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Introduction to the concept of green jobs

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1. Concept of Green Jobs

2. Green Jobs for a Green Economy

3. Experience from other countries

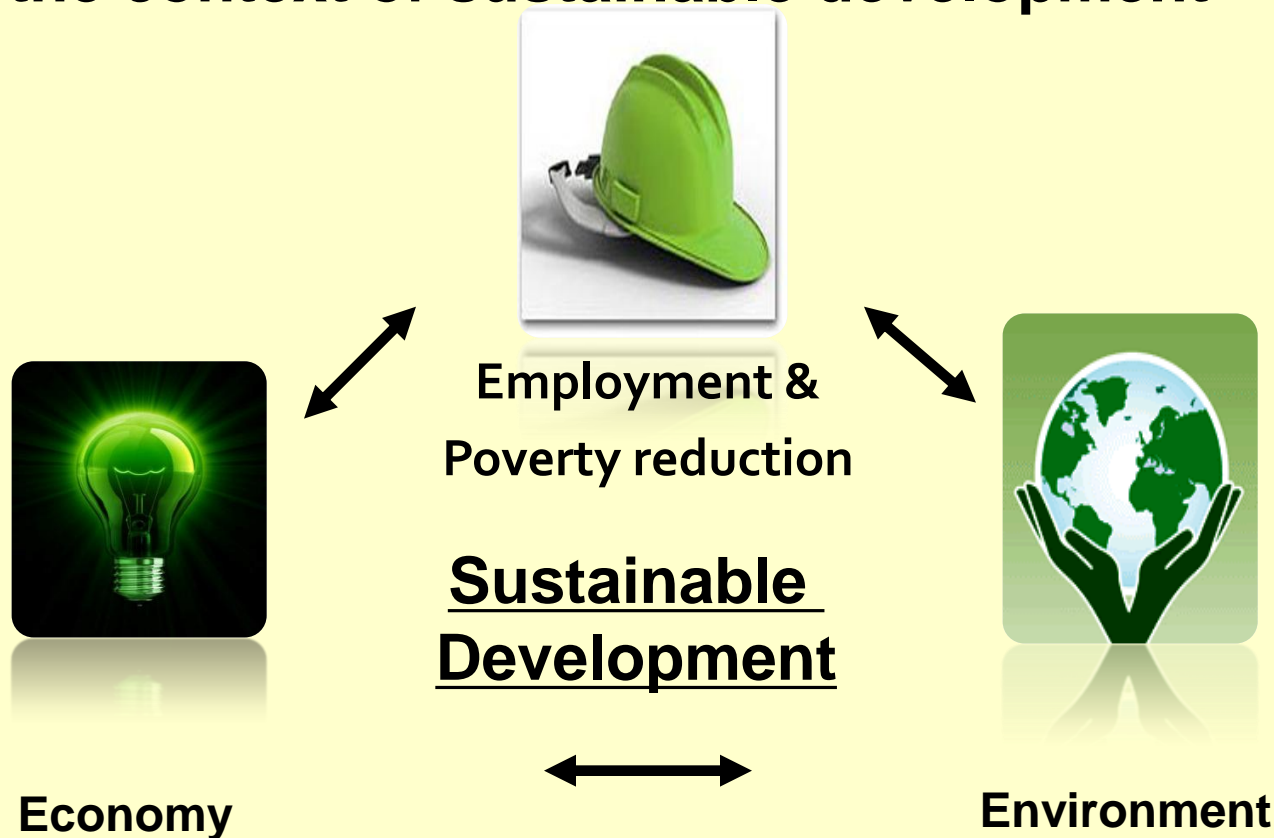
4. Lessons learnt, challenges and opportunities

1. Green Jobs and the Sustainable Development Agenda



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GJ links social policies with environmental and economic policies to achieve inclusive growth in the context of sustainable development





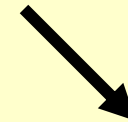
- **“Green Jobs can be generically defined as the direct employment created in economic sectors and activities, which reduces their environmental impact and ultimately brings it down to levels that are sustainable”.**
- **Green Jobs are based on the two pillars of Decent Work and Environmentally Sustainability;**

Decent Work (DW) + Environmental Sustainability (ES)

- ➔ **Green jobs pursue the goal of full employment, decent work for all and a low-carbon, environmentally friendly, climate resilient economy;**

the Decent Work dimension

Labor/social issues



The core ILS (8)

