Introduction to Green Jobs Concepts (global and regional experiences)

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1. The two challenges of the 21st century

- Green jobs address the two defining challenges of the 21st century
  - Averting dangerous climate change and environmental degradation
  - Pressing need to deliver social development and decent work for all
The employment and social challenge

- Unemployed: 205 million globally, 83 m in Asia-Pacific
  - Of these, nearly 40 per cent are between 15 and 24 years of age
- One in five workers in extreme poverty (< $1.25/day)
  - Two-thirds of these workers in A-P
- World’s working age population to grow from 4.5 billion in 2010 to 5.2 b in 2025
  - Asia home to 300 m of these 700 m additional workers
- Only one in five working-age population have access to comprehensive social protection systems
The environmental challenge

- Climate change – sea level rise, increase in extreme weather events (storms, floods, droughts, water fall patterns, etc)
- (World population 1 bn 1900 – 9 bn 2050?)
- No access to potable water: nearly 900 million people
- No access to reliable energy: 3 billion households
- Nearly ¾ of world’s poorest depend on environment as a significant part of their daily livelihood

Environmental challenges have an far-reaching implications in terms of livelihoods and labour market dynamics
Responding to these challenges requires a far-reaching transformation to the way we produce, consume and earn a living.

- **Green jobs** will be a key element of this shift to a sustainable, low-carbon economy.
2. Green Jobs

Green jobs is defined by the ILO/UNEP as:

“employment created in economic sectors and activities, which reduces their environmental impact and ultimately brings it down to levels that are sustainable”
What do we mean by green?

- Green jobs contribute directly to reducing the environmental impacts of the economy
  - By enhancing green sectors (Green Jobs in renewable energy, pollution control, forestry, mass transport, eco-tourism…)
  - Improving the environmental performance of existing sectors (Greener Jobs in manufacturing, construction, tourism…)
  - Adapting to the effects of climate change (Green Jobs to build climate resilient infrastructure…)
A Green Job in country A is not necessarily a Green Job in country B

A green job today will not necessarily be a green job tomorrow
What do we mean by decent work?

The ILO’s Decent Work Agenda provides a framework with four strategic objectives:

1. **Fundamental principles and rights at work and labour standards**

2. **Employment and income opportunities** - opportunities for work that is productive and delivers a fair income

3. **Health and Safety and Security in the workplace and social protection for workers**

4. **Social dialogue and tripartism** - freedom for people to express their concerns, organize and participate in decisions that affect their lives
Impact of the transformation to a greener economy on sectors

Expansion of green sectors

- Eg. Recycling, eco-tourism

Some sectors will decline

- Eg. Some industries that cannot adapt

Most sectors will evolve

- Eg. Manufacturing, construction, transport
Examples of potential green jobs

Need to look at:
• environmental impact
• decent work element
Examples of potential green jobs

- Mangrove planter
- Mechanic for CNG propelled buses
- Manufacturer of fuel efficient car
- Sustainable farmer (resource management, carbon capture)
- Farmer in agro-forestry
- Workers in certified forestry
- E-Waste collector
- Architects and engineers designing renewable technologies and energy efficiency products

Need to look at:
- environmental impact
- decent work element
4. Estimating green jobs

- Green Dynamic Social Accounting Matrix (Green DySAM)
- Updated input-output tables incorporating green sectors,
- Assess and predict potential environmental and socio-economic impacts of climate mitigation and adaptation measures on employment and incomes.
- Labour ministries can develop programmes to undertake research on the labour market and track demands for green skills and green jobs.
- Mainstreaming employment targeting and employment impact assessments into economic and environment-related strategies.
- Employment and skills needs forecasting ought to be integrated into economic planning and integrated with environment-related agendas to anticipate new developments in the labour market.
4. Estimating green jobs

Bangladesh – 3.5 million existing core env-related jobs

<table>
<thead>
<tr>
<th>Sectors</th>
<th>Core env-related jobs</th>
<th>Direct ‘Green’ jobs</th>
<th>Indirect jobs</th>
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</thead>
<tbody>
<tr>
<td>Sustainable agriculture</td>
<td>41,548</td>
<td>n.a.*</td>
<td>47,482</td>
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<tr>
<td>Sustainable and participatory forestry</td>
<td>28,813</td>
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<td>Sustainable energy</td>
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<td>Waste management and recycling</td>
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<tr>
<td>Collection purification/distribution of water</td>
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<td>n.a.</td>
<td>n.a.</td>
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<tr>
<td>Climate adaptation activities</td>
<td>1,726,755</td>
<td>616,052</td>
<td>967,849</td>
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<td>Manufacturing and energy efficiency</td>
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<td>Sustainable transportation</td>
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<td>178,510</td>
<td>54,049</td>
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<td>Sustainable construction</td>
<td>1,340,000</td>
<td>536,000 –</td>
<td>1,416,364</td>
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<tr>
<td></td>
<td></td>
<td>670,000</td>
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<td>Total</td>
<td>3,543,004</td>
<td>1,427,319</td>
<td>2,798,651</td>
</tr>
</tbody>
</table>

