

# GREEN economy

Why a Green Economy Matters for the Least Developed Countries





Uganda, Kampala district, women of the women's cooperative  
drying banana chips in a self-made solar energy system/contributor: Ron Gilling

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## Foreword

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# Foreword



The world is preparing for the 2012 UN Conference on Sustainable Development (Rio+20), where one of the themes will be “green economy in the context of sustainable development and poverty eradication”. This publication examines the idea that Least Developed Countries (LDCs) possess the economic conditions, the natural and cultural assets, and the policy setting to embrace, if not lead, a green economy transition, which would in turn accelerate their development.

In its simplest expression, a green economy can be described as one that is low carbon, resource efficient and socially inclusive. A green economy can take advantage of new growth trajectories designed to be more socially inclusive, as well as responsive to poverty reduction and economic diversification objectives.

The conditions in LDCs provide a basis to pursue a low-carbon and resource efficient path of economic growth and development, anchored in investment and policy reform designed to enhance livelihoods for the poor, create employment opportunities and reduce poverty. The move towards a green economy would also provide an opportunity to address the infrastructure challenges of LDCs in a sustainable way. The 48 LDCs currently present a low-carbon profile, due to their low levels of carbon emissions. Their economies rely significantly on natural capital assets such as agriculture, forest resources, biodiversity, tourism, minerals and oil extraction. There also exists a large potential for renewable energies.

While other countries face sizeable economic and social costs of ‘decarbonization’, alongside costs

linked with retiring inefficient fossil fuel-based technologies, LDCs can jump start the green economy transition by maintaining and expanding the sustainable practices that already exist. For example, practices such as low-carbon, labour intensive agriculture and community-based forestry, which have existed for decades in these countries, will be central elements to the greening of these sectors.

Structural constraints, including dependence on fragile agriculture, limited access to energy and low economic diversification, which have previously prevented LDCs from significantly reducing poverty and achieving higher rates of development, resulted from policies and investments that undervalued the importance of the economic sectors most relevant to the livelihoods of the poor. Refocusing policies and investments to target sectors and areas including renewable energy, agriculture, forestry, tourism and enhanced ecosystem services can lead to the economic empowerment of low income populations, be more conducive to inclusive growth and jobs and make a significant contribution to achieving the Millennium Development Goals in the poorest countries.



## Why a Green Economy Matters for the Least Developed Countries

Governments have a central role to play in putting in place strategies, targeted public expenditures, policy reforms and regulatory changes to promote further investment and initiatives by the private sector and civil society. Already, decision makers in a number of LDCs are taking bold measures that can set the course for this transition to occur.

Bringing energy to the rural poor is one of the most important contributions that a green economy can make to LDC economies. After decades of national and global efforts, it is now becoming clear that decentralized forms of energy supply offer LDCs the most effective approach to rural energy access. In this regard, it is encouraging to observe that many LDCs have started to initiate policies and innovative approaches to tap into their potential for adaptable, clean energy solutions.

In addition to energy, there is growing evidence that sustainable forms of agriculture, a sector which accounts for a large share of GDP in LDCs, can increase yields and revenues, open up new market opportunities and reduce climate change and environmental vulnerability. By increasing investment and technical support, and implementing appropriate policy reforms to encourage such practices, significant gains can also be achieved in this area.

For LDCs to succeed in this journey, there must be a supportive international policy framework in which risks and uncertainties originating in other countries are prevented from jeopardizing the progress achieved in the more vulnerable economies. The international community must provide the necessary support to leverage financial resources and help LDCs build capacity in order to seize the opportunity for transformative change that is conducive to sustainable development and poverty reduction, beginning with the Fourth United Nations Conference on the Least Developed Countries (LDC-IV) being held 9-13 May 2011 in Istanbul, Turkey.

This report is a joint effort of the United Nations Environment Programme (UNEP), the United Nations Conference on Trade and Development (UNCTAD) and the Office of the High Representative for the Least Developed Countries, Landlocked Developing Countries and Small Island Developing States (UN-OHRLS) on the occasion of the Fourth UN Conference on LDCs. It aims to be illustrative rather than comprehensive by showcasing examples of innovative policies and practices, identifying emerging opportunities and challenges for a green economy transition in LDCs, and stimulating further discussion amongst interested stakeholders.

