

IPSI Case Study Summary Sheet

Basic Information

Title of case study			
Sustainable use of biodiversity in socio-ecological production landscapes and seascapes (SEPLS) and its contribution to effective area-based conservation: the case of Kaya forests on the Kenyan Coast			
Submitting IPSI member organization(s)			
Kenya Forestry Research Institute (KEFRI)			
Other contributing organization(s) <i>(IPSI members and/or non-members)</i>			
Author(s) and affiliation(s)			
Chemuku Wekesa and Leila Ndalilo (KEFRI)			
Format of case study <i>(manuscript or audiovisual)</i>	Manuscript	Language	English
Keywords			
Biodiversity; Kaya forests; Landscape; Management; Mijikenda community			
Date of submission <i>(or update, if this is an update of an existing case study)</i>	19 February 2018		
Web link <i>(of the case study or lead organization if available for more information)</i>			

Geographical Information

Country <i>(where site(s) or activities described in the case study are located – can be multiple, or even “global”)</i>									
Kenya									
Location(s) <i>(within the country or countries – leave blank if specific location(s) cannot be identified)</i>									
Coast Region									
Longitude/latitude or Google Maps link <i>(if location is identified)</i>									
https://www.google.com/maps/@-3.1761888,39.1118108,9z									
Ecosystem(s)									
Forest	x	Grassland		Agricultural	x	In-land water		Coastal	x
Dryland		Mountain		Urban/Peri-urban		Other <i>(Please specify)</i>			
Socioeconomic and environmental characteristics of the area									
The Kenya Coast is endowed with a variety of resources that support livelihoods and economic development in the region and Kenya as a whole, in addition to maintaining the health and function of marine and coastal ecosystems. The resources include coral reefs, mangroves, lowland and Kaya forests, Afromontane forests and historical sites which provide the foundation for the region’s economy.									
Description of human-nature interactions in the area									
The local population is heavily dependent on the provisions of the natural ecosystem for survival, with agriculture (crop and animal production) being the main source of food and income. Other economic activities undertaken in the region are fishing, tourism, trade, forestry and mining. The impacts of climate change coupled with rapid population growth and overdependence on natural resources by local communities are causing extensive degradation of natural resources leading to loss of biodiversity and low food productivity.									

Contents

Status <i>(“ongoing” or “completed”)</i>	Completed	Period <i>(MM/YY to MM/YY)</i>	
Rationale <i>(why activities or policies described, or information shared in the case study are needed)</i>			
Kaya forests are important multifunctional socio-ecological production landscapes that provide both direct and indirect benefits for human well-being. However, Kaya forests are undergoing a drastic transformation in the			

present era of global environmental change. The forests are under extreme pressure from sand harvesting and the extraction of building poles, as well as encroachment on forest areas in search of more fertile land for crop farming and livestock grazing.
<i>Objectives (goals of activities or policies described, or of producing the case study)</i>
An integrated landscape management approach is a prerequisite to ensure the sustainable use of biodiversity in <i>Kaya</i> forests for socio-economic development in the coastal region. Integrated and holistic management approaches for <i>Kaya</i> forests could ensure that these sacred forests are well-connected and integrated into the broader landscape, hence contributing to area-based conservation of biodiversity while at the same time providing ecosystem services that support local livelihoods.
<i>Activities and/or practices employed</i>
A mixed-methods approach involving both qualitative and quantitative surveys was used to explore how sustainable use of biodiversity in <i>Kaya</i> forests contributes to the effective area-based conservation of biodiversity.
<i>Results</i>
Clearly, traditional knowledge and cultural values and practices of Mijikenda community play an important role in enhancing effective conservation of biodiversity in <i>Kaya</i> forests and associated landscape. The five communities have developed a number of strategies to conserve biodiversity—mainly technological and institutional strategies.
<i>Lessons learned (factors in success or failure, challenges and opportunities)</i>
The ecosystem approach applied by the Mijikenda community in managing the <i>Kaya</i> forests and associated landscapes to enhance ecological connectivity and conserve biodiversity should be strengthened to stem the loss of traditional knowledge and biodiversity resources.
<i>Key messages</i>
Integrated and holistic management approaches of the <i>Kaya</i> forests, if sustained, could in the long-term ensure that these sacred forests are well-connected and integrated into the broader landscape, hence sustainably conserving biodiversity while providing ecosystem services that support local livelihoods.
<i>Relationship to other IPSI activities (if the case study is related to any other IPSI collaborative activities, case studies, etc.)</i>
This case study originally appeared in the Satoyama Initiative Thematic Review v. 4.
<i>Funding (any relevant information about funding of activities or projects described in the case study)</i>
The authors would like to thank the European Union (EU) for funding this study through the Smallholder Innovation for Resilience Project.

Contributions to Global Agendas

CBD Aichi Biodiversity Targets (<https://www.cbd.int/sp/targets/>)

The table below shows based on the self-evaluation by author(s). ● and ■ indicates the “direct” or “indirect” contributions to the CBD’s Aichi Biodiversity Targets respectively to which the work described in this case study contributes to.

Strategic Goal A				Strategic Goal B					
■				■		■			
Strategic Goal C			Strategic Goal D			Strategic Goal E			
■							■	●	

UN Sustainable Development Goals (SDGs) (<https://sustainabledevelopment.un.org/sdgs>)

The table below shows based on the self-evaluation by author(s). ● and ■ indicates the “direct” or “indirect” contributions to the SDGs respectively to which the work described in this case study contributes to.

	■							
1 NO POVERTY 	2 ZERO HUNGER 	3 GOOD HEALTH AND WELL-BEING 	4 QUALITY EDUCATION 	5 GENDER EQUALITY 	6 CLEAN WATER AND SANITATION 	7 AFFORDABLE AND CLEAN ENERGY 	8 DECENT WORK AND ECONOMIC GROWTH 	9 INDUSTRY, INNOVATION AND INFRASTRUCTURE
	■	■	■		■			
10 REDUCED INEQUALITIES 	11 SUSTAINABLE CITIES AND COMMUNITIES 	12 RESPONSIBLE CONSUMPTION AND PRODUCTION 	13 CLIMATE ACTION 	14 LIFE BELOW WATER 	15 LIFE ON LAND 	16 PEACE, JUSTICE AND STRONG INSTITUTIONS 	17 PARTNERSHIPS FOR THE GOALS 	