CRITICAL EVALUATION OF RAPID ECOSYSTEM SERVICES ASSESSMENT TOOLS IN AFRICAN MAN & BIOSPHERE RESERVES

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EVAMAB stands for "Economic valuation of ecosystem services in Man and Biosphere reserves (MAB): testing effective rapid assessment methods in selected African MABs". The project addresses the assessment of the economic value of ecosystem services (ES) in UNESCO-MAB sites from a regional perspective (Africa). This project lasts 30 months (2017-2019) and is financed by Belspo (Belgian Science Policy) and UNESCO to support research activities in Man & Biosphere Reserves (MAB).

PROJECT OBJECTIVES

General objective

To test and develop existing methods and tools for rapid assessment of ecosystem services (ES) and to assess the economic value of ecosystem services in African UNESCO-MAB.

• Better appreciation of the potential for management and socio-economic integration.
• Better protection of UNESCO-MAB sites and their biodiversity for future generations.

Specific objectives

To test and adapt rapid assessment tools for a bundle of ecosystem services provided by UNESCO-MAB sites.	To formulate pertinent stakeholder engagement and policy advice for managers and decision-makers, including other stakeholders such as the private sector, community leaders, and MAB Council, concerning the valuation of ecosystem services, reward mechanisms and opportunities and limitations of socio-economic valuation in conservation.

Work packages

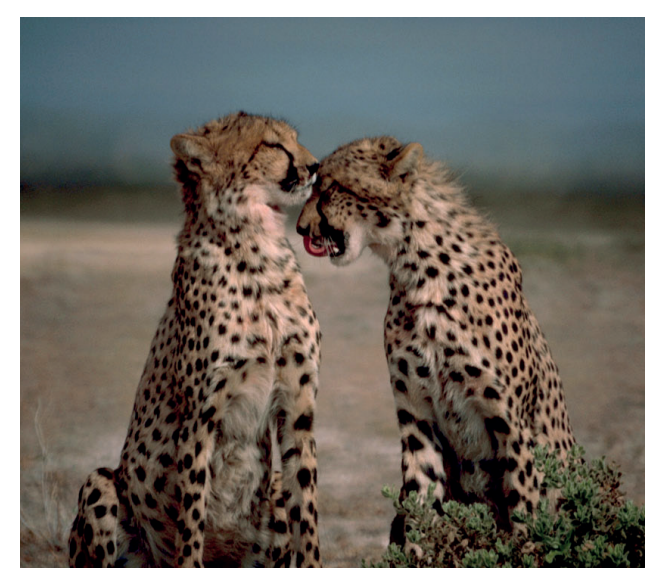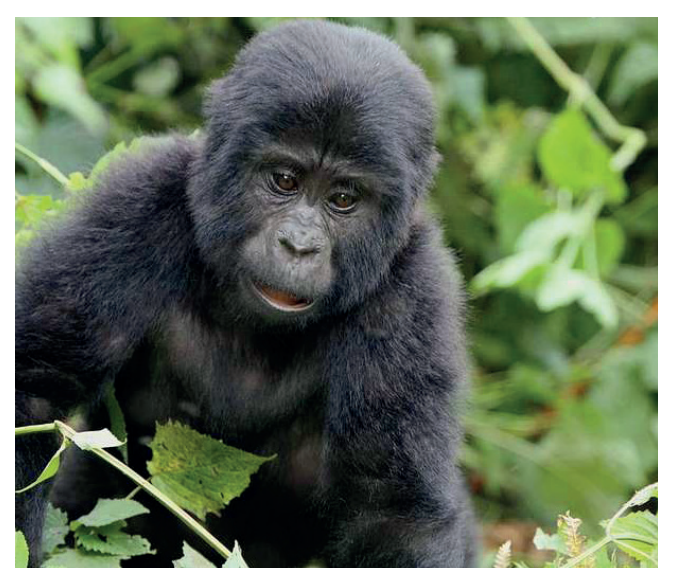|			
WP A: literature survey of rapid assessment methods and tools for ecosystem services related to MAB sites.	**WP B**: rapid assessment of ecosystem services in 4 selected MAB sites.	**WP C**: science-policy interface.	**WP D**: economic valuation of Ecosystem Services and guidelines for reward mechanisms.

SELECTED STUDY SITES

Lake Tana (**Ethiopia**)

Pendjari National Park (**Benin**)