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# Tapping New Green Growth Options for Improved Development Prospects

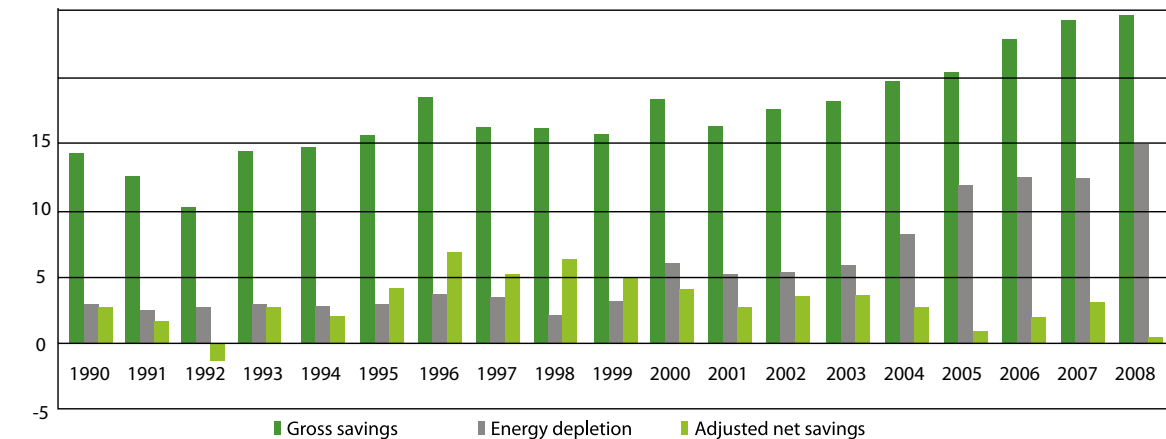


Persistent poverty and low human development in LDCs can only be reversed if structural constraints underpinning LDCs' economic vulnerability are addressed.<sup>1</sup>

This requires a removal of constraints on productive capacities such as poor access to energy, the preservation and enhancement of ecosystems and ecosystem services including fisheries and forests that form the basis of livelihood of the poor, and more resilient food and agricultural production systems. The experience of the last three decades is illustrative of how a growth and development approach concentrated

on "growth enclaves" has failed to reduce poverty and create employment for the vast majority of people in LDCs. The current development approach is also not environmentally sustainable. For example, when national savings in LDCs are adjusted for depletion of natural resources (of which energy depletion is the most significant component), they had been steadily declining since the late 1990s and were almost zero in 2008.<sup>2</sup>

Savings and depletion of natural resources in LDCs, 1990–2008 (percentage of GNI)



Source: UNCTAD, 2010. *The Least Developed Countries Report 2010: Towards a New International Development Architecture for LDCs*.

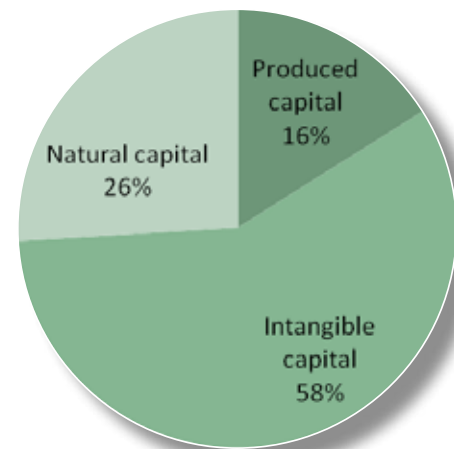
1- UN-OHRLLS, 2011. *Compact for Inclusive Growth and Prosperity: Report of the United Nations Secretary-General's Eminent Persons Group on the Least Developed Countries*.  
2- UNCTAD, 2010. *The Least Developed Countries Report 2010: Towards a New International Development Architecture for LDCs*. United Nations: New York and Geneva.

