

Malawi's Natural Capital Accounted?

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Malawi Profile

- ▶ Population 18,000,000
- ▶ 2/3 of the population depend agriculture for livelihoods
- ▶ Agriculture account for 1/3 of the country GDP
- ▶ The GDP \$6.3 billion
- ▶ The per capita income of \$486.45

Natural Resources

- ▶ Forestry : 8.6 % of the total land area under Forestry reserves
- ▶ Wildlife: 11.1 % of the total land area under Parks, Wildlife reserves, and Natural sanctuaries
- ▶ Fresh water: 20% of the total land area (Lake Malawi being the dominant)
- ▶ These are habitats to a wide of species
- ▶ In 2011 a study was conducted on the Economic Valuation of Sustainable Natural Resource use in Malawi. (Wildlife, Soils, Forestry and Fisheries).
- ▶ The 2011 study used the Adjusted GDP, Monetary indicators in attempting to account for NR.

WILDLIFE

- ▶ Malawi has 5 NP,4 WR,3 NS covering 11.1 % total land area
- ▶ 1.7% Endemic Species , 2.4 % endangered
- ▶ Contribution to Economy:-

Eco-tourism,
Employment, Parks
Fees, concession fees,
hiring of guides



Wildlife Contribution GDP

Official Contribution to Malawi's GDP

Not Officially Accounted for!!!!

- An analysis of WTTC revealed that Wildlife in Malawi contribute to 2.7% of Malawi's GDP (calculation based on eco-tourism).
- Contribution to GDP adjusted from 0 - 2.7%

However following were not accounted for as wildlife contribution to GDP

- ✓ The Value of stock in all reserves,
- ✓ Employment,
- ✓ eco-systems services
- ✓ loyalties.

True value of wildlife contribution to GDP will influence policy shift in conservation.

Soil

- ▶ Major Soil types in Malawi : the Eutric leptisols , the Chromic luvisols , and the Haplic lixisols of variable morphology
- ▶ There are also some localised areas of Acrisols, Cambisols, Gleysols, Phaezems, Planosols and Vertisols.
- ▶ Following essential services provision:-
- ▶ Water purification
- ▶ Soil Biota
- ▶ Agriculture
- ▶ Pottery
- ▶ Construction

Contribution to GDP

Not officially accounted for!!

Agriculture as a sector contributes to 37% of Malawi's GDP (proxy for soil's contribution)

However it is negative impacts to the economy that's brought about by poor land mgt practices that needs to be properly accounted for!!

1% increase in soil loss is equivalent to a monetary loss, at the national level, of about 0.026% of the GDP, or the 0.420% of the agricultural production value.(Economic Assessment of Soil Loss Malawi 2018).

Forestry

- ✓ 36% of Malawi's total Land area covered by/with trees
- ✓ national parks and wildlife reserves constitute about 28.9% of the area covered by forestry resources,
- ✓ 23.5% is covered by forest reserves.
- ✓ The remaining area is covered by natural woodlands on customary lands (44.6%) and plantation forests (3.2%).