Mount Elgon (**Uganda**)
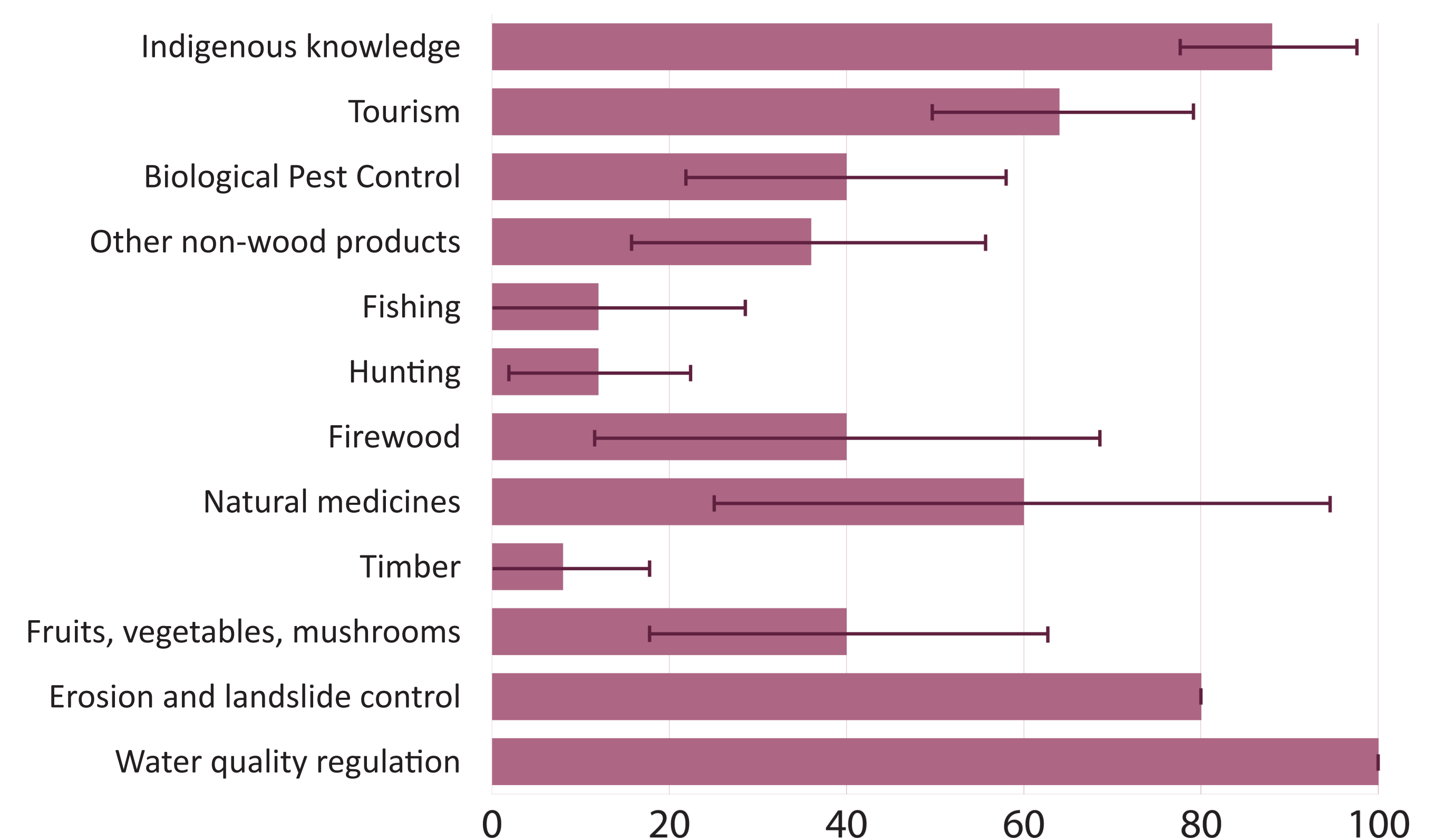
Lake Manyara (**Tanzania**)

PRELIMINARY RESULTS

What should rapid ecosystem services assessment tools do ?
(Results of the two-round Delphi survey among MAB experts & professionals)

Characteristic		Consensus level	Score variance	Trend in scores between rounds
Purpose of the tool	Environmental awareness raising & education	70%	10%	↓
	Scoping & description of provided ES	65%	10%	↑
	Supporting ES monitoring & evaluation	65%	25%	↑
	Identifying livelihood, development &investment opportunities	55%	25%	↓
Characteristics of the tool	Be able to assess multiple types of ES	60%	10%	↓
	Require a low degree of expertise to be applied	55%	20%	↑
	Provide results that are easy to communicate	55%	5%	↑
Outputs	Quantitative output	53%	15%	↑
	Economic evaluation	58%	5%	↑
Inputs	Maps	78%	15%	↓
	Quantitative input	83%	5%	=
	Qualitative input	61%	5%	↓
Hiring someone to apply ES assessments tool	Yes	84%		↑
Most restrictive criterion for fieldwork	Technically demanding	56%	20%	↑
	Epensive	67%	10%	↑

Only characteristics with scores showing >50% consensus are presented

What are the most valuable ecosystem services for communities living around Uganda's Mount Elgon MAB Reserve?

NEXT STEPS

In the coming months, the EVAMAB project will result in the publication of minimum two scientific publications, regarding the selection and application of rapid ecosystem services assessment tools in African Man & Biosphere reserves.

Rapid assessment tools will also be applied in other African Man & Biosphere reserves to test the user-friendliness and flexibility of various methods for generating management & policy recommendations.

Multi-stakeholder validation workshops will be held in three study sites: Pendjari (Benin), Lake Tana (Ethiopia) and Mount Elgon (Uganda).

EVAMAB website: http://www.biodiv.be/evamab