# Why a Green Economy Matters for the Least Developed Countries

## Seizing the moment

**LDCs are well positioned in the transition to a green economy given their low-carbon profile and rich natural capital and cultural assets.** Relative to larger economies, LDCs are generally characterized by low-levels of carbon emissions and relatively low investments in polluting technologies. On the other hand, poorer countries are more dependent on natural resources, making ecosystem degradation, resource scarcity and climate change particularly challenging to ending poverty. Investments and policy reforms that reduce environmental risks and ecological scarcities are therefore critical to improving human well-being and social equity in these countries.

Shares of Total Wealth in Low-income Countries, 2000



Source: World Bank, 2006. *Where is the Wealth of Nations? Measuring Capital for the 21st Century*

## Energy access is central

**Bringing electricity to the rural poor is one of the most important contributions that a green economy can make to LDC economies.** Lack of modern electricity infrastructure in rural regions and access to the development options that electricity opens are persistent impediments to economic development in LDCs where 77 per cent of the population is without access to electricity.<sup>3</sup> Most affected are the 71 per cent of the population of LDCs that live in rural regions who rely on biomass burning as the only source of energy. Not only does biomass burning provide extremely limited utility – heating and cooking only – but it also results in deforestation and desertification that limits future agro-forestry productivity as well as indoor pollution that poses a serious health hazard for the rural poor. Rural electricity thus remains a fundamental need in LDCs to improve environmental health conditions, light homes and schools, run information and communication systems, refrigerate food and medicines, and power rural businesses and industry. Extending rural electrification can also help to enhance linkages between rural farming and non-farming activities, which will be a powerful mechanism of both growth and poverty reduction.

**However, bringing electricity to the rural poor has been a persistent challenge for LDCs.** Resource constrained governments often find the costs of extending national grids prohibitive and such investments are generally unattractive or entail too high a risk for the private sector. It is only in recent years with declining costs of renewable

energy technologies that the green economy has emerged as an economically viable approach to electrify LDCs' rural regions employing remote off-grid electricity generation systems. Commercializing renewable energy systems to serve domestic markets now represents an attractive green growth option. Not only can it provide electricity to the rural poor to open new rural economic development pathways, but it also reduces poverty by creating local manufacturing jobs for related hardware and for the financing, distribution, installation and maintenance of renewable energy systems. Income generating applications linked to existing agro-forestry or tourism industries can help drive the local economy.

**LDCs will benefit from more affordable access to renewable energy systems in a greening global economy.** As the transition proceeds, high levels of demand for renewable energy technologies in developed country markets stimulate increasing innovation and economies of scale resulting in improved performance and falling prices. This makes off-grid rural electrification projects increasingly attractive to private sector investors considering community-scale hydro, biomass, wind and solar facilities; and to individual businesses and households seeking to install small renewable energy systems. Some LDCs, including Bhutan, Nepal, Senegal and the United Republic of Tanzania, have successfully stimulated rural electrification projects by mainstreaming renewables as a central technology option in national energy strategies.

## From waste to wealth

**Within the infrastructure services sector, other green business opportunities can be found in solid waste management and recycling in urban areas.** As with renewable energy, projects that maximize local content and local knowledge contribute to local job creation and income multiplying effects.

**Turning waste into a dynamic business in Bangladesh** - Over 6 million people live in Dhaka, each day producing over 3,000 tons of household waste. The city collects less than half of it; the rest remains on roadsides, in open drains and in low-lying areas. A company called Waste Concern, founded in 1995, turned this environmental crisis into a green business opportunity by collecting and recycling organic waste. Waste Concern utilizes the waste in a composting scheme that provides organic fertilizer to the nation's farmers while significantly reducing national greenhouse gas emissions.

The company has also attracted foreign direct investment through an agreement with a Dutch company to develop two Clean Development Mechanism (CDM) projects. Based on its success in Bangladesh, Waste Concern is now assisting 10 Asian and 10 African cities in replicating its model. A regional recycling training centre was opened in Dhaka in 2010 to benefit international participants.

