

Green Economy

Challenges and Opportunities

Not a new concept

- As early as 1989: “Blueprint for a Green Economy”
 - Main idea: economics can and should come to the aid of environmental policies
 - The authors argued that sustainable development was not achievable given the structure of the economy

What is the green economy?

- In Rio 1992, the concept of green economy was being discussed in relation to sustainable development
 - The Rio Declaration included principles promoting the internalization of environmental costs and the use of economic instruments
 - It also called for the elimination of unsustainable consumption and production

10 years later: Johannesburg

- The Johannesburg Plan of Implementation identified the need to **change** the way societies **produce and consume**
 - International expert meetings emphasized the promotion of social and economic development within the carrying capacity of the environment

- Basic economic paradigm/model: economic growth through the utilization or exploitation of natural resources
- “Misallocation of capital”: over the past 20 years, capital was invested into property, fossil fuel development and structured financial assets
 - In comparison, little money was poured into renewable energy, energy efficiency, public transportation, sustainable agriculture, ecosystem and biodiversity protection and land and water conservation

- The market encouraged this:
 - Allowing businesses to accumulate economic externalities—and letting them get away with no accountability
 - Externality: cost that affects a party who did not incur that cost or benefit
 - Example: pollution as a by-product of industry; usually industries do not pay for this, but others are affected by the pollution and pay the price in terms of impact on health
 - These are invisible costs: who pays for this?

- The concept of green economy introduced the idea of delinking economic growth and environmental degradation, by:
 - improving efficiency and sustainability in the use of resources and production processes, and
 - reducing resource degradation pollution and waste

UNEP 2010

- Defines green economy as one that results in “improved human well-being and social equity, while significantly reducing environmental risks and ecological scarcities” (UNEP 2010).
- In its simplest expression, a green economy is:
 - low-carbon
 - resource efficient
 - And socially inclusive

“Myths” of the green economy

1. There is an inescapable trade off between environmental sustainability and economic progress
2. Only wealthy countries can afford to have a green economy

Transitioning to a green economy

- Eliminate the trade-offs between economic growth and gains in environmental sustainability and social inclusiveness
 - Create the enabling conditions that will encourage public and private investment to incorporate environmental and social criteria
 - Review environmental indicators to account for pollution, ecosystem services

- Reconcile the competing economic development **aspirations** of rich and poor countries
 - Green economy presents a new development path that reduces carbon dependency, promotes efficiency and lessens environmental degradation

Green economy and consumers?

- The consumer is the most important link in the value chain
 - Will consumers “buy” the idea of a green economy?
 - Global growth means the expansion of the middle class – and this sector has growing aspirations
 - “The American Dream”

What does the consumer want?

- In 2011, a European Commission survey was conducted that said:
 - 72% of respondents were willing to buy green products
 - Only 17% actually did buy green products within the next month
- How to make green products more desirable and more “emotional”

<http://forumblog.org/2012/01/more-with-less-will-consumers-buy-it/> - only 17%

Green Consumers

- Are sincere
- Judge their efforts as inadequate
- Are not looking for perfect companies – just ones that are trying to make a difference

http://www.iisd.org/business/markets/green_who.aspx

Green Consumers

- Overstate their green behavior – including the green products they actually use
- Want environmental protection to be easy and not to entail major sacrifice
- Tend to distrust company claims unless verified – “greenwashing”
- Lack knowledge and don’t trust themselves to make evaluations about environmental impact – but are willing to learn

Natural Capital: Underlying components and illustrative values

Biodiversity	Ecosystem goods and services	Economic values
Ecosystems (variety and extent)	Recreation Water Regulation Carbon Storage	Avoiding greenhouse gas emissions by conserving forests – US\$ 3.7 trillion
Species (diversity and abundance)	Food, fiber, fuel Design inspiration Pollination	Contribution of insect pollinators to agricultural output – US\$ 190 billion/year
Genes (variability and population)	Medicinal discoveries Disease resistance Adaptive capacity	25-50% of the US\$ 640 billion pharmaceutical market is derived from genetic resources

The Economics of Ecosystems and Biodiversity (TEEB)

Economically and socially inclusive?

