



GREEN JOBS, JUST TRANSITION AND CLIMATE CHANGE : THE ILO EXPERIENCE

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Content of the presentation

1. Introduction to the concept of green jobs and their relationship to climate change
2. Some ideas for projects that combine employment and climate change agendas
3. Tools developed by the ILO in the framework of just transition and green job creation

Green jobs and their relationship with climate change



Decent
Work/Employment



Environment/
Climate change

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INCENDIOS EN CALIFORNIA »

Nuevos apagones masivos en California mientras brotan nuevos incendios

La compañía eléctrica deja sin luz a 179.000 clientes y avisa de que lo peor está por llegar. Al noroeste de Los Ángeles, un incendio obliga a evacuar a 49.000 personas



PABLO XIMÉNEZ DE SANDOVAL

Los Ángeles - 25 OCT 2019 - 14:54 CEST



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CHILE »

Chile se enfrenta a la mayor sequía de su historia

Se calcula que al menos 10.000 animales han muerto por la falta de agua, en las sets regiones especialmente afectadas



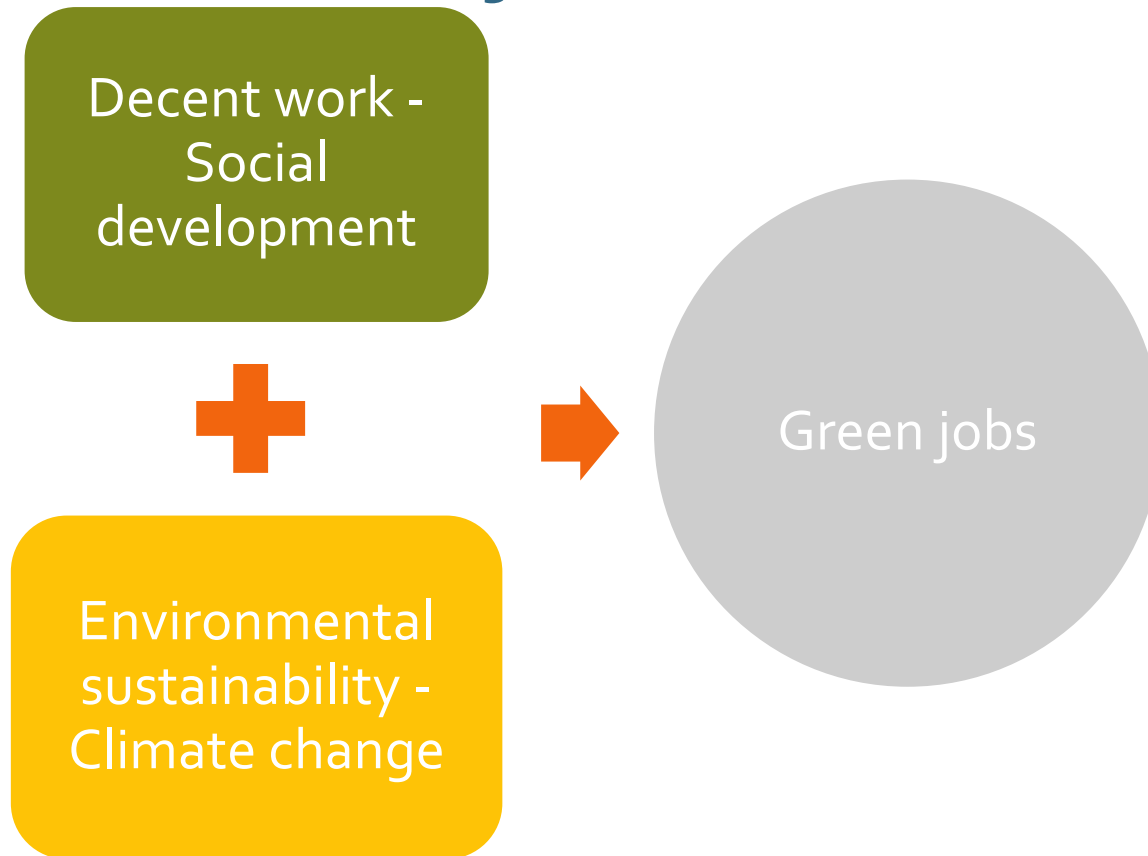
La laguna Aculeo, alguna vez un atractivo turístico, sin agua por la sequía. MDP

Employment and climate change.

Double direction

- The impacts of climate change, both gradual and extreme events, destroy employment, disrupt the functioning of the economy and damage the infrastructure needed for labour markets.
- Decarbonization and adaptation measures can be great generators of new employment if the right measures are taken. 24 million new jobs.
- Impact of natural disasters: Philippines, December 2014, Typhoon Hagupit affected 800,000 workers, caused economic losses and disruptions of supply chains in various sectors.
- Impacts of climate change on productivity and occupational health: Each year, thousands of working hours are lost due to environmental damage. In 2030, the number of hours worked will be reduced by 2% due to increased temperatures.

Green Jobs: uniting environmental and social objectives



Well managed, transitions to environmentally and socially sustainable economies can be an important engine for job creation, improved employment quality, social justice and poverty eradication.

Definition of green jobs (ILO)

Green jobs in decent working conditions that help protect and restore the environment (with potential in all sectors):

Specifically:

- Reduce consumption of energy and raw materials
- Limit climate change
- Reduce waste and pollution
- Protect and restore ecosystems
- Help us to adapt to climate change



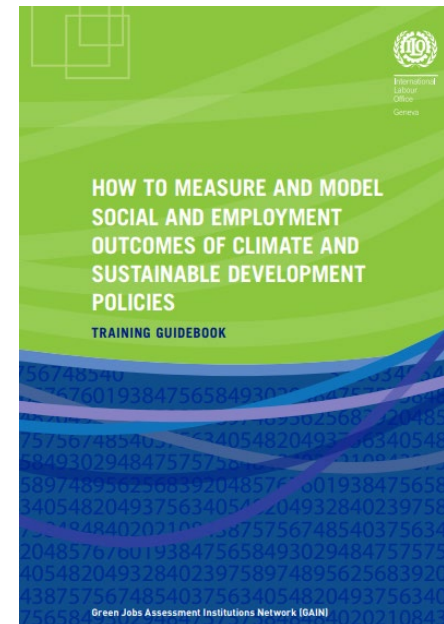
Some ideas for working together
employment and climate agendas

Climate policy (NDC) as a generator of employment-mitigation

Climate policy as a generator of employment	ILO tools and approaches
How many jobs can you create?	Analysis of the impact on the use of alternative investment scenarios
In which sectors?	Assessment of quantity and quality of green jobs at sectoral level in a territory and recommendations
Quality of employment created?	Analysis of decent employment deficits and recommendations for improvement Analysis of new vocational training needs - SKILLS
Equal opportunities between men and women?	Assessment of barriers to access green jobs Women's Entrepreneurship Development Programme (WED).
Is there any losing sectors?	Identify job destruction by sectors by climate measures
How can we help them be part of the transition?	Just Transition Policy. <ul style="list-style-type: none">• Social dialogue• Economic development alternatives• Business development programmes• Training and curricular adaptation

Evaluation of employment potential of NDCs

- Analysis of the impact on the use of alternative investment scenarios
- Following the **ILO methodology**:
 - India
 - Mauritius
 - WESO 2018 Report
- Job creation linked to alternative green investment scenarios according to input/output tables



Decarbonization of sectors, generators of employment



Las energías renovables dan empleo a más de diez millones de trabajadores

Only 35% are women and they mostly occupy administrative jobs.

Cuadro 6. Componentes de la inversión de un parque eólico^{a/} (porcentajes)

Componente de la inversión	Participación en la inversión global	Porcentaje mano de obra	Porcentaje equipos y materiales	Estimación de contenido local máximo		
				Mano de obra	Equipos y materiales	Otros
Hub, nacelle y generador	30,6	0	100		0	
Torre	18,2	0	100		32	
Sit de palas	12,2	0	100		0	
Obra civil - fundaciones	7,2	45	55	100	100	
Línea alta tensión	5,6	50	50	100	0	
Punto de conexión y medida	4,7	55	45	100	0	
Subestación alta tensión	4,0	80	20	100	0	
Obra civil - caminería	3,3	30	70	100	100	
Transporte	3,3	No aplica	No aplica			68
Montaje y puesta en marcha	3,1	50	50	100	100	
Cables de media tensión	2,1	0	100		40	
Distribución interna parque (media tensión)	1,5	100	0	100		
Instalación de enlaces	1,2	50	50	100	0	
Transformadores alta tensión	1,1	0	100		0	
Transformador media tensión	1,0	0	100		45	
Celdas de media tensión	0,8	0	100		0	
Total	100					
Desarrollo / Ingeniería	5% del total de la inversión	No aplica	No aplica			100
Seguros	0,25% del total de la inversión	No aplica	No aplica			100