Source: Adapted from the Social Entrepreneurs Brochure 2011, the Schwab Foundation for Social Entrepreneurship.

3- UNDP and WHO, 2009. *The Energy Access Situation in Developing Countries, A Review Focusing on the Least Developed Countries and sub-Saharan Africa.*



## Why a Green Economy Matters for the Least Developed Countries

### Building on natural capital assets

**LDCs are endowed with rich natural resources amenable to ecotourism, which is commonly perceived to be tourism in natural surroundings, making ecotourism another major green growth option for many LDCs.** In 23 out of the 48 LDCs international tourism is among the top three foreign exchange earners, with island LDCs exhibiting a high dependence on tourism. Ecotourism is built on small-scale community-led tourism operations that preserve natural ecosystems and generate employment for unskilled rural laborers in locales without the capital necessary for industrial activities. The ecotourism industry has matured considerably over the past decade and some industry projections position ecotourism to capture 25 per cent of global tourism revenues in 2012.<sup>4</sup> Excluding domestic receipts, global ecotourism revenue from international tourists could be as high as US\$ 240 billion with the majority of destinations in developing countries.

Although several LDCs such as Lao People's Democratic Republic, Madagascar, Nepal and Tanzania have begun to develop the sector, substantial opportunities remain for others to do so as well. The variety in products offered by ecotourism, and tourism more generally, and their linkage with other economic sectors can help LDCs to strengthen and vertically diversify their economy while promoting rural community development and generating profitable businesses that conserve natural resources. Moreover, carbon sequestration is another area where developing countries are offering green services in global markets. For example, international funds through the United Nations REDD (Reducing Emissions from Deforestation and Degradation) Programme compensate land owners for keeping forests intact and reforesting degraded areas.

#### Ecotourism in Laos experiences rapid growth -

In Laos, ecotourism has become a thriving economic activity accounting for about half of total tourism revenue. Overall, the number of international arrivals in Laos has jumped from 1 million in 2005 to over 2 million in 2009, with most foreign tourists coming from other countries in the region, principally Australia, China, Thailand and Vietnam. Much of this success is attributed to a National Ecotourism Strategy Action Plan established by the Lao Tourism Administration. The strategy builds on successful demonstration projects to introduce ecotourism in the country that began in 1999 and benefited from support from multilateral and bilateral donors including UNESCO, the European Union, and the German and New Zealand governments. Main thrusts of the strategy are the sustainable use of the natural and cultural resources and the delivery of measurable socio-economic benefits to local communities.

Source: Lao Tourism Administration.

### Diversification and value addition in agriculture

**A green economy offers significant opportunities for LDCs to diversify their agricultural sector through horizontal diversification into organic crops.** Agriculture continues to be the primary motor in LDC economies where it accounts for between 30 to 60 per cent of the GDP and employs up to 80 per cent of the national workforce.<sup>5</sup> The sector supplies the bulk of basic food and provides



subsistence and other income to more than half of the LDCs' population. Sustainable agricultural production protects natural ecosystems and yields natural products, including organic products, that are benefiting from growing demand. The global market for organic food and beverage products is projected to reach US\$ 60 billion this year; a more than three-fold expansion from 2000 levels.<sup>6</sup> Organic farming is practiced on 37 million hectares in 160 countries; a nearly four-fold increase over the past decade. Increases in organic farmland are now occurring predominantly in developing countries to respond to growth in global demand for organic products. The number of LDC producers is growing. About 75 per cent of the more than 1.8 million producers worldwide are farmers, mostly smallholders, in over 110 developing countries, with large numbers in LDCs such as Burkina Faso, Ethiopia, Tanzania and Uganda. Beyond organic food and beverages, consumer preferences for organic fibres such as organic cotton, wool, hemp and silk are providing new income opportunities for LDC farmers; and, international cosmetic firms are sourcing increasing volumes of organic oils, waxes, fats and herbs from LDC producers. Practical approaches toward diversifying LDC economies includes horizontal and vertical diversification, and strengthening inter-sectoral linkages, in the agriculture and tourism sectors.