**OSH standards
HRD/TVET**

**(ILC 2007 conclusions on
sustainable enterprises)**



Engine of Growth



Environment

The Environmental scope



- **CLIMATE CHANGE**

 - **Greenhouse gases emissions reduction and capture**

 - **Prevention of deforestation and forest degradation**

 - **Adaptation to climate change and climate variability**

- **BIODIVERSITY – DESERTIFICATION**

- **ECO-SYSTEMS, LAND USE MANAGEMENT**

- **POLLUTION CONTROL: air, water, waste, contaminated soils,etc.**



Green national Standards, Voluntary Codes, etc

Organic Agriculture - [SNI 01-6729-2002 \(Indonesian National Standards\) on Organic Food System by National Standardization Agency of Indonesia](#)

Green Building and Construction - [SNI 03-6759-2002 \(Indonesian National Standards\) on Codes for Energy conservation designation of buildings; Green Star \(Australia\)](#)

Green Finance [Principles for Responsible Investment \(UN- PRI\)](#)

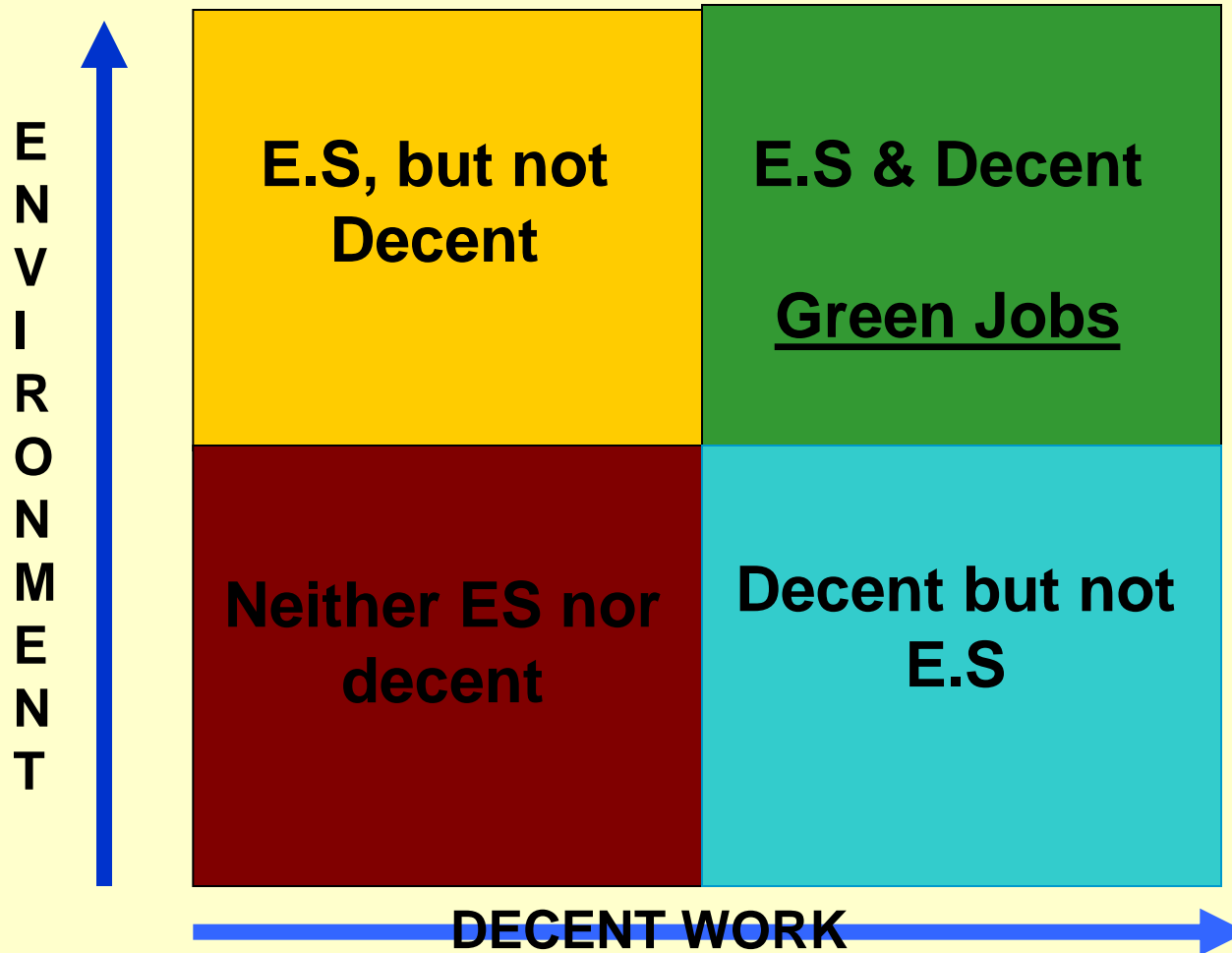
Sustainable Fisheries [Marine Stewardship Council Fishery Standards](#)

Sustainable Forestry [Forest Stewardship Council \(FSC\)](#)

Manufacturing and Industry [\(ISO\) 14064 of Greenhouse Gas Accounting and Verification](#)

Tourism [Green Globe 21 Standard](#)

Green Jobs – A Journey towards Decent Work and Environmental Sustainability





Green Jobs - A multi-dimensional, dynamic, concept

- **A Green Job in country A is not necessarily a Green Job in country B**
- **Not necessarily new jobs, but need to monitor difference**



2. Green Jobs for a Green Economy in the context of Sustainable Development and Poverty Eradication

- Key sectors for green jobs creation under the Green Economy : Agriculture, Green Buildings, Cities, Energy, Finance, Fisheries, Forests, Manufacturing, Tourism, Transport, Waste, Water and, **Enabling Activities**
- Opportunities exist for more Green Jobs,
- Sector based, country specific – need to properly identify them

Global Market Trends in Food Production



- **Sustainable forestry certification** increased by 181 % (last 5 years), 9 per cent of global forested land in 2009
- **Certified sustainable coffee** increased by 400% (last 5 years). 8 per cent of global coffee exports
- **Sustainable tea production** has grown by 5'000% (last 5 years). 7.7 per cent of global coffee exports
- **Sustainable banana** sales have grown by 63 % (last two years), 20 per cent of global exports in 2009
- **Sustainable cocoa** sales increased by 248 % (last 5 years), 1.2 per cent of global sales in 2008



Global Market Trends in Food Production

- Booming world markets
- Starting from a very tiny market
- Job substitution mainly - it is about maintaining jobs
- Africa, Americas,
- Asia lagging behind

Ecotourism, agro-ecotourism



- early 1990s, the fastest growing sector of the tourism industry, expanding globally between 20% and 34% per year.
- In 2004, growing 3 times faster than the global tourism industry as a whole (UNWTO)
- could grow to 25% of the world's travel market, by 2012
- Large potential for job creation, youth employment

EcoTourism World Congress, Ventiane, 2009



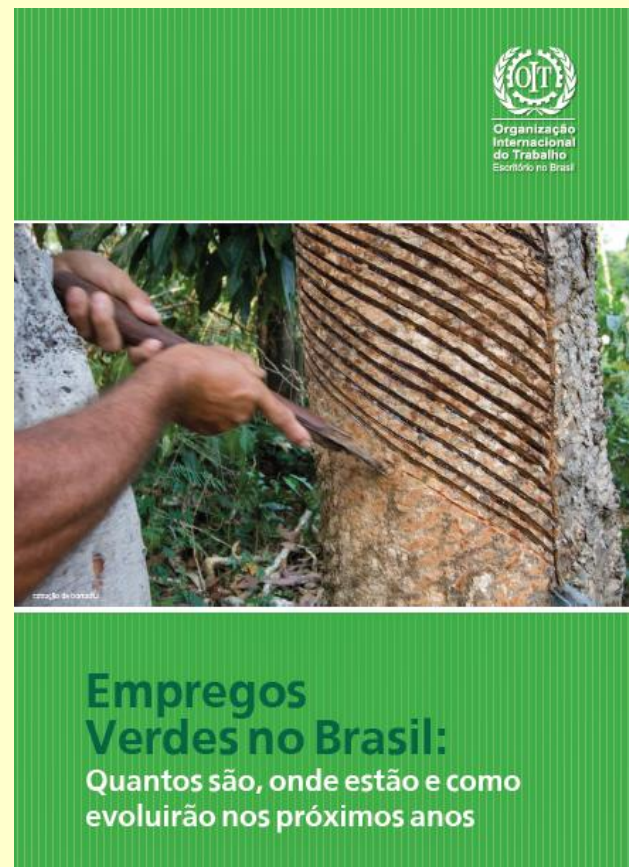
Adaptation to climate change

- **Negative impacts on livelihoods directly related to natural resources management, e.g. rural, coastal areas,**
- **Climate Adaptation policies**
 - Potential for job creation in natural resource management, irrigation, construction, transport
 - Options to optimize the social and employment benefits of climate adaptation policies
- **New international financial mechanisms**
 - Target 100 US\$ Bn/year
 - Half on climate adaptation (?)
 - Support to Least Developed Countries

3. Experience from other countries

National Profile Brazil

- 2.65 m formal green jobs
- 6.7% formal employment
- Growing faster than overall labor market



Korea Green New Deal: employment targetting



Green New Deal's nine major projects

(Units: people, billion won)

Project	Jobs	Investment
Refurbishment of the four rivers	199,960	14,477.6
Eco-friendly traffic network (railroads, etc.)	138,067	9,653.6
National green information (GIS) infrastructure	3,120	371.7
Water resource facilities (small and midsize dams)	16,132	942.2
Green cars and clean energy	14,348	2,052.7
Recycling resources (refuse-derived fuel, etc.)	16,196	930.0
Forest restoration	133,630	2,417.4
Energy conservation village and school	170,702	8,050.0
Environmentally friendly living space	10,789	483.8

Source: Ministry of Strategy and Finance

China - Projections



Total employment effects of low-carbon development in major sectors (2005-2020) (1'000 jobs)

Sectors	Sub-sectors	Direct Employment	Indirect Employment	Sub-total
Forestry (2005~2020)	Afforestation & Reforestation	7,600	11,085	18,685
	Sustainable Forest Management	188	61	249
	Forest tourism	3,154	3,616	6,770
Power Industry (2005~2020)	Thermal Power	251	29	279
	Wind power	848	2309	3,157
	Solar power	50	1,237	1,287
Core Industry	Iron and Steel (2007~2011)	-200	—	-200
Green investment (2008~2011)		175	357	532
Total^[1]		30,759		

Source: Chinese Academy of Social Science (CASS)/ILO project, 2010.

^[1] Here the simple measurement of sum total is only for reference, which includes incomparable data between sectors like forestry and iron and steel because different methodology and data resources. And some of the employment data in this table is average value.



Bangladesh

Looking at the relationship between environment, the economy and jobs.

	Core environment-related jobs	Direct 'Green' jobs	Indirect jobs
Sustainable agriculture	41,548	n.p.	47,482
Sustainable and participatory forestry	28,813	n.p.	28,121
Sustainable energy	18,823	18,823	50,561
Waste management and recycling	189,180	n.p.	212,753
Collection purification/distribution of water	8,441	n.a.	n.a.
Climate adaptation activities	1,726,755	616,052	967,849
Manufacturing and energy efficiency	10,934	10,934	21,472
Sustainable transportation	178,510	178,510	54,049
Sustainable construction	1,340,000	536,000 – 670,000	1,416,364
Total	3,543,004	1,427,319	2,798,651

Source: ILO/GHK, June 2010.



4. Lessons learnt, achievements

1. Environment and job creation can be mutually supportive

Opportunities exist in each country for more Green Jobs, including for the poor;



2. Recognition of the Need for a Just Transition for workers and enterprises to adapt to a changing environment - [Cancun Agreement](#) (long term vision, Dec 2010)

Addressing climate change requires a paradigm shift

- based on innovative technologies and practices
- more sustainable production and consumption
- while ensuring a **just transition of the workforce that creates decent work and quality jobs**



- 3. The green transition has started in the region and globally – great disparity in Asia & the Pacific between countries, sectors**
- 4. Green jobs is becoming central to the policy agenda in many countries**

ILO Global Study on skills for green jobs, 2011



Immediate challenges & tasks

- **Identify opportunities in each country**
- **Enhance capacity of the social partners**
- **Address the gaps in green skills**
- **Create green jobs for youth**
- **National Strategy for a job-rich NAPA with more green jobs**
- **Develop integrated services to sustain the development of green jobs**



Thank you

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