The role of green economy in sustainable development

Presentation by

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The role of green economy in sustainable development

1. Green Economy Initiative

Origins and Background

Shifting to Green Economy

Global crises provide an opportunity to reconsider traditional growth models.

Global momentum for transition to a green economy:
- G20 reaffirmed commitment to “move toward greener, more sustainable growth” (Sept 2009)
- UN CSD 2012 (Rio+20): “green economy in the context of sustainable development and poverty eradication”

GEI’s Mission

“Advising clients on Greening their Economies, by working with extensive partnerships of institutions and experts and using a range of research products infused with thought leadership”

Green Economy: The Need for Change

Meeting the dual goals of sustainability:
- High human development and low ecological impact

Meets minimum criteria for sustainability
Green Economy Working Definition

“**A Green Economy** can be defined as one that results in improved human well-being and social equity, while significantly reducing environmental risks and ecological scarcities.”

2. Green Economy Data Trends

Green Economy and Climate Change

Scenarios for GHG emissions from 2000 to 2100 (assuming no additional climate policies are brought into effect and estimates of corresponding surface temperatures)

- In 2008, investments in renewable energy generation ($140 billion) surpassed investments in fossil fuel power generation ($110 billion)
- Projected investments in renewables could generate 20 million jobs
- REDD-PLUS - Investments in reducing emissions from deforestation, forest degradation, and sustainable management of forests

Green Economy & Climate Change

- Business-as-usual risks increasing greenhouse gas emissions by 93% by 2100 (IEA) and raising average global temperatures by 6°C (IPCC)
- Emissions linked to deforestation and forest degradation account for nearly 20% of global greenhouse gas emissions

Opportunities

Challenges

Green Economy and Resource Efficiency

**Humanity’s Ecological Footprint, 1961-2005**

Lost Capital

- Earth has lost 40% of forests over the 300 years
- Since 1990, the world has lost roughly half of its wetlands, which slow floodwaters, protect uplands from erosion and improve water quality
- Some 30% of coral reefs, essential for biodiversity, have been damaged through fishing, pollution or disease

Investment - increases net welfare gains from economic activities by “doing more and better with less”
- Global market for environmental products and services is projected to double from $1.37 trillion per year to $2.74 trillion by 2020
- Increasing demand - markets for organic food and beverages expanding on average 10-20% per annum

Economic activity currently consumes more biomass than the Earth produces (i.e. the ecological footprint exceeds our planet’s resources)

Opportunities
- Selecting and driving transformation in key sectors - critical or highly material for greening the global economy
- On enabling conditions (finance, subsidies, taxes, regulations, and related reforms that achieve GE objectives)

Challenges
- Incentives for eco-innovation: CLEAR POLICY SIGNAL!
- Approximately 2.6 billion people rely on agricultural production systems for their livelihood (FAO 2009)
- 525 million small farms worldwide, 404 million less than two hectares of land (Nagayets 2005), small farms cultivate 60 percent of arable land (Herron et al. 2010)
- 10 percent increase in farms yields -> 7 percent reductions in poverty in Africa, more than 5 percent in Asia
- Green farming practices have increased yields, especially on small farms, between 79 and 180 percent.

Agriculture
- An increase in overall GDP coming from agricultural labor productivity is on average 2.5 times more effective in raising the incomes of the poorest quintile in developing countries than an equivalent increase in GDP coming from non-agricultural labor productivity.
Fisheries

Example: Fisheries sector

Types of subsidies – leave $8 bn ‘good’ subsidies: MPA’s, fleet retireals, skills training, livelihood dept

<table>
<thead>
<tr>
<th>Type of subsidy</th>
<th>Impact</th>
<th>Example</th>
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<tbody>
<tr>
<td>Good</td>
<td>Enhance the conservation of fish stocks over time</td>
<td>Funding fisheries management/ closing government spending to operate marine protected areas</td>
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<td>Bad</td>
<td>Lead to overcapacity and excessive catches</td>
<td>Fuel subsidies</td>
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<tr>
<td>Ugly</td>
<td>Can either ‘cannibalise a fish stock or deplete &amp; further’</td>
<td>Buyback or deprecimation to fishing sector to reduce a fleet size</td>
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Water

Aggregated global gap between existing accessible, reliable supply and 2030 13 water withdrawn, assuming no efficiency gains

![Graph showing water access and supply](image)

Enabling Conditions

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<tr>
<th>Financial</th>
<th>Institutional</th>
<th>Economic</th>
<th>Infrastructure</th>
<th>Information-based</th>
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4. Green Economy

**Success Stories**
Uganda – OA Transformation

Challenges
Agricultural Dependence

85% of the population and 4% of GDP, both of exports earnings

Organic Agriculture

Climate Contribution
48–68% lower carbon emissions
Carbon Sequestration
Business Opportunity

80% of exports earnings

U.S. $22.8 million (2007/8)
U.S. $6.2 million (2004/5)
U.S. $3.7 million (2003/4)

OA Exports in Uganda

Bangladesh – Solar PV

Challenges
Access to Electricity

Rural Area

37% no access, mostly rural area

Bangladesh – Solar PV

Innovative Business Model

As of 2010

300,000 SHSs installed

96 women employed

600 youth trained

In coming years

Planning to train 5,000 women

Instruct 14,000 school children

Aiming to create 10,000 jobs by 2015

Solar Home Systems (SHSs)

Bangladesh – Solar PV

Innovative Business Model

Grameen Shakti (GS)

Bangladesh – Solar PV

Brazil – Sustainable Cities

Challenges
Urbanization

Slum Growth

Become almost synonymous

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Brazil – Sustainable Cities

Curitiba, Bus Rapid Transit System, 45% public transport ridership

Thank you

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www.unep.org/greeneconomy