

Nyanganje to Udzungwa Scarp: A Potential Wildlife Corridor.

A Socio-Economic Study of Forest- Adjacent Communities

*Carried out by Kilimanyika for
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Udzungwa Mountains & Forests...

- An area of rich biodiversity and a hotspot for a range of unique endemic species
- Forests are crucial as a water catchment area.
- **Contributes significantly to the livelihoods of a large population who are reliant on forest resources**
- Affect the economic development of the country as a whole, particularly as the source of vast volumes of water utilised in hydro-electric power generation and irrigation.
- ***It is therefore crucial to find management regimes for the area which support the common good whilst acknowledging the socio-economic and cultural realities of communities within the area.***



Aims of Study

The study aims to provide an understanding of:

- How communities utilise and value the forests
- To assess in what ways they are likely to participate in and engage with future forest management activities.

The study was funded by CEPF and contributes to the CEPF strategic direction 1 & 2, namely: To increase the ability of local populations to benefit from, and contribute to biodiversity conservation and enhancing connectivity among fragmented forest patches in the hotspot in and around Udzungwa.

Objectives of Study

The objectives are to:

- To generate baseline data on the socio-economic and livelihoods status of communities living adjacent to the forest reserves
- To evaluate their capacities and willingness to support improved management regimes aimed at increased conservation of the target forests.
- The study also offers evaluation of the options for improved management of the forests in the light of this data.

Area of Study

- **The Udzungwa Scarp, Iyondo, Matundu, Nyanganje, Ihangha and Iwonde forest reserves** are situated to the south, west and south-west of Udzungwa Mountains National Park.
- This study focuses on these areas, notably where the forest borders significant human habitation.
- 15 village communities were studied
- Over 650 people were interviewed through 2 discussion groups (male and female) per village and 300 answered detailed questionnaires

Communities Studied

Forest Reserve/Area	Selected Villages
Nyanganje	Signal Kiberege Ihanga
Iwonde/Ihanga	Machipi Kilama Igima
Iyondo/Matundu	Mpofu Mngeta Njage
"Idete Corridor"	Idete Namwawala Mkangawalo
Udzungwa Scarp	Ikule Chita Udagaji

Socio-Economic Baseline Data

Key Findings...

- Of the equal number of men and women interviewed, 88.9% of households are managed by men.
- The majority of the population are not native to the area. The area is highly popular with outsiders. A considerable 70.3% of heads of households are migrants to the area.
- 78% of migrant respondents came to the area because of the prospect of opportunities in agriculture
- Despite the considerable amount of water running of the Udzungwa Mountain range, facilities for access to water for the majority of respondents are still very basic, 85% rely on community wells or pumps.

Key Findings...

- The vast majority of respondents do not have access to electricity or light in their homes after dark.
- 98% say that their involvement in agriculture is for their food source. Over a quarter of respondents also rely on their livestock as a source of food.
- As a source of cash income, agriculture is still the most important livelihood for 54% of respondents. However, animal husbandry, small businesses and artisanal work are also key income generation activities.
- 97% say that agriculture is the most important livelihood activity. Animal husbandry and small business are seen as reliable secondary activities, plus artisanal trade.