Fuente: Ministerio de Industria, Energía y Minería (2015).

a/ Se refleja el caso más común al 2016, que son los parques de 50 MW con torre de acero, si bien de acuerdo con datos del Ministerio de Industria, Energía y Minería (2015) los porcentajes no varían notoriamente para parques de diferente potencia o con torre híbrida. El caso asume, a su vez, una altura de torre de 110 metros y diámetro de rotor de 117 metros.

Renewable energy employment in Uruguay

Local employment mainly created in construction

Uniting industrial policies and employment in renewables, electric mobility to create industrial employment

Regional approach to ensure economy of scale

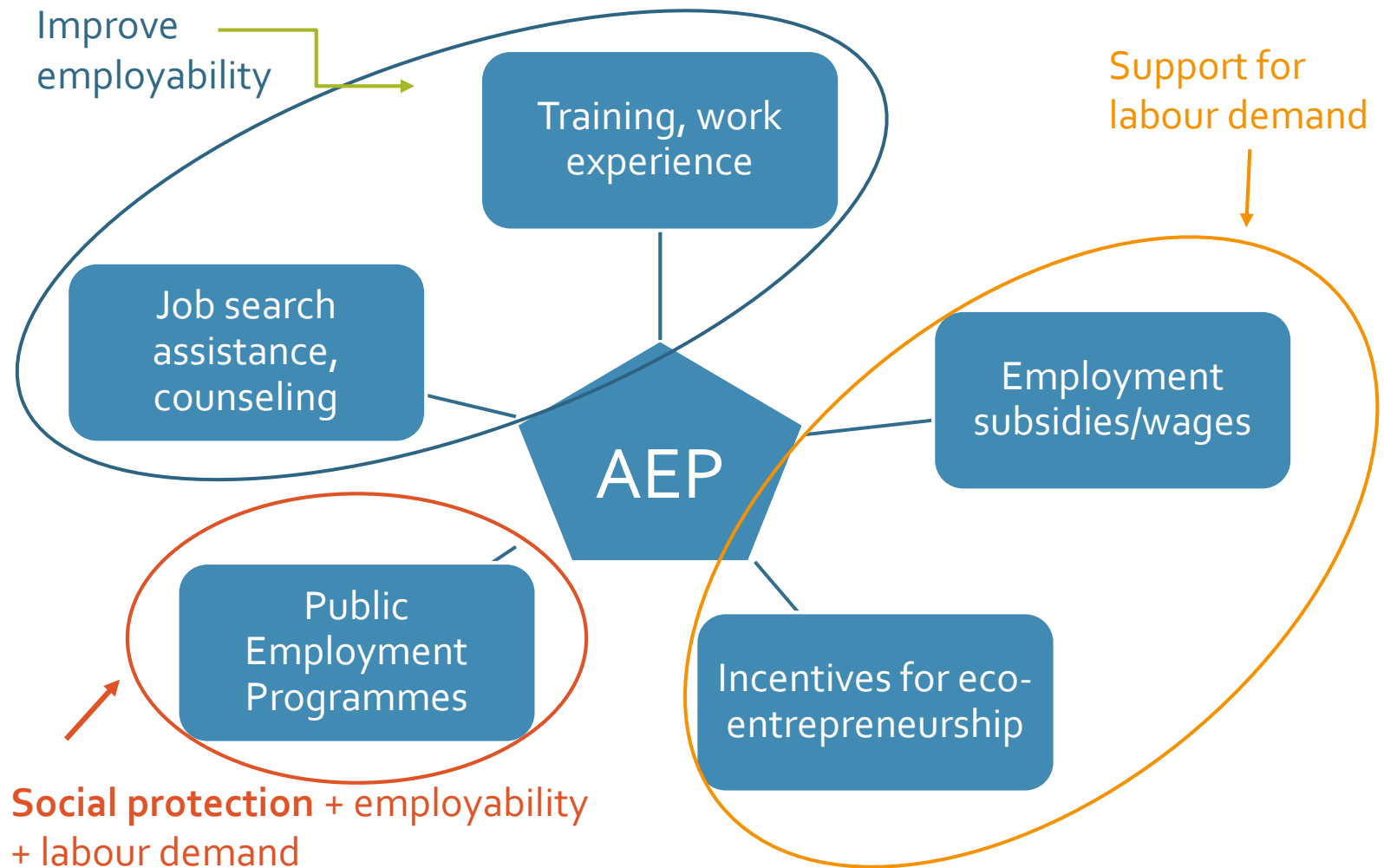
Value chain Development for decent work



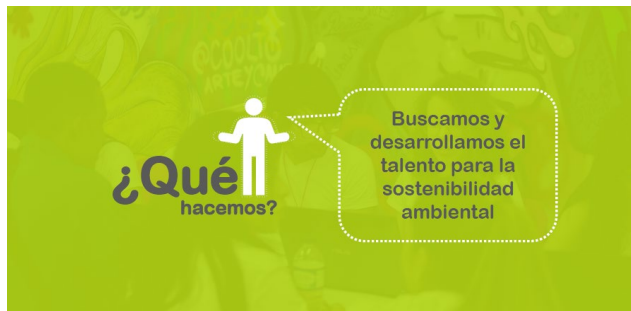
Una guía para profesionales del desarrollo, funcionarios gubernamentales e iniciativas del sector privado

- Consider environmental regulation and the environmental impact of production as elements of analysis to define the development of the value chain.
- Focus on decarbonization and the need to adapt to climate change.
- Analyze the opportunities offered by the green economy within the value chain

Active Employment Policies for Just Transition



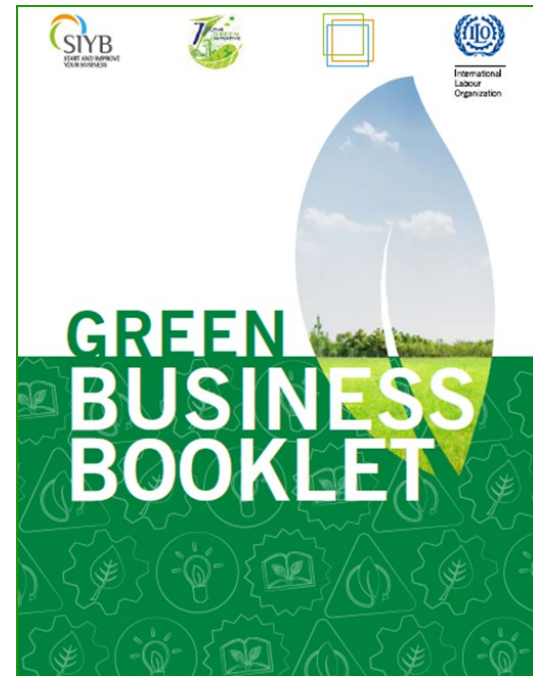
Active employment policies and employment services - Green Talent in Colombia



Labour relations between companies and green workers

Business development programmes

- The environmental footprint of companies is very important
- In Europe, SMEs produce 60-70% of industrial pollution; in India, 70%.
- Companies can generate green products and services if the regulatory and market frameworks change.
- With this change, new companies are created and existing ones can become more sustainable.



SIYB: Start and improve your business - environmental sustainability

- The SIYB programme is structured into four independent training components designed to respond to each stage of the company's development.

Generate Your Business Idea (GYB) is intended for people who would like to start a business, and who, through the training, develop a concrete business idea ready for implementation.

Start Your Business (SYB) is for potential entrepreneurs who want to start a small business and already have a concrete business idea. The programme is a combination of training, field work and after-training support, and helps participants assess their readiness to start a business and to prepare a business plan and evaluate its viability.

Improve Your Business (IYB) introduces already practising entrepreneurs to good principles of business management. Its six modules (marketing, costing, buying and stock control, record keeping, planning for your business, and people and productivity) can be taught individually or all combined in a full course.

Expand Your Business (EYB) enables growth-oriented small enterprises to develop a business growth strategy through training interventions.

