



# Achieving sustainable development in Africa through inclusive green growth: the role of ecosystem goods and services

*This policy brief is the third in a series of six briefs drawn from the fifth edition of the Sustainable Development Report on Africa, a joint publication of the Economic Commission for Africa (ECA), the Food and Agriculture Organization of the United Nations, the United Nations Environment Programme, the United Nations Industrial Development Organization and the United Nations Development Programme on the theme “achieving sustainable development in Africa through inclusive green growth”. The brief highlights the role of ecosystem goods and services in promoting inclusive green growth in the region.*

Ecosystem goods and services are the benefits that people obtain from both natural and modified ecosystems.<sup>1</sup> The Millennium Ecosystem Assessment groups these goods and services into four categories:<sup>2</sup> namely provisioning, regulating, cultural, and supporting ecosystem services. From disaster risk reduction to energy generation to water security, Africa has ample opportunity to seize the benefits of ecosystems goods and services for inclusive green growth. The provisioning and regulating services provided by ecosystems directly and indirectly link to every aspect of inclusive green growth that is socially inclusive and environmentally conscious economic growth. Harnessing ecosystems services, therefore, would spur inclusive green growth and lead to sustainable development.

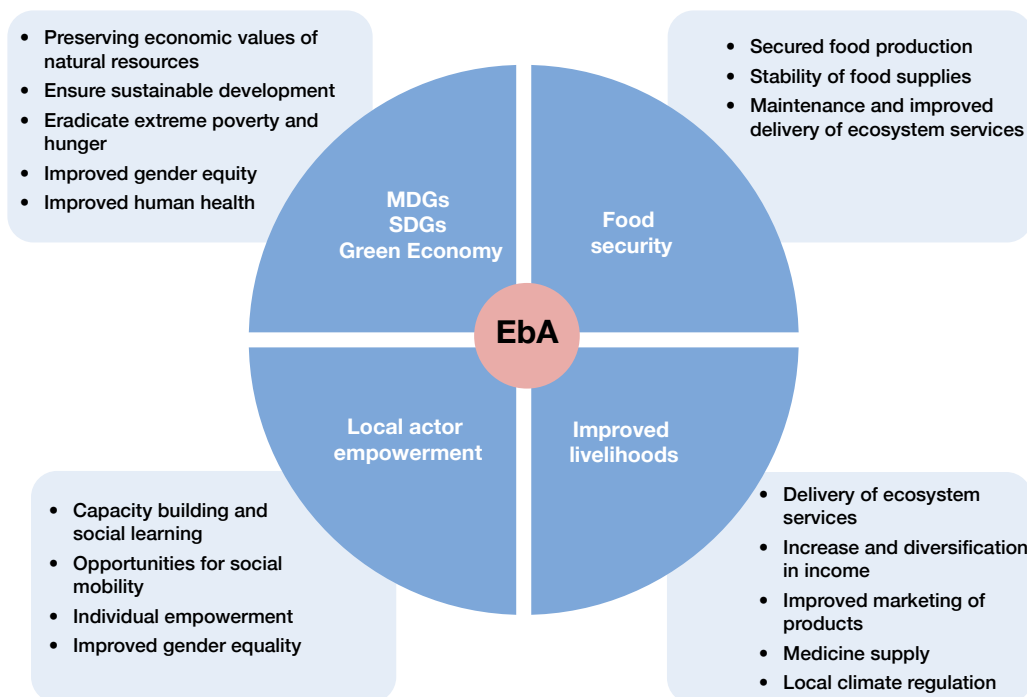
## Potential and trends in ecosystems goods and services based inclusive green growth

The role of ecosystem goods and services in advancing sustained and inclusive green growth is now recognized at the global, regional and national levels. In Africa, there is great potential for harnessing ecosystem goods and services for inclusive green growth, and ultimately sustainable development, given the region’s rich endowment with a diverse range of rich ecosystems such as forests, wetlands, fresh water and marine resources. Practices throughout Africa and elsewhere highlight the intrinsic connection between ecosystem goods and services and inclusive green growth initiatives.

The development and management of ecosystem goods and services has led to job creation, improved human welfare and poverty reduction, with efficient resource use and enhanced environmental assets. Efforts are ongoing to foster green growth in ecosystem goods and services, while good practices have been documented in the process. For instance, livelihood diversification and industry spin-off, such as empowering local community actors, can challenge traditional socioeconomic structures, provide for social inclusion, promote community-led innovations, build capacities, and improve the lives and livelihoods of socially vulnerable groups.

The following diagram depicts the many cross-cutting objectives that appropriate ecosystem goods and services management or ecosystem-based approaches can achieve.

1 An ecosystem is a complex of living organisms and the abiotic environment with which they interact in a specified location (United Nations, 1992).  
2 Millennium Ecosystem Assessment (2005). Ecosystems and Human Well-being: Synthesis. Island Press, Washington, D.C.



### Woodlots in the United Republic of Tanzania

In Makete, United Republic of Tanzania, forests, woodlands and grassland resources are essential to the local economy, as well as for the conservation of vital watersheds and the environment for agriculture and livestock production. Widespread unsustainable land use has produced serious ecological losses and limited farm productivity. These problems have been aggravated by a lack of institutional, legislative and fiscal capacity for effective natural resource management, and consequently, for the stability of the Makete ecosystem.

Using smallholder woodlot management practices, an ecosystem-based inclusive green growth project undertaken by the United Nations Environment Programme's Climate Change and Development - Adapting by Reducing Vulnerability scheme, created a new stream of income for local communities and revenues for the city, while enhancing resilience to climate vulnerability. Building on indigenous weather forecasting knowledge, the project trained 27 technicians in forecasting indicators, and disseminated data on silvicultural management practices, training disadvantaged women and girls who work in woodland management and the marketing of wood products with empowering knowledge relating to species selection, land preparation, field planting and spacing, management for forest regeneration and marketing channels for wood products.

This was an incredibly innovative advancement that provided financial credits to low-income people who could then use their woodlots as collateral for microloans. The in-built incentive to maintain the woodlots created new sources of income and triggered the setting-up of community savings and credit societies. The regeneration of the forest for the benefit of the watershed succeeded in promoting inclusive green growth and sustainable ecosystem management.

Source: <http://www.unep.org/greeneconomy/SuccessStories/WoodlotManagementinTanzania/tabid/29893/Default.aspx>

Sustainable management of forests through inclusive green growth approaches can ensure that the value of forests is intrinsically accounted for. For instance, while the extractable value of Cameroon's tropical forests is approximately \$700 per hectare per year, this is far less than the forests' climate and flood benefits, which add up to about \$900-\$2,300 per hectare per year.<sup>3</sup> Another good practice of woodlots management in the United Republic of Tanzania is provided in the box.

### Challenges and opportunities

In order to realize the vast potential for ecosystem goods and services-based inclusive growth, countries will have to address the challenges confronting them and seize a large number of existing and emerging opportunities, some of which are highlighted in the table.

<sup>3</sup> United Nations Environment Programme (2010). The Economics of Ecosystems and Biodiversity. Mainstreaming the Economics of Nature: A synthesis of the approach, conclusions and recommendations of TEEB. Geneva.

Challenges	Opportunities
<ul style="list-style-type: none"> <li>• Pressures related to climate change, rapid population growth and urbanization.</li> <li>• Weak governance associated with ineffective systems for planning and guiding land and resource use.</li> <li>• Weak scientific research to enhance ecosystem goods and services.</li> <li>• Renewable resource degrading practices in the extractive industry that have a great impact on the environment.</li> </ul>	<ul style="list-style-type: none"> <li>• Certification of environmental goods and services which have the potential to enhance consumer demand for their sustainable management.</li> <li>• Promoting payment for ecosystems services which allows for ecosystem accounting, and provides opportunities for private sector investment in the restoration and provision of ecosystems goods and services.</li> <li>• Harnessing opportunities presented by the climate change challenge such as maintenance of natural forests promoted through adaptation and mitigation mechanisms.</li> <li>• Leveraging environment and climate change-related international agreements and platforms, and international financial initiatives.</li> <li>• Promoting a true measure of wealth by including natural capital in gross domestic product measurements.</li> </ul>

### Enhancing ecosystem goods and services-based inclusive green growth

A vast potential exists to harness ecosystems goods and services for inclusive green growth. Good practices need to be scaled up and out for beneficial economic, social and environmental outcomes that promote sustainable development in Africa. In order to enhance and sustain ecosystem goods and services-based inclusive green growth, countries should:

*Support research to ensure that the development and management of environmental goods and services is guided by the best available science.* Research is needed to better quantify the costs and benefits, and enhance evidence-based promotion of ecosystem services in inclusive green growth as well as reducing vulnerability to climate change.

*Promote the application of environmental assessment tools in national development plans and strategies, and in decisions and actions affecting environmental goods and services.* This should include the application of environmental impact assessments across the board and enhancing the use of strategic environmental assessments at the decision-making and policy-formulation levels.

*Promote knowledge exchange and the development of practical tools and guidelines for implementing ecosystems goods and services management approaches, as part of broader inclusive green growth and sustainable development planning strategies.* Best practices and experiences from the implementation of ecosystem-based approaches across a range of ecosystems and geographical regions, with a particular focus on sustainable projects, should be shared.

*Develop education, training and communication capabilities.* This is necessary to increase awareness of the role of ecosystems and ecosystem management for inclusive green growth and sustainable development.

*Mobilize funding and promote value addition for ecosystem goods and services.* In this regard, the development and management of ecosystems goods and services should be mainstreamed into national development plans and sustainable development interventions at the subnational, national and regional levels, and value addition should be promoted, including through public-private partnerships.

*Strengthen capacity to implement multilateral environmental agreements, enhance institutional effectiveness and promote regional cooperation.* This calls for, among other measures, strengthening and enhancing the effectiveness of institutions, policies and regulatory frameworks on the environment and related matters.

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