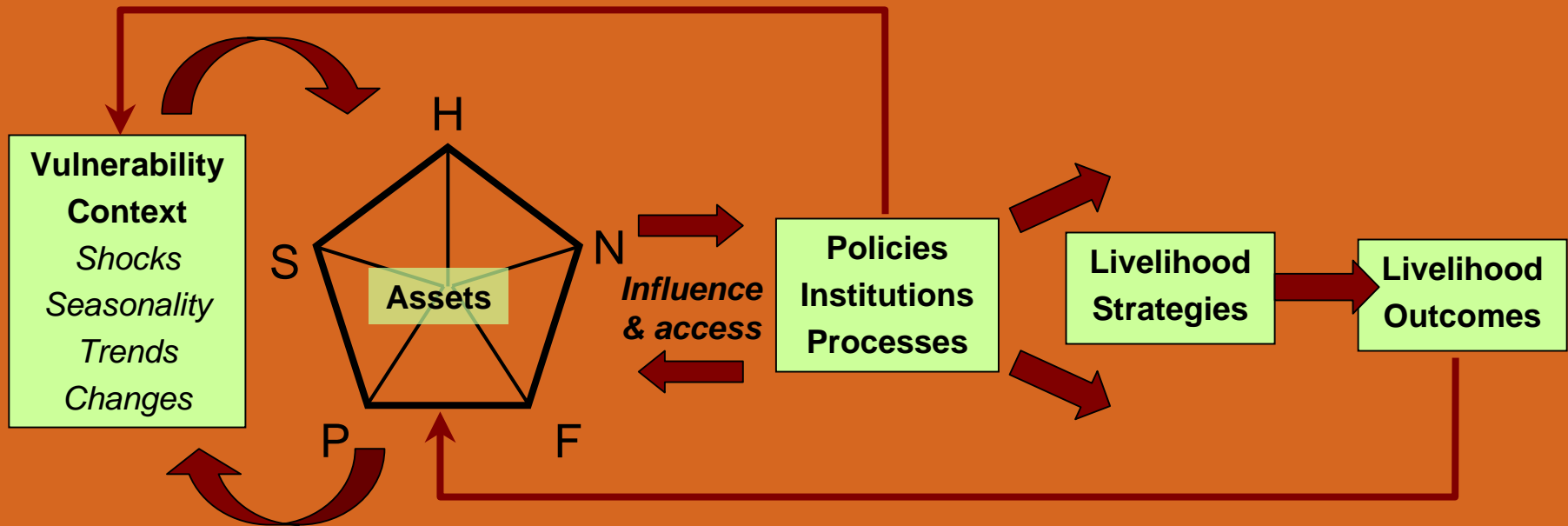
Sustainable Livelihoods Assessments

Sustainable Livelihoods

A combination of sustainable livelihoods assessment and socio-economic baseline data collection. The following community **assets** were analysed:

Natural	Land, forest, rivers, marine life, terrestrial life, biodiversity.
Financial	Savings in the form of cash and liquid assets such as grain, livestock etc.
Human	Knowledge, skills such as beehive making, good health, ability to work etc.
Physical	Roads and transport, buildings, communications etc.
Social	Networks between individuals, relationships, members of groups etc

The Sustainable Livelihoods Framework



Livelihood Assets:

N = Natural

H = Human

S = Social

F = Financial

P = Physical

Natural – *Mali Asili*

Trees

Various, particularly ‘Mianzi’ bamboo, ‘Miombo’ (*Brachystegia* spp.), ‘Mikuyu’ (*Ficus* spp.) and marketable species such as ‘Mininga’ (*Pterocarpus* spp.), ‘Mipingo’ (*Dalbergia melanoxylon*), ‘Mivule’ (*Milicia excelsa*) and ‘Mikangazi’ (*Khaya* spp.)

Forest Products

firewood, natural medicines, bees/honey, charcoal, timber, building poles, carvings, mushrooms, grass, birds, and wild animals.

Rivers & Fish

Rivers are seen as essential to livelihoods and it is acknowledged that the source of these is the forest/mountains. Within these rivers, a variety of fish were mentioned across the survey area, usually sourced for food, and other times for sale. Most common of those cited were ‘Perege’ (Tilapia), ‘Kambare’ (mud fish) and ‘Dagaa’ (sardines).

Natural – *Mali Asili*

Wildlife

Baboons, vervet, both black and white and red Colobus monkeys, puku antelope and bushpigs were commonly cited. Elephants and buffalo were seen as natural assets for the 'Idete corridor' villages.

Food Crops

maize, rice, bananas, sugar cane, potatoes, sweet potatoes, millet, finger millet, tomatoes, legumes, soya, sunflowers, cassava, groundnuts and a range of green vegetables.

Cash Crops

Those most valuable to the communities are rice, maize, sesame, sugar cane and millet.

Livestock

Community respondents cited cattle, sheep, goats, pigs, poultry and domestic dogs as assets.

Human - *Uwezo*

For men, skills have been developed for carrying out the following livelihood practices: farmers (everyone), teachers, fishers, healers, potters, carpenters, masons, plumbers, painters, mechanics, tailors, pit sawers, thatchers, blacksmiths and electricians.

For women: farmers (everyone), teachers, healers, potters, tailors, weavers, hairdressers, clothes seller, sundries seller, cooked food seller, fresh fruit and groceries seller, local brewing and alcohol selling, other small business skills.

All: Very low levels of education

Social - *Taasisi*

- There are self-help groups set up by community members. Women's groups are more common than men's groups and are more likely to be active.
- Groups include beekeeping, rice and other crop production, tree planting, food selling, fishing, livestock and death and burial.
- Influential Institutions include: TANAPA, Plan International, Kilombero Valley Teak Company (KVTC), TANESCO is, religious civil society institutions (churches, mosques), civil society support organisations like Cobasheka, Cotaco, Solidarmed, CEFA, LKEMP and Daipesa.