Contribution to the Economy;-

Timber

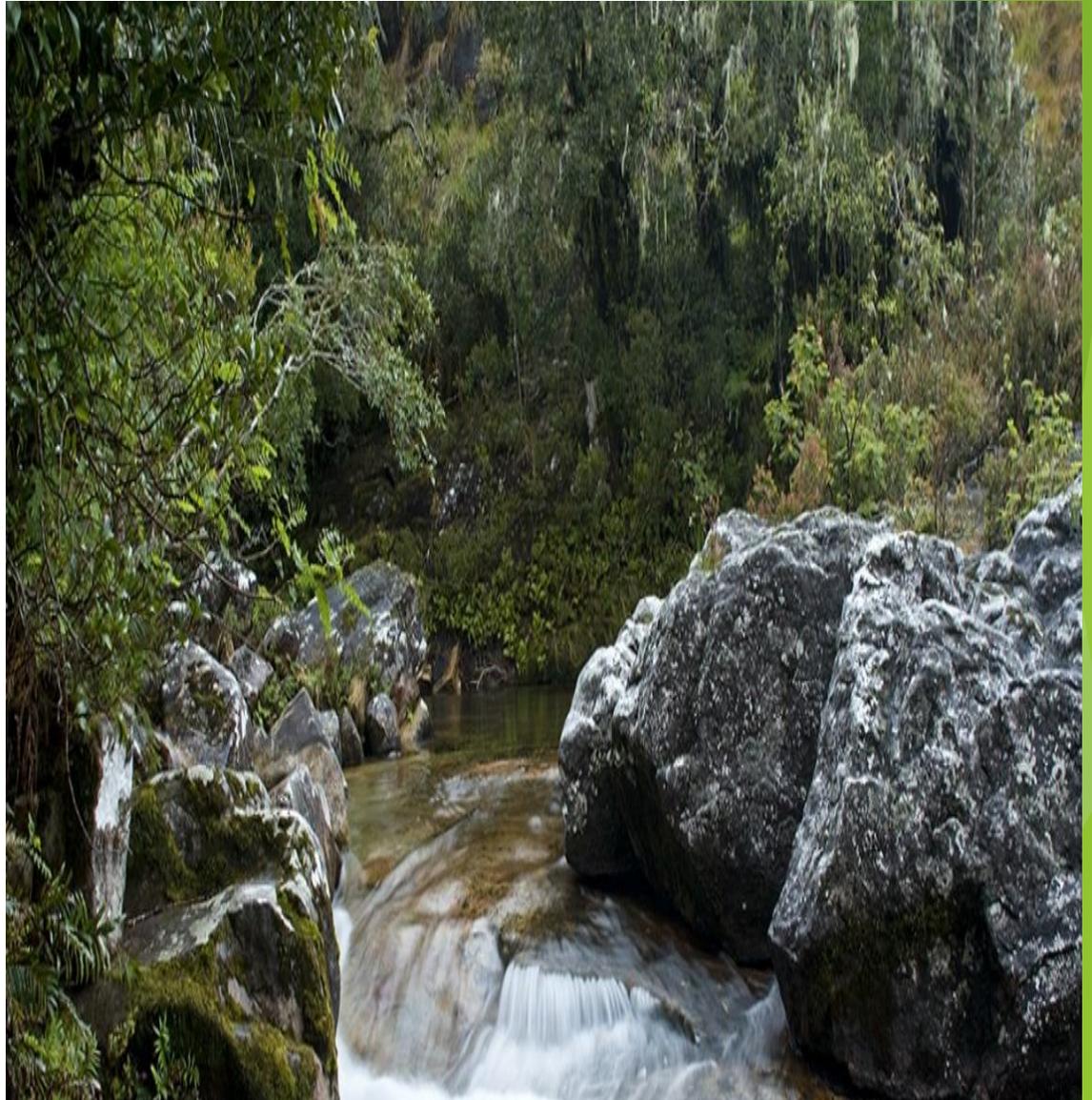
Energy

Carbon sequestration

Erosion Control

River Sources

NTFP i.e. mushrooms, thatching grass, honey, fruits.....



Contribution to the GDP

Official Statistics in of forestry contribution to the GDP in Malawi was calculated at 1.8%.

- ❑ The calculation was mainly based on official sales of timber from government plantations.
- ❑ However a study by BEST (2008) revealed that wood fuel traded in country valued at \$163 Mill or 4,3% of 2008 GDP
- ❑ **Just by adding the wood fuel value the contribution by forest to GDP is adjusted from 1.8 to 6.1% !!!**

However the following are not accounted in the GDP Calculation

- ❖ Employment in forestry industry (29,000)
 - ❖ Employment in the traded wood fuel(130,000)
 - ❖ Mushroom production was estimated at \$139.5 million
- ▶ This implies that there is Need for comprehensive analysis of the value of forestry resources to GDP.

Fisheries

- ▶ Five Lakes and 13 Major Rivers in Malawi
- ▶ Lake Malawi account for 82% of fish catch in Malawi water bodies
- ▶ Sardela Species are the mostly caught fish (32.5% of total fish catch)
- ▶ Orechemis Karongae is of high nutrition content ,great taste and export value
- ▶ Fishing is done on capture fisheries, aquaculture and ornamental fisheries
- ▶ Contribution to economy:- nutrition,employment,tourism,....



Contribution to GDP

Fisheries contribution to GDP is 4% . (Based on Landed Value of fish)

However the statics Doesn't include:

- ▶ Value of Fish in tourism
- ▶ Employment in Fish supply chain e.g. fish processing, transportation and marketing (employs 60,000 fishermen, 450,000 engaged in fisheries related economic activities.)
- ▶ This implies that there is Need for comprehensive analysis of the value of fisheries resources to GDP.

Cost of Unustainable Utilisation of NR

Natural Resources and Source of Cost	Annual Cost (2007 prices)	
	Million Malawi Kwacha	% of GDP
Soils	8988	1.9%
On site Impact agriculture	7540	1.6%
Offsite Impact Hydro power	1433	0.3%
Offsite Impact Drinking water treatment	15	0
Forest	12983	2.4%
Unsustainable round wood	3100	0.4%
Unsustainable fuel wood	6089	1.2%
Flood prevention (indicative only)	232	0.2%
In door Air Pollution	3267	0.7%
Out door Air Pollution	327	0.2%

Cost of Unustainable Utilisation cont'

Natural Resources and Source of Cost	Annual Cost (2007 prices)	
	Million Malawi Kwacha	% of GDP
Fisheries	3906	0.8%
Unustainable use (Lower bound)	3906	0.8%
Wildlife	665	0.1%
Poaching (Indicate only)	665	0.1%
Total	26,573	5.3%

Conclusion

Though Malawi attempted to account for Natural Capital Account in 2011 , proxy indicators were mostly used and actual contribution of natural resources to GDP was not fully determined.

Recommendations

Periodical Natural Capital Accounting Studies are needed at least every 5 years.

- Malawi is expected to update value of some eco-systems through valuation that will be done by Bio-Bridge Initiative.
- Expenditure Analysis on Biodiversity by BIOFIN initiative will also assist in updating information .

However Malawi needs a comprehensive study covering all natural resources



▶ Thank You Very Much