GHK Consulting 2010

*n.a. – not available
4. Estimating green jobs

Bangladesh – 3.5 million existing core env-related jobs

• **800,000** of these jobs can be considered “green jobs” as they meet decent work standards.
• Core environment-related jobs and green jobs account for nearly 7% and 2% respectively of total jobs (49.5 million) in the economy.
• Another **4 million** jobs are indirectly supported as a result of these core environment-related and green jobs.
• Climate adaptation activities (62%) and sustainable construction (21%) account for most of the identified environment-related jobs

GHK Consulting 2010
*n.a. – not available*
Green jobs are affected by changes at all levels of the economy

National economic plans, social protection and the regulatory environment will create jobs and support decent working conditions

- **Micro level** – changing consumer behaviour, workplace practices.

- **Meso level** – industry and community initiatives eg. corporate social responsibility, green financing, sectoral programmes.

- **Macro level** – national economic plans, skills policies, social protection, regulatory environment.
Brazil

- 2.65 m existing formal green jobs (comprising 6.7% of the formal labour market)
  - For example, approx. 60,000 workers recycling industry
  - Green Social Housing - upgrading the informal settlements. 3 million affordable homes to be built using principles of green construction, creating green jobs and skills for local people, based on the U.K.’s Sustainable Code Level 6
India

- The Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) - employment-intensive growth policy focuses on conservation of resource bases in rural areas

- Links policies for poverty alleviation and income security with climate change adaptation and investments in natural capital

- Works are related to water, soil and land conservation activities such as recharging groundwater, reducing soil erosion, conserving biodiversity, reclaiming degraded lands and carbon sequestration

- Provided income security and a social protection floor to approximately 54 million rural households
South Korea

- The Four Major Rivers Restoration Project (2009)
- Part of governments Low Carbon Green Growth agenda
- Goal = water security, improve flood control measures, regenerate ecosystem vitality, new opportunities for rural economic development along the restored river routes.
- Created for 88,400 jobs (US$ 6.6 billion) for 2 years,
- Investments related to climate adaptation (eg. strengthening old levees, dredging sediment, expanding carbon sinks and flood monitoring technologies) mitigation: Photovoltaic and small hydropower power
Biogas Power Generation in Samoa

Trained villagers to build biogas digesters
Retrofitting Prefabricated Buildings
Mongolia

- Approximately 250,000 people (20% of the urban population) live in prefabricated buildings in Ulaanbaatar.
- 40% of the heating energy can be saved. A potential 60% or more is also possible with consumption-oriented heating tariffs.
**Skyrise Greenery Program Singapore**

- Urban greenery and ecology designed to enhance the urban living environment
- Reduces the need for air conditioners, saving energy and reducing GHG emissions.
China ACFTU: The Role of Trade Unions in Promoting Energy Efficiency

- Reducing emissions in the workplace and in advocating awareness and innovation about energy efficiency among workers.

- Training program to create 670,000 new energy efficiency inspectors.

- Ensuring workplaces and enterprises are compliant with environmental regulations.

- Rewards for innovative energy efficiency ideas; quiz and speech competitions; monthly energy reductions themed events and specific training programs for energy efficiency inspectors.

- ACFTU plans to build 800 new demonstration points and 50 female worker training and demonstration schools for green skill and re-skilling programs for laid-off and migrant workers.
Australia National Green Jobs Corp

• Green skills and accredited training to 10,000 young people (aged 17-24 years old) for employment in emerging green sectors.

• Integrated with variety of social protection policies

• Projects include; restoring degraded beaches, dunes, riverbanks, foreshores; land surveys and audits; building and repairing board walks; regeneration and replanting of degraded lands; wildlife and fish habitat protection; refurbishing public parks; building or repairing bikeways; landscaping gardens using native plants and work in recycling and waste management.
Thank you

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