

## Challenging Drylands Myths with Economics and Facts

Ecological adaptations allow dryland plants and animals to reproduce, grow and survive in extreme conditions. Simply dryland systems are ecologically resilient and cannot be dismissed as wastelands.

BY WILFRED NYANGENA - FEBRUARY, 2009

It is important that sustainable use strategies are informed by an understanding of adaptations and dynamics of dryland systems. This type of *knowledge* results from regular interaction between people and their environment. This knowledge has a value, measurable not in monetary terms but in the success or failure of household livelihood strategies over time. Recognizing the full value of ecosystem services and the opportunities they offer will enhance better planning and realization of the full economic potential of dryland ecosystems. This eventually will change the wrong but popular notion that drylands are economic wastelands, not worth of investment.

Besides supporting crops and livestock, drylands support other forms of production that, though not readily measurable, are important to a large number of individuals and households through local and informal markets. From the available data, this study finds drylands being of great economic potential.

Agriculture in dryland countries such as Afghanistan, Burkina Faso, Kenya and Sudan contribute about 30 percent to GDP, and 20 percent in others like Chad and Pakistan. In India, arid and semi-arid lands contribute 45 percent of agricultural production. Drylands are equally important for livestock production. In China, for instance, drylands which are home to 78 million cashmere goats which supply 65-75% of the world's cashmere fibre. In Kenya, over 60% of the national livestock herd is found in drylands, providing 67% of the red meat

### Key Points

- Drylands support crop farming, livestock and forestry.
- Drylands are rich in wildlife and support tourism due to their diversity.
- Grasslands in drylands sequester up to 260 tonnes of Carbon per ha.
- Drylands provide cultural services.

## Challenging Drylands Myths with Economics and Facts

consumed, 10% of GDP and 50% of agricultural GDP.

Drylands, with their woody vegetation are important for supply of wood fuel which constitutes 70 percent and 74 percent of national energy in Sudan and Kenya, respectively . Dryland forests also provide browse for livestock, and timber and non-timber products for a variety of uses.

Wildlife resources are important for households and communities living in drylands. In the Kgalagadi South District of Botswana, for example, it has been estimated that community enterprises achieved on average USD 3,590 from hunting and USD 8,735 from tourism per year. Total estimated value to the District is USD 191,260, and estimated asset values are USD 984,200. However, in many countries, security issues have not been adequately addressed in the drylands and this is a threat to tourism development. Local communities have also not benefited from tourism sufficiently, an issue that has been widely blamed for human-wildlife conflict.

### Policy implications and recommendations

This study finds that drylands are quite useful contrary to the belief that they are mere wastelands. They are rich in biodiversity and support such economic activities as crop and livestock farming, tourism and forestry. They are also important for carbon sequestration and cultural values. Unfortunately, most of the values of drylands are not captured in the national accounts. Consequently, drylands have not been given their due attention in national planning.

There is need to devise proper mechanisms for capturing the use and non-use values of drylands and to reflect these in the national accounts. It is also important to invest in the indigenous knowledge of the people to plan and capture the full potential of the drylands. Modernization may be essential but this must be within the realms of indigenous knowledge and local circumstances.

In addition, a re-evaluation of local management systems should involve a change in the attitudes reflected in public policy. These re-evaluations make a case for increasing public investment in drylands and improving incentives for engagement by the private sector.

POLICY BRIEF

Challenging Drylands Myths with Economics and Facts

**ABOUT THIS BRIEF**

This brief is based on results from: Nyangena, Wilfred, 2009 “Realising the true value of ecosystem services” in Mortimore, M. (Ed) “Dryland Opportunities: A new paradigm for people, ecosystems and development” pp. 27-41. IUCN, Gland, Switzerland, IIED, London, UK and UNDP, New York, USA.

**CONTACT**

Dr Wilfred Nyangena, [wnyangena@kippra.or.ke](mailto:wnyangena@kippra.or.ke) Phone +254-20-2719933/4, Fax +254-20-2719951



EfD Center in Kenya, [www.efdinitiative.org/centers/kenya](http://www.efdinitiative.org/centers/kenya)  
[kenya@efdinitiative.org](mailto:kenya@efdinitiative.org) , Phone +254-20-2719933/4, Fax +254-20-2719951  
Environment for Development in Kenya, Kenyan Institute for Public Policy  
Research and Analysis (KIPPRA), Bishops Garden Towers, Second Floor,  
Bishops Road, Box 56445-00200, Nairobi, Kenya



EfD, Environment for Development initiative,  
[www.environmentfordevelopment.org](http://www.environmentfordevelopment.org)  
EfD Secretariat: [info@efdinitiative.org](mailto:info@efdinitiative.org), Phone: +46-31-786 2595, Fax +46-31-786  
10 43, [www.efdinitiative.org/efd-initiative/organisation/secretariat](http://www.efdinitiative.org/efd-initiative/organisation/secretariat), Department of  
Economics, University of Gothenburg , PO Box 640, SE 405 30 Gothenburg,  
Sweden