



# **Landscape Strategy for Community Development and Knowledge Management for Tukombo-Kande *Satoyama Initiative in Malawi***

by

Weston Mwase & Alex Damaliphetsa

Lilongwe University of Agriculture & Natural Resources



# INTRODUCTION

## ❑ What is the Community Development and Knowledge Management for the Satoyama Initiative (COMDEKS)?

- Global project implemented by UNDP funded by the Japan Biodiversity Fund
- Satoyama Initiative's vision is to promote sound socio-ecological production landscapes
- Officially adopted as part of sustainable use in the Biodiversity Convention in 2010. (COP 10).

❑ **Participating Countries:** Malawi, Brazil, Cambodia, Ethiopia, Fiji, Ghana, India, Nepal, Slovakia, and Turkey

## ❑ **Project main objective & Guiding principles**

- To develop sound biodiversity management and sustainable livelihood activities with local communities in socio-ecological production landscapes to maintain, rebuild, and revitalize landscapes

## ❑ **Five Guiding Principles**

- ✓ Resource use within the carrying capacity and resilience of the environment
- ✓ Cyclic use of natural resources
- ✓ Recognition of the value and importance of local traditions and cultures
- ✓ Natural resource management by various participating and cooperating entities
- ✓ Contributions to local socio-economies

# OBJECTIVE OF THE STUDY

## MAIN OBJECTIVE

1. To conduct community consultations, mobilize stakeholder participation, identify and pilot indicators for resilience in socio-ecological production landscapes in Tukombo-Kande region and contribute to the development of the Landscape Strategy.

## SPECIFIC OBJECTIVES

1. To conduct a landscape-wide baseline survey based on a developed set of indicators for resilience in socio-ecological production landscapes
2. To develop the Programme Landscape Strategy following the template and guidelines which was provided for this purpose.
3. Synthesize lessons learned from the consultation process and baseline assessment

# The Baseline Assessment Methodology

**Period:** from 12 to 18<sup>th</sup> Oct, 2012

## **Key tools used:**

- Focus group discussion
- Key informant interviews with stakeholders from different sectors
- Transect walks across the landscape
- Desk reviews



## **The stakeholders**

- Agricultural officers
- Lead farmers
- Forest officers
- Fisheries officer, fishermen, local leaders
- Representatives of local NGOs and CBOs