- Green economic potential
 - Agriculture, forestry, fishery, water management
 - Investments in these sectors are likely to benefit the poor: through creation of jobs and securing livelihoods based on ecosystem services
 - But this is not automatic: still need a pro-poor orientation
 - Ex. Organic farming is an opportunity for farmers, but it still needs policies to ensure extension and support services for it to really benefit people

The experience of South Korea

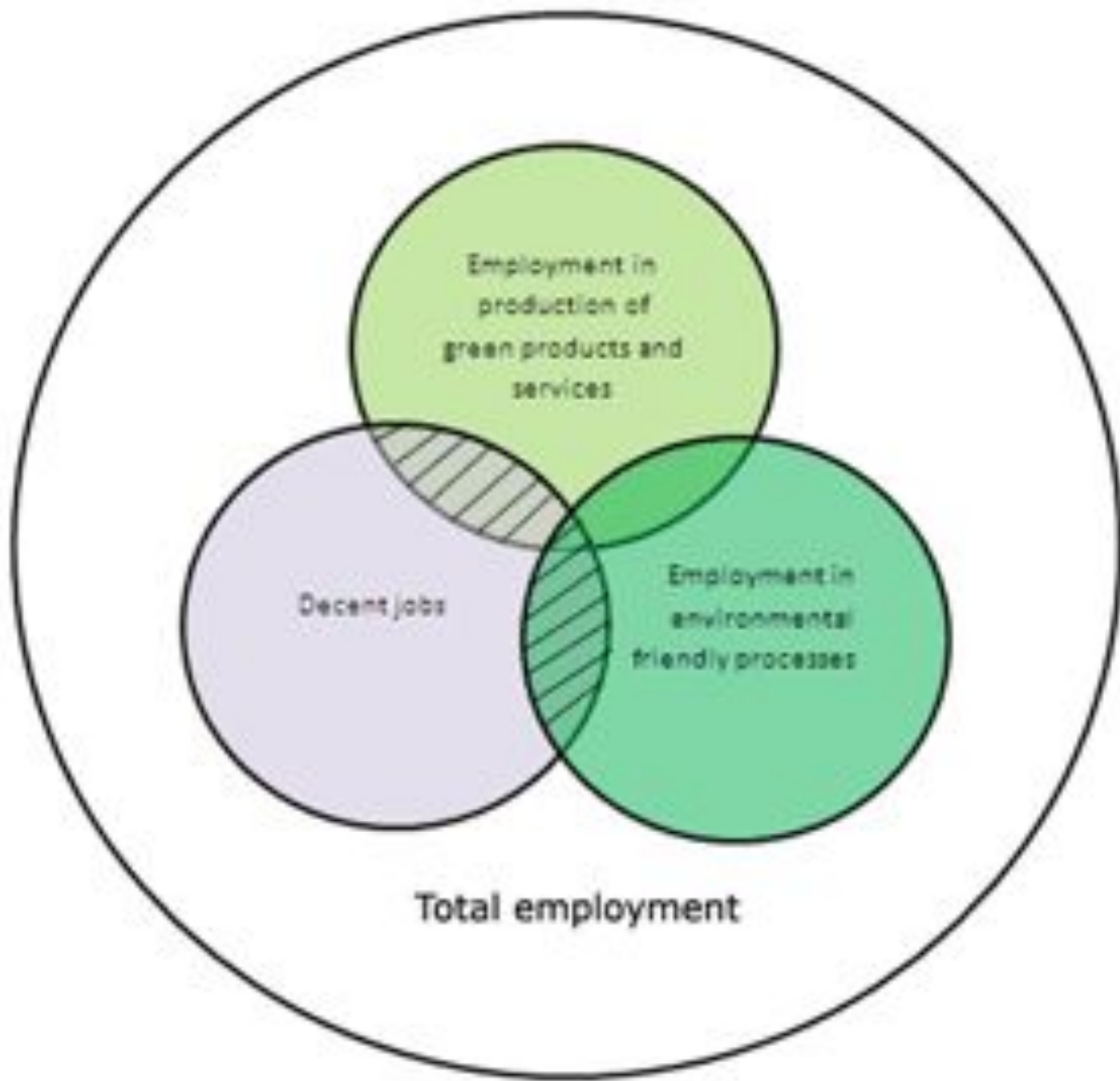
- July 200: South Korea announced its National Strategy for Green Growth
 - Shifting its economic structure away from energy-intensive industries
 - Target goal: reduce greenhouse gas emissions by 30% from a business as usual path by 2020 and increase the country's renewable energy to 11% of total energy supplies by 2030
- South Korea's government announced plans to continue making investments in innovative, low-carbon technologies for renewable energy, waste management, public transportation and construction, and to create enough new jobs in these sectors to offset the loss of employment in current carbon-intensive industries, such as mining, petroleum refining, and fossil fuel power generation.

Green Jobs?

