRA/Insurance companies	Within 1year
Enforcement	Complying with legal and regulatory requirements	Introducing fines and possible revocation of licenses for non-compliance;	Compliance rate (%)	TRA/ Enterprises	Within 1year
Ecosystems and watershed protection	Participating in protection of fragile ecosystems and watersheds	Introducing fines or penalties for tourism enterprises found to be in violation of regulations on riparian ecosystem protection.	Compliance rate (%)	TRA/ Enterprises / NEMA/KWS/ KFS	Within 1year
Emissions Reduction	Investing in carbon offset projects	Fines or penalties for tourism enterprises failing to meet carbon emission reduction targets	Compliance rate (%)	TRA/ Enterprises / NEMA/KWS	Within 1year
		Suspension of permits or licenses for non-compliance with carbon offset requirements	Compliance rate (%)	TRA/ Enterprises / NEMA/KWS	Within 1year
	Transitioning to electric vehicular transportation systems	Regulations mandating a percentage of tourism enterprise fleets to be electric by a certain date, with penalties for non-compliance	Compliance rate (%)	TRA/ Enterprises / NEMA/KWS	Within 1year

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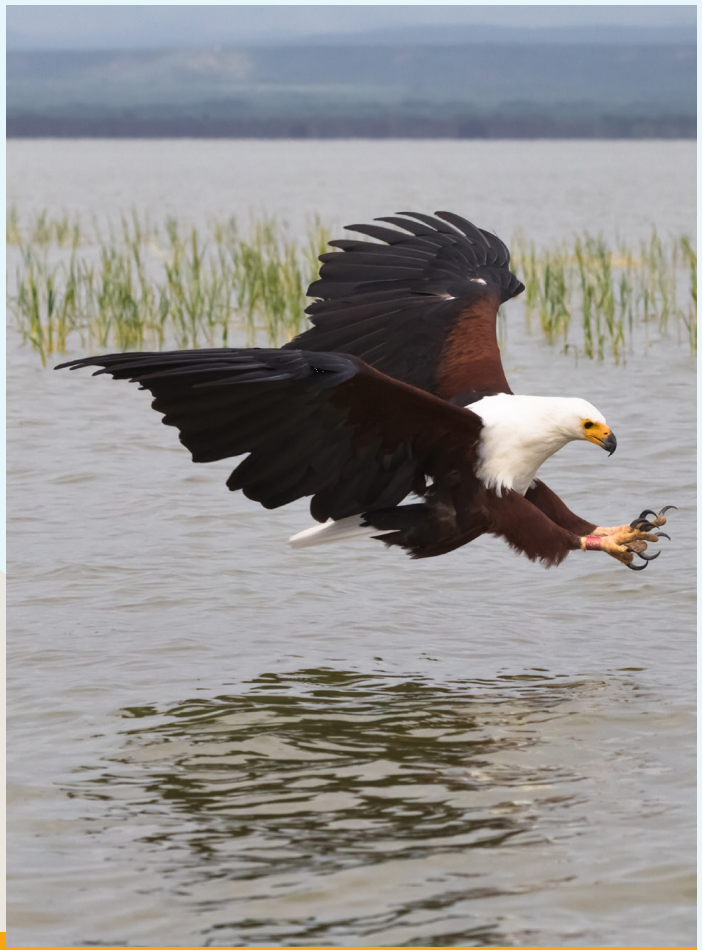

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