

FOUR KEY THEMES

Environmental setting

Socio-economic conditions

Policy and institutional frame

Project features

MAIN SETS OF VARIABLES

Environmental setting	Geophysical Biological Land cover / use Environmental threats
Socio-economic conditions	Demography Livelihoods Socio-cultural setting Infrastructure
Policy and institutional frame	Laws and regulations Participatory processes Social organization
Project features	Scale Implementation Programmes Collaboration Outcomes

Environmental setting

Aggregate variable	Measured variable	Measurement
Geophysical	precipitation	average
	altitude	average across area
	topography buffer core transition??	scale 1-5 (1=flat, 2=a few hills, 3=many hills and plateaus, 4=many steep hills with a few flat areas, 5=mountainous)
	soils	scale 1-5 (1=poor soils, 3= scattered patches of medium soils, 5=a lot of good quality soils covering the entire area)
Biological	Importance of key species	number of IUCN redlist species
	Habitat diversity	shannon diversity index (negative sum of (the percent habitat multiplied by its natural log))
	fragmentation/integrity of habitats	scale 1-5 (1=low integrity, cut by many roads, multiple small patches interspersed with agricultural lands; 3=medium integrity, cut by some roads, few large patches with little agricultural intrusions, 5=high integrity, few roads, one large patch with very little agriculture)
Land cover / use	percent natural habitat	estimate or from GIS database
	percent <land use>	estimate or from GIS database
	economic potential of forested area	scale 1-5 (1= low economic potential, few valuable tree species, NTFP species and tradable wildlife species, poor agricultural potential; 3=medium potential, some valuable timber species, NTFP species present in reasonable quantity and wildlife is hunted to some extent for trade, soils, topography and climate are reasonable for some agriculture; 5=high potential, many valuable timber species, lots of NTFP species, large amount of traded wildlife species, good quality soils on reasonable topography with good climatic conditions)
Environmental threats	hunting	scale 1-5 (1=some common animals hunted, 3=many common animals hunted and a few rare species hunted, 5=many common and rare animals hunted)
	logging	scale 1-5 (1=few timber species cut and taken from the forest, 3=some timber species cut and taken from the forest, damaging some parts of the forest, 5=large areas of the forest cut for timber extraction)
	invasive species	scale 1-5 (1=no threat of weeds, 3=some threats from weeds and invasive water species, patches taken over by invasive species, 5=large areas threatened by weeds, waterways have pests and large areas are covered by weedy species)
	pollution	scale 1-5 (1=very little pollution, 3=areas surrounded by intensive agriculture, affecting the quality of the waterways to a small degree, 5=many industrial pollutants in the water and area surrounded by fertilised agricultural land making a large effect on the quality of the water in the area)

Socio-economic conditions

Demography	<p>population in core Population in buffer # households indigenous groups indigenous population migration</p>	<p># people # people # households # major indigenous groups # individuals # individuals</p>
Socio-cultural setting	<p>indigenous usage of forest cultural importance of forest recognition by national officials or staff of cultural/spiritual importance of forest cultural conflicts among stakeholders current influence of former large scale conflicts social attitudes towards conservation/NRM</p>	<p>scale 1-5 (1=few indigenous groups, little useage of the forest, 3=some indigenous groups who use the forest for some products, 5=many indigenous groups who use the forest as their main source of income and livelihood) recognition of global importance (UNESCO world heritage etc.) measurable value: cultural and spiritual values of the forest, cultural landscape linked to UNESCO world heritage scale 1-5 (1=very little conflict amongst groups, 3=some conflicts between indigenous and migrant groups, 5=many frequent disputed between stakeholders over resources and land) scale 1-5 (1=conflicts many years ago and the people have fully recovered, 3=conflicts still remembered amongst elders, the impact is still noticeable, 5=conflicts very recent and damaging to the community) scale 1-5 (1=people wish to cut down the forest and see little reason to conserve its resources, 3=people wish to use the forest but also see its importance in terms of protecting the species for future use or for cultural value, 5=people do not wish to cut the forest for resources because of the value of protecting the habitat for future sustainable use and high cultural value)</p>
Livelihoods	<p>level of poverty Income income sources changes to livelihoods literacy education health tourism Economic frame - production increases Technology/industrialisation/intensification</p>	<p>scale 1-5 (1=very little poverty, 3=half of the population below the stated poverty line, 5=most of the population earns much less than the poverty line) from an average household income across the buffer and core zones from an average estimate of household income in the core and buffer zones, from forest use positive or negative livelihood changes from conservation practices literacy rate amongst adults # people with primary school education child mortality rate <5 years old, in percent revenue from tourism scale 1-5 (1=decrease in population and decrease in productive output, 2=stable productive output and no growth in population, 3=normal productive increase and normal growth rate, 4=high production and higher than normal growth rate, 5=very high growth rate and intensive production and high output) Dominant type of agriculture</p>
Infrastructure	<p>Access to markets Large-scale infrastructure Investment in infrastructure</p>	<p>time (in hours) taken to access nearest connected market area of dams and mines scale 1-5 (1=no investment, 3= some investment by both government, NGOs and industry, 5=high intensity of investment by both industry and government)</p>