**Producing sustainably harvested timber is another area where LDCs can increase their presence in greening global markets.** Sustainable forest management seeks to strike a balance between society's increasing demands for forest products and benefits and the preservation of forest health and



diversity. This balance is critical to the survival of forests and to the long-term prosperity of forest-dependent communities. Most sustainably harvested timber is certified by the Forest Stewardship Council (FSC). FSC assists many LDCs in developing national standards and marketing activities for producers. Globally, total FSC certified forest land area has increased seven-fold over the past decade to reach nearly 140 million hectares in 2010 with developing countries' share of this total rising to about 20 per cent. LDCs involved in FSC certified production include: Laos, Mozambique, Nepal, Republic of Congo, Tanzania and Uganda.

### Sustainable urbanization

**Economic empowerment of rural areas will contribute to reducing the unsustainable trend of rural-urban migration while allowing a better planning of urbanization in LDCs.** As in other parts of the world, urbanization is progressing fast in LDCs. Key to the challenges facing poorer countries is the massive inflow of rural poor into urban centres, leading to growing slums under unsuitable living conditions and lack of access to basic services such as sanitation, clean water, energy and transport. The large demand for new construction offers LDCs options for deploying already available technologies which can increase energy and resource efficiency in this area. As many LDCs have social housing programmes, ensuring that such programmes include design criteria and construction practices that support sustainable building principles can enhance living conditions for low income communities in urban settlements.<sup>7</sup>

4- The International Ecotourism Society, 2006. *Global Ecotourism Fact Sheet*.  
5- UNCTAD, 2010. *Globestat*.

6- Willer, H. and Kilcher, L., 2011. *The World of Organic Agriculture*, IFOAM, Bonn, and FiBL.  
7- For more information, please see Sustainable Urban Social Housing Initiative (SUSHI) <http://www.unep.org/sbc/>



# Pathways to a Green Economy Transition

预览已结束，完整报告链接和二维码如下：

[https://www.yunbaogao.cn/report/index/report?reportId=5\\_9797](https://www.yunbaogao.cn/report/index/report?reportId=5_9797)



National development plans and strategies can provide the overall policy framework to orient interventions by public authorities and private actors.

Experience in developed countries and emerging economies demonstrate that governments can set the frameworks that drive a process of transformative change, as seen in the Republic of Korea's Five-Year Plan on Green Growth (2008-2012) or China's 12th Five-Year Development Plan for 2011-2015. In the same vein, a number of developing countries and LDCs have adopted long-term and medium-term development plans that integrate the environment and investment thereby enhancing their environmental assets as overall development priorities. Clear strategies and policies have greater chances to lead to an allocation of public resources and to encourage private investment and community participation to achieve positive change.

For example, Rwanda's Vision 2020 provides a strategic direction for the country and a set of measurable policy goals with regard to population, land and management and utilization of natural resources and other socio-economic sectors. Rwanda integrated environmental targets in its Economic Development and Poverty Reduction Strategy and subsequently adopted an Environment and Natural Resources Sector plan (2009 - 2013) "Towards a Green, Clean, Healthy and Wealthy Rwanda". Nepal's Three-Year Interim Development Plan for 2011-2013 lays particular emphasis on increasing public expenditure to assist relief and generate employment.

## Community Forest Management in Nepal

Forests account for almost 40 per cent of the land in Nepal. The Forest Act and Forest Rules recognize Community Forest User Groups as "self-governing autonomous corporate bodies for managing and using community forests", giving a prominent role to community forest management. Such an approach generates employment and income from forest protection, gains from tree felling, log extraction, and non-timber forest products.

Community forestry has contributed to restoring forest resources in the country, turning an annual rate of decline in forest cover of 1.9 per cent during the 1990s, into an annual increase of 1.35 per cent over the period 2000 to 2005.

The Plan includes development for physical infrastructure such as the effective use, management and conservation of forests by communities, expanding electricity to rural populations through the use of hydropower, and planning for effective transport through the construction of "green roads" for remote village communities.