Physical – Miondo Mbinu

Majengo, Hudumu

Typical physical assets identified for sample villages in discussions are as follows:

- Dispensary (in most villages)
- Milling machines
- Primary School (s)
- Roads and tracks
- Secondary School (not in all villages)
- Shallow well(s)
- TANESCO poles (not in all villages, passing through village but usually not connected to village – only in Kiberege was there access to electricity)
- TAZARA railway line

Financial – *Fedha*

Savings

Very few respondents have any savings. For those men that do, they have individual bank accounts in Ifakara town. Women with individual savings often keep them in a box within their home, or in bank accounts.

Investments

Very few people have investments. Investments were considered property such as their homes, milling machines or bicycles, namely items that depreciate in value. Others refer to stocking harvested crops as an investment.

Access to Credit

Access to microcredit in rural areas is difficult. For the majority of villages sampled, microfinance institutions such as SACCOS and FINCA are slowly becoming known to the communities, but with a slow take-up.

Key Problems

- Lack of well equipped, affordable dispensaries, with qualified medical staff
- Lack of teachers housing
- Lack of proper educational infrastructure; poor primary schools, lack of secondary schools
- Lack of access to markets/lack of transport
- Lack of land
- Lack of farm inputs to increase efficiency of production and yield
- Lack of electricity
- Lack of telecommunications

Attitudes Towards Forest Conservation & Management

Forest cover is seen to be much reduced by most villages...

Forest Reserves/Area	Selected Villages	Forests Perceived to be Reduced?
Nyanganje	Signal	Reduced
	Kiberege	Reduced
	Ihanga	Reduced
	Machipi	Reduced
Iwonde/Ihanga	Kilama	Increased
	Igima	Reduced
	Mpofu	Reduced
	Mngeta	Reduced
Iyondo/Matundu	Njage	Increased
	Idete	Reduced
"Idete Corridor"	Namwawala	Increased
	Mkangawalo	Reduced
	Ikule	Increased
Udzungwa Scarp	Chita	Reduced
	Udagaji	Increased

How would the communities manage the forests if they could?

Nyanganje Communities partly cautious of TANAPA because of past conflicts and their policy of non-consumptive utilisation and partly show recognition of work done. Would prefer controlled utilisation with greater individual village control of forest

Iwonde/Ihanga Communities would favour local management, or joint management, with management zones, and the support of an environmental management and awareness programme

Iyondo/Matundu Communities would favour local management, with management zones, and the support of an environmental management and awareness programme

'Idete Corridor' Communities would favour local management, but do not object to partnership with FBD or TANAPA, provided there are utilisation zones

Udzungwa Scarp Communities would support management by TANAPA providing they are given environmental education leading to a form collaborative management involving communities

Key Livelihood Issues

Forest Dependent Communities

- Communities are highly dependent on forests because of poverty
- They rely on the forests for their energy sources, for which there are few affordable alternatives
- The forest, both its timber, and non timber products have real value for communities. They have an market value and a socio-cultural value.
- Communities rely on their neighbouring forests for survival to a greater degree during hard times such as drought.
- Communities are, to some degree, aware of their rights as land managers, even if they have not yet been taken through the land use planning process as a whole.

Lack of Environmental Awareness

- Communities lack understanding of the environment. A continued programme of environmental education and awareness raising will be essential.
- Education levels amongst the majority of the communities are low. The current level of awareness regarding forest conservation is generally limited to basic understanding.
- Where it is expected that communities, or representatives of communities, are to become forest managers, part of patrol teams, or committee members responsible for giving environmental education themselves, it is reasonable to expect that training will be required by experienced technical staff via government or NGOs.

Potential Economic Activities

Alternative Energy

It is recommended that alternative sources of energy continue to be researched and developed for the communities, such as energy efficient stoves and renewable energy technologies.

Community Woodlots

Another area to continue to focus development on is on community developed woodlots. These, if managed properly, can allow for a local harvest of timber and forest products including for fuel, building and medicines.

Alternative Income Generation Activities

Alternative income generating activities (AIGs) may be able to provide opportunities to diversify incomes away from activities which rely on taking value from forest products.

Agricultural Intensification

As the high level of migrancy to the area testifies, Kilombero valley is highly attractive to many rural Tanzanians because of the high agricultural potential that the area, supported by the microclimate afforded by the Udzungwa mountains forest.

Concluding Remarks

A socio-economic perspective must be considered alongside a ecological perspective in considering future approaches to forest management.

The livelihoods of the population in the area depend in significant part, on forest resources. The views and needs of these communities need to be taken into account where possible to ensure they act as custodians of the forests rather than in conflict with their surrounding resources.

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