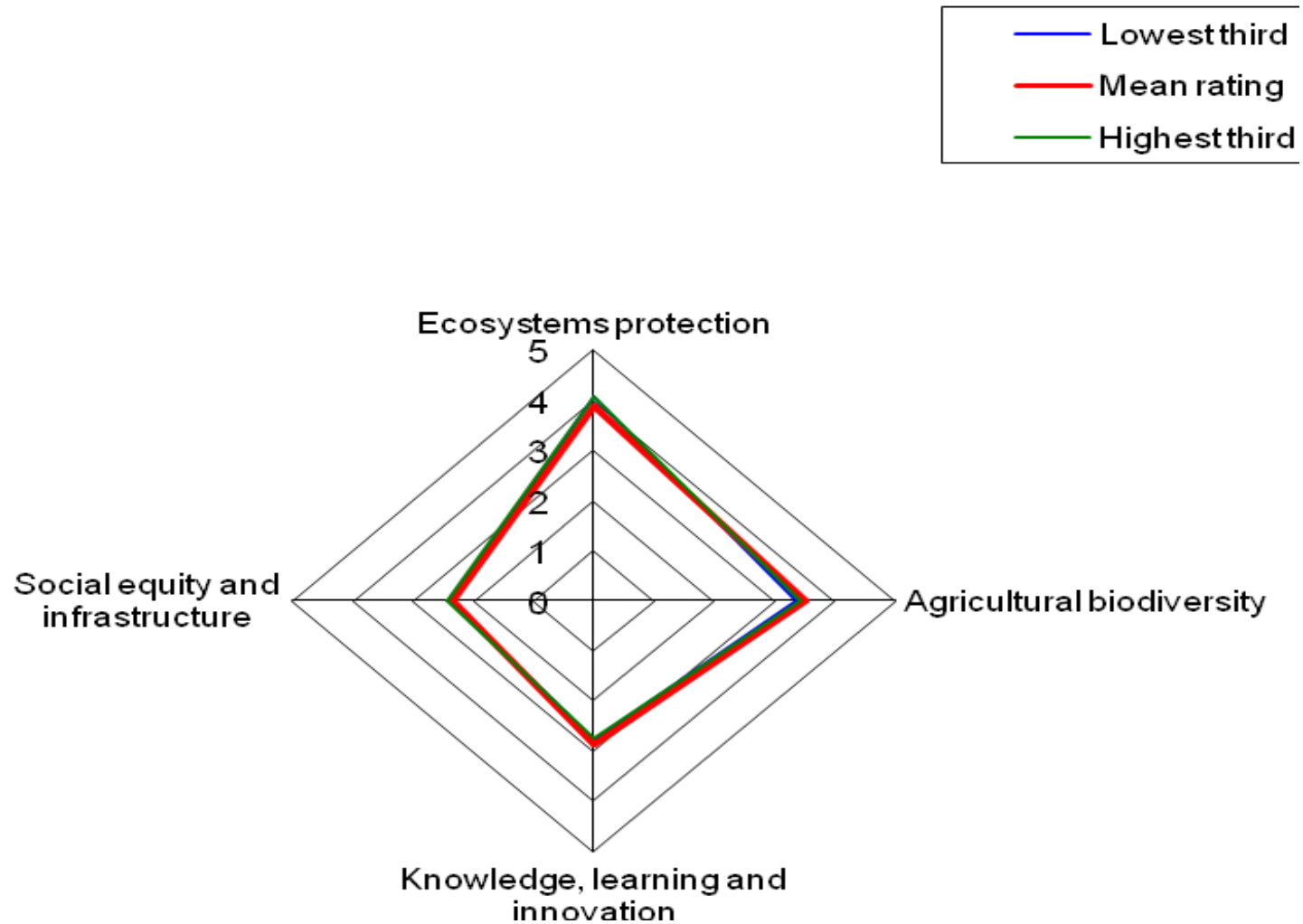




# Procedure

- ❑ Assessment based on set of indicators for resilience in socio-ecological production landscapes, developed by the United Nations University-Institute
- ❑ **The Indicators have four main goals**
  - protecting and maintaining biodiversity
  - agricultural biodiversity
  - knowledge learning and innovation
  - social equity and infrastructure.
- **Scores were guided by the COMDEKS score rating of 1 to 5**
  - 1 denoted poor performance and 5 best performance for resilience of the SEPL.
  - Six belt transects systematically located at a distance of 2 km apart with plots of 100 m by 100 m to ground truth the community perceptions

## SEPL Performance



**Figure 2: Overall SEPL Performance Indicators of the Tukombo- Kande landscape**



**Table 1. Summary of overall rating of the Tukombo-Kande SEPL**

	Ecosystems protection	Agricultural biodiversity	Knowledge, learning & innovation	Social equity & infrastructure
Lowest third	4.19	4.13	2.94	3.00
Mean rating	3.88	4.00	2.88	3.08
Highest third	4.07	4.00	2.64	3.00
Std dev.	1.047	0.739	0.908	1.165

# Major threats to the Landscape

- 1) High deforestation - agricultural expansion, traditional brick baking, shifting cultivation, forest fires and overexploitation of tree resources for fish processing.
- 2) Inadequate livelihood support systems that are in line with community tradition and culture.
- 3) Reduced access to micro credit facilities for enterprise development and growth.
- 4) Overreliance on natural resources as a major direct source of livelihoods
- 5) The lack of a planned strategy to protect ecologically sensitive areas such as wetlands, beach areas etc
- 6) Overfishing of shallow water fish stocks due to increased demand. The catches of almost all fish species except for *Usipa*

# MAJOR WEAKNESSES

1. Inadequate promotion, support and development of the eco-tourism industry.
2. Poor market infrastructure and fishing gear for fish capture, processing and sale of fish products.
3. Weak and dysfunctional local governance structures- VNRMCS, VICs
4. Inadequate water and sanitation amenities
5. Inadequate awareness of cross-cutting issues of climate change, gender empowerment, human rights alcohol and drug abuse, voluntary counseling and testing and behavioral change for HIV/AIDS.

# A PROPOSED LANDSCAPE STRATEGY

## □ Strategic *Vision*

*To ensure a resilient socio-ecological production landscape where cultural heritage, natural resources, agrobiodiversity remain interconnected for increased agricultural production, wealth creation & continuous provision of ecosystem services.*



# Outcomes

- ❑ **Outcome 1:** Natural woodlands, Village Forest areas and other habitats such as sacred groves, watershed & aquatic habitats are conserved
- **Outcome 2:** Sustainable agricultural practices implemented through agroforestry, crop diversification, conservation agriculture, value addition & processing of produce
- **Outcome 3:** Community-based ecotourism developed to broaden household income base and complement with agriculture -food security and landscape conservation.
- **Outcome 4:** Community based institutional governance structures in place for effective integration of conservation and production in the targeted landscape.
- **Outcome 5:** Diversified livelihood resources for enhanced landscape resilience through improved access to microcredit schemes for enterprise development and expansion.

# Opportunities

- ❑ Abundance of water bodies especially rivers & streams that can be enhanced for irrigation agriculture.
- ❑ Vast land that is amenable to crop and livestock production.
- ❑ Available market for fish – fish buyers come from as far as Zambia, Lilongwe, Blantyre and Zomba
- ❑ High potential for the development of community based eco-tourism.
- ❑ High cultural heritage and diversity of tribes that are involved in different professions -fishing, rice production, curios, & cassava production.
- ❑ High productivity of land for cassava, mango fruits that would act as precursors for value addition and processing.
- ❑ Lake shore road connecting the North & Southern Malawi & regions of the country

# POTENTIAL PROJECTS FOR FUNDING

1. Crop diversification, livestock production, bee keeping, agro-forestry systems- crop livestock integration.
2. Increase crop- value addition and processing of such crops as rice, cassava, mango fruits and fish species.
3. Restoration of riparian areas, restoration and protection of wetlands and watersheds, restoration of indigenous forests and use of soil and water saving technologies.
4. Aquaculture development and building of capacity of fish farmers in aquaculture.
5. Community-based ecotourism & Natural resource-based enterprises.
6. Capacity building of governance structures)in leadership skills, & management of CBOs
7. Soil, water and energy technologies- soil conservation, conservation agriculture, irrigated agriculture

# PROJECTS FUNDED

- 1) Community-based eco-tourism and cultural heritage preservation project – US\$50,000
- 2) Promotion of sustainable livelihoods for nature conservation project - US\$50,000
- 3) Mtowole-Chavula beekeeping and afforestation project - US\$25,000
- 4) Promotion of integrated approaches for sustainable livelihoods and nature conservation - US\$25,000
- 5) Promotion of fish farming and improved fish processing practices among fishing communities - US\$35,000
- 6) Emanyaleni BD conservation and livelihoods improvement project - US\$15,000
- 7) Promotion of environmental education for sustainable development - US\$35,000



# ACKNOWLEDGEMENTS

- Satoyama Initiative & GEF for funding project
- IPSI Ghana WS Conference for funding travel.
- Members of Small Grants Programme GEF at UNDP Malawi
- Members of community for providing information
- Audience at IPSI conference