Where? Zambia, Mexico, Kenya, China and others

Sector focus: Start and improve your business with environmental criteria in construction



- The Start and Improve Your Green Construction Business Training Programme is a comprehensive entrepreneurial and management training programme for owners and managers of existing and emerging contracting businesses in the construction industry.
- It consists of thirteen modules that introduce basic principles of good contracting business management in a simple and practical way with a focus on green construction.
- Where? : Green Jobs in the construction sector in Zambia
- Possibility to replicate in other sectors

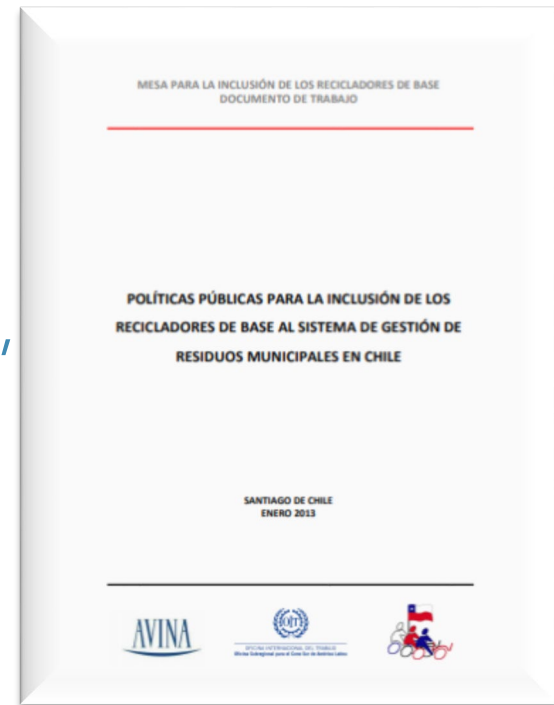
My.COOP: strengthening agricultural cooperatives

- My.COOP is a training package and programme on the management of agricultural cooperatives.
- A well-managed agricultural cooperative can also contribute to the promotion of broader aspects of development such as food security, sustainable use of natural resources and the creation of inclusive employment.
- Social economy and cooperatives with potential in energy, construction, and sustainable financing.

My.Coop	
Module 1: Basics of agricultural cooperatives	
1. BASICS OF AN AGRICULTURAL COOPERATIVE	Collective action Coops principles Coops diverse functions
2. CHALLENGES FOR COOPERATIVES	Cooperatives face internal and external challenges
3. COOPERATIVE GOVERNANCE	Dual character of cooperatives 'Agency' Members commitment
4. MANAGEMENT, CAPITAL FORMATION & FINANCE	Roles and skills Capital formation Audits
Module 2: Cooperative service provision	
1. WHAT ARE THE NEEDS OF MEMBERS?	The assessment of members needs can be systematic There are different methods applicable for different situations
2. WHAT SERVICES TO PROVIDE?	A cooperative cannot cater to all needs: prioritization
3. WHO WILL PROVIDE THE SERVICE?	The four A's: Appropriateness, Accessibility, Affordability and Availability. Evaluation – member satisfaction
Module 3: Supply of farm inputs	
1. PROCUREMENT OF INPUTS	What to procure? How much to procure? Selection of a supplier
2. STORAGE AND STOCK MANAGEMENT	Stocking or not? How to manage stocks
3. SELLING THE SERVICE	Selling procedures Pricing policy Income statement
Module 4: Cooperative marketing	
1. MARKETING SERVICES	Collective marketing and/or Market information (Research & dissemination)
2. STRATEGIC MARKETING	Targeting markets through upgrading Marketing mix (the 5 P's) Strategic marketing
3. CERTIFICATION	Specialized markets Certification schemes

Working in the informal economy: formalising recyclers

- **Informal recyclers:** who they are, what they manage, where they operate and how much waste they move.
- Improving working conditions
- Define institutional responsibility for waste, workers and companies.
- Public contracting with environmental and social criteria
- Creation of cooperatives
- Where is it? Chile, Brazil, India



Climate policy as a generator of employment-adaptation

Climate policy as a generator of employment	ILO Tools
Do we know how vulnerable employment is to the impacts of climate change?	<p>Determine the vulnerability of employment to climate change by economic sector, geographical location, type of training, size of enterprise</p> <p>Business Continuity Programmes for Disaster Situations</p>
Does the social protection system respond to the new challenges of climate change?	<p>Assessment of additional burdens on social protection systems due to climate change</p> <p>(Conditional resource transfer programmes, payment for environmental services with a focus on employment...)</p>
Employment created with adaptation measures?	<p>Public employment policy</p> <p>Intensive employment programmes for the development of adaptation infrastructures (water management, reforestation, infrastructure construction and others).</p> <p>Employment Focus Post-Disaster Need Assessment Programme (PDNA)</p>
Tools to improve resilience at the sectoral level?	<p>Economic diversification and insurance programs</p>

Employment Intensive Investment Programme (EIIP)

- With thirty years of experience linking employment and **infrastructure development in more than seventy countries**, the Employment Intensive Investment Programme (EIIP) has a unique and broad repertoire for the creation of productive employment for economic development.
- The EIIP promotes the **orientation of infrastructure investments** towards the creation of higher levels of productive employment and better access to basic goods and services for the poor in both rural and urban areas.
 - Water management, floods, droughts
 - Reforestation, improvement of ecosystems, fire-fighting measures
 - Maintenance of roads and new communications

Public employment programme Adaptation to climate change

India: National Rural Employment Guarantee Law

- 100 days of guaranteed employment: Improve income security to create rural assets and address environmental challenges at the community level: water, transportation, energy, etc, and it includes job training

South Africa :

Working for water programme,
fires, energy, etc.

- Social component
- Environmental improvement
- Creation of temporary employment



Temporary employment programme for the generation of green jobs - Mexico city

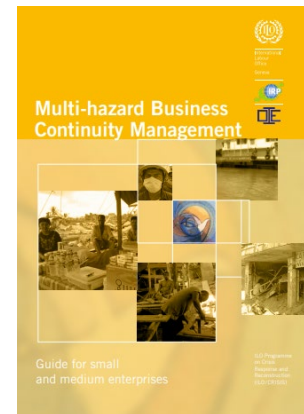
Work activities and possible occupations for Temporary Occupation:

- Ecosystem care and recovery
- Cleaning of riverbeds
- Cleaning and improvement of ravines (reforestation and water management infrastructures)
- Improvement of rural roads
- Environmental education programmes
- Monitoring of biodiversity in rural areas of the city
- Solar City



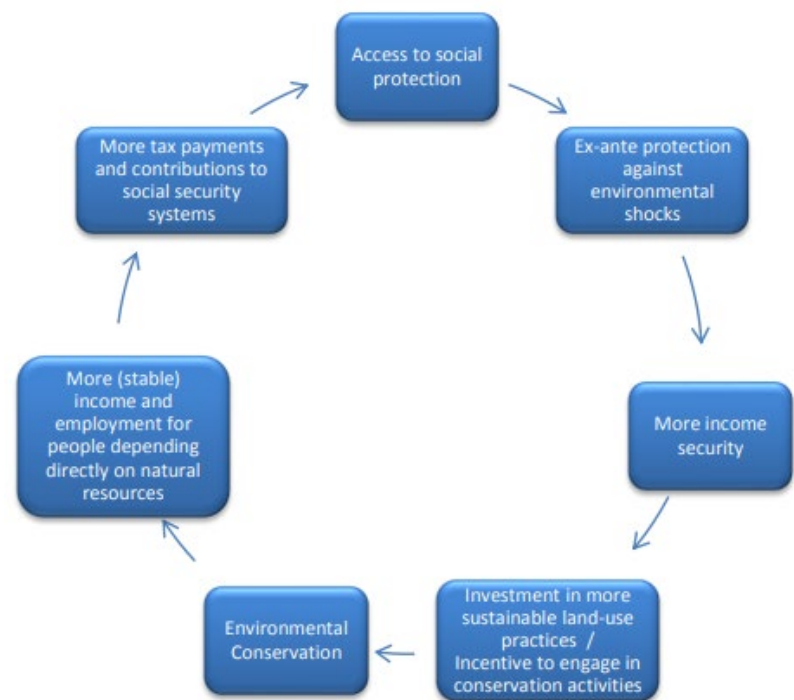
Business Continuity Programmes for Disaster related situations

- Micro, small and medium-sized enterprises account for more than 90% of employment.
- Sector highly vulnerable to floods, droughts and other disasters, but has low adaptive capacity.
- The guide provides practical instructions for the recovery, creation and protection of decent work opportunities in situations of fragility, conflict and disaster.