Policy and institutional framework

<p>Laws and regulations</p> <p>Relevance of Conservation legislation</p> <p>Land tenure status</p> <p>Law enforcement mechanisms</p> <p>corruption</p> <p>stability of political and policy processes</p>	<p>scale 1-5 (1=few laws for conservation activities, integrity of laws low; 3=some forestry laws, laws against illegal trade, land tenure regulations, few holes in the legislation, 5=legislation is strong with laws for illegal trade, forestry, conservation and land tenure, no loopholes in the legislation)</p> <p>category of tenure status (state owned, community recognition, private owned, none) and the integrity of the tenure system (ie. Have the people got the require usage tenure?) rating: poor, medium, strong</p> <p>scale 1-5 (1= laws are present but not enforced to any extent; 3= some enforcement by local people and officers; 5= many patrol teams and strong law enforcement by local officers)</p> <p>scale 1-5 (1=very little informal payments; 3=some payments to officials and for transport or illegal activities; 5= informal payments are very frequent and open, people must pay to get anything done)</p> <p>scale 1-5 (1=laws present but change frequently, regulations are not strong and ignored, easy to change regulations and laws; 3=laws are present and change periodically, regulations are observed but not followed to their full extent, laws can be changed with some effort; 5= laws are present and do not change often, it takes a lot of time and effort to change rules and regulations)</p>
<p>Participatory processes</p> <p>Existence of formal participatory mechanisms</p> <p>Effective use of participatory mechanisms</p>	<p>scale 1-5 (1= no regulations to work with local people; 3= some rules and regulations to consult local people before starting an activity; 5= local people must, by law, be consulted before events take place)</p> <p>scale 1-5 (1=few meetings between organisations, government and local people; 3= irregular meetings between government, organisations and local people; 5= regular periodic meetings and consultation between government, organisations and local people)</p>
<p>Social organization</p> <p>activity of community organisations (inc. NRM groups)</p> <p>presence and investment of NGOs in area</p> <p>customaty rules & enforcement</p> <p>conflicts between formal law and customary rules</p>	<p>scale 1-5 (1=little or no organisations run by local people and if there are some, they rarely run well; 3= some organisations and NRM bodies run by local people, they have little power and poor management; 5= some strong organisations and NRM bodies, they have a fair influence over the decisions made by other stakeholders in the landscape and are managed well)</p> <p>scale 1-5 (1=few organisations and no investment; 3= some organisations but little investment and influence; 5=many organisations with a lot of investment and influence over the landscape)</p> <p>scale 1-5 (1=few or no rules, if present they are mostly ignored; 3= some local customary rules, they are regarded by some as important; 5= many strong customary rules, they should be followed and perpetrators are usually punished)</p> <p>scale 1-5 (1=the difference between customary rules and laws are minor; 3= many customary rules are similar to laws, but some cause conflict in legislation and between different groups; 5= customary rules are very different to the laws present and both are often broken, causing conflicts between groups)</p>