- According to the International Labor Organization:
 - Green jobs are decent jobs that contribute to preserve or restore a sustainable environment, be they in traditional sectors such as manufacturing and construction, or in new, emerging green sectors such as renewable energy and energy efficiency.

http://www.ilo.org/global/topics/green-jobs/news/WCMS_220248/lang--en/index.htm

- At the enterprise level: a green job can produce goods or provide services that benefit the environment
 - Green buildings or clean transportation
 - However, these green outputs might not always be based on green production processes or technologies
 - A green job can also be distinguished by their contribution to more environmentally friendly processes



Employment in
production of
green products and
services

Decent jobs

Employment in
environmental
friendly processes

Total employment

“Just” transition to green jobs

- While the green economy will create new jobs, it will also mean downsizing in industries that are traditionally emissions or pollution intensive
- New skills are needed for newly emerging jobs
 - Without training, the transition will be impossible

http://www.ilo.org/global/topics/green-jobs/WCMS_214247_EN/lang--en/index.htm

Payment for Ecological Services

Types of Ecosystem Services

	Forests	Oceans	Cultivated / Agricultural Lands
Environmental Goods	<ul style="list-style-type: none"> • Food • Fresh water • Fuel • Fiber 	<ul style="list-style-type: none"> • Food 	<ul style="list-style-type: none"> • Food • Fuel • Fiber
Regulating Services	<ul style="list-style-type: none"> • Climate regulation • Flood regulation • Disease regulation • Water purification 	<ul style="list-style-type: none"> • Climate regulation • Disease regulation 	<ul style="list-style-type: none"> • Climate regulation • Water purification
Supporting Services	<ul style="list-style-type: none"> • Nutrient cycling • Soil formation 	<ul style="list-style-type: none"> • Nutrient cycling • Primary production 	<ul style="list-style-type: none"> • Nutrient cycling • Soil formation
Cultural Services	<ul style="list-style-type: none"> • Aesthetic • Spiritual • Educational • Recreational 	<ul style="list-style-type: none"> • Aesthetic • Spiritual • Educational • Recreational 	<ul style="list-style-type: none"> • Aesthetic • Educational

Source: Millennium Ecosystem Assessment (2005) <http://www.millenniumassessment.org/>

Payment for Ecological Services

- At present, many of these services are undervalued or have no financial value at all
- Markets are now emerging for ecosystem services

- The defining characteristic of a payment for ecosystem services (PES) approach is that external ES beneficiaries make direct, contractual and conditional payments to local landholders and users in return for adopting practices that secure ecosystem conservation and restoration (Wunder, 2005).
 - In essence, ES providers are compensated for their efforts to safeguard ecosystem services, thus ensuring their ongoing provision.

- The focus is on ensuring the continuous supply or flow of that ecosystem service in exchange for something of economic value
- However, critical to PES is that the payment causes the benefit to occur where it would not have otherwise
 - Therefore sellers must maintain or enhance specific ecosystems and functions beyond what would be expected in the absence of payment
 - Remain accountable verifiers to ensure that the service being paid for is indeed delivered



- BPI partnered with the IFC to boost private sector investments in energy efficiency,
- Most of the projects financed in 2013 were energy efficiency projects

- The projects financed by SEF loans resulted in 28.7 percent growth in total energy saved to 115,613 megawatts in 2013 from 89,821 MW in 2012.
- Clean energy produced jumped substantially to 1.1 million MW from 630,742 MW, while green house gas emissions avoided in 2013 reached 808,793 tons from 645,774 tons in 2012.

“We all need to work together because there are no jobs on a dead planet; there is no equity without rights to decent work and social protection; no social justice without a shift in governance and ambition; and, ultimately, no peace for the peoples of the world without the guarantees of sustainability.”

Sharan Burrow, General Secretary, International Trade Union Confederation; Member of the World Economic Forum Global Agenda Council on Employment & Social Protection.

<http://forumblog.org/2012/06/green-jobs-for-a-growing-world/>

References

- The website <http://www.unep.org/greeneconomy/> contains many documents and references on green economy.
- A Guidebook to the Green Economy. UN-DESA 2012.
<http://sustainabledevelopment.un.org/content/documents/GE%20Guidebook.pdf>
- Green Economy Report. UNEP 2011.
<http://www.unep.org/greeneconomy/greeneconomyreport/tabid/29846/default.aspx>
- Green Economy: Valuing Nature. UNEP.
http://www.unep.org/greeneconomy/Portals/88/GE_VALUING%20NATURE_final.pdf

- Payments for Ecosystem Services: Getting Started with PES. A Primer.

[http://www.unep.org/pdf/
PaymentsForEcosystemServices_en.pdf](http://www.unep.org/pdf/PaymentsForEcosystemServices_en.pdf)