Social protection adapted to the impact of climate change

- **Role of social protection** as an accelerator of decarbonization and as a measure to reduce negative social and economic impacts of climate change.
- **Types:** Conditional transfers, payment for environmental services, public employment programmes, eco-entrepreneurship programmes, green job training
- **Case studies:** from Egypt (energy subsidy withdrawn), China (deforestation), Sahel, Philippines (typhoon impact)
- **Examples of policies:** in Brazil (Bolsa Verde), Costa Rica (Pago por servicios ambientales), Ecuador (Socio Bosque) and South Africa (Working for Water)



Transversal measures

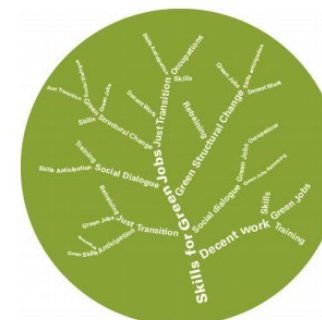
Guide: Anticipating Training Needs for Green Jobs

- **Climate change and environmental degradation** have been recognized as global drivers of change.
- Along with technological change, globalization, demography and other drivers, they have a pronounced impact **on changing employment and the demand for skills**.
- Moving towards a greener economy is creating opportunities for the introduction of new clean technologies, green investments and jobs.
- Climate change and environmental degradation are constrained, however, by **the shortage of human capital to deploy the technical solutions that are required**.



International
Labour
Office
Geneva

Anticipating skill needs for green jobs
A practical guide



Skills and Employability Branch
Employment Policy Department
ILO
Geneva

Professional training with an environmental focus

- **FOIL Project: Central America and Dominican Republic**

- Identification of new vocational training needs linked to 'green' objectives or trends.
- Curricular development of new professions.
- Social dialogue and labour mobility.

- **WESO 2018 Report: Skills for a green transition**

- Workers with basic levels of training, workers from declining sectors and vulnerable groups are left out.
- Changes based on social dialogue and labour market data

Evaluation of barriers to access green jobs and women's entrepreneurship development programme (WED)

- **Ensuring gender equality** in the environmentally sustainable economy
- Prevent women from being excluded from the green economy
- Most green jobs are created in construction, industry and energy production, where **the female presence is low.**
- **WED:** women entrepreneurship training. Improvement between 15-60% of sales in Kenya, Vietnam or Algeria.



Indigenous peoples and climate change



Why?

- The income of indigenous peoples depends mainly on natural resources and ecosystems. Their way of life is based on ensuring a sustainable use of these resources.

- 48% of indigenous peoples live in rural areas in Latin America.

- Their economic activities are mainly agroforestry, agriculture and the use of forest products and other natural resources for income and maintenance.

Areas of intervention:

- Identify traditional knowledge that helps mitigation (sustainable forest management), adaptation to climate change, protection of biodiversity.
- Promote sustainable livelihoods, create green jobs and encourage climate-sensitive innovation, entrepreneurship and enterprise.
- Achieve gender equality and facilitate increased participation of women in decision-making and natural resource management, among other areas.

Just Transition and Social Dialogue

- **ILO Just Transition Guidelines - Guiding Principles:**
 - Social consensus on goals and pathways to environmental sustainability is essential.
 - Social dialogue should be an integral part of the institutional arrangement for policy development.
 - **Adequate, informed and recurrent consultations.**
- **Governments must:**
 - Provide **stable political signals** based on social dialogue and a regulatory framework that enables enterprise development, decent work, social inclusion and poverty reduction.
- **The social actors must:**
 - **Play an active role in policy formulation, development and monitoring**, bringing decent work at the centre.
 - Promote the inclusion of **specific environmental measures through collective bargaining** and sectoral and other agreements.

Examples of work at country level

- **Peru**: Development of a Green Jobs Plan as part of the country's new employment policy.
- **Barbados**: Support to the National Statistical Service in the measurement of green employment.
- **Chile**: Advice to the Ministry of Energy on the policy to eliminate the burning of coal in the energy matrix.
- **Uruguay**: Work with economic sectors with high levels of precarious employment and environmental impact (artisanal brick kilns), green jobs workshop for young people.

Examples of ILO projects

- **Argentina**: Identify employment linked to bioenergy production, sustainable rural development approach, analysis of necessary changes in vocational training.
- **Guyana**: application of GAIN methodology to evaluate the impact on employment of a development policy based on environmental sustainability.
- **Argentina and Peru**: Decent Work for the recycling of electronic and electrical waste.
- **Mexico**: Green Jobs Program with Mexico City. Focus on training, dialogue and promotion of new companies in water collection, energy improvement of buildings, urban biodiversity protection and others (under development).
- Productive chain for sustainable rural development- Chiapas, MEX

Thank you
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