Greening the rural economy is central to increasing decent employment opportunities, enhancing resource and labour productivity, and fostering poverty eradication and social inclusion. Through its Green Jobs Programme, the International Labour Organization (ILO) has a growing track record in policy advice, project implementation and institutional development to support its constituents in efforts to turn environmental challenges facing rural economies - including natural resource degradation, growing resource scarcity, and the negative impacts of climate change on productive assets, livelihoods and populations - into opportunities for sustainable development. Yet knowledge, policy and implementation gaps remain in moving towards a more systematic and comprehensive strategy that links environmental sustainability issues with all dimensions of the Decent Work Agenda. With its technical expertise, tools and means of action, the ILO is well placed to advocate for and promote greater integration of the principles of decent work and environmental sustainability into rural development strategies.
1. Rationale and justification

Greening the rural economy is central to enhancing resource and labour productivity, boosting poverty eradication, increasing income opportunities and improving human wellbeing in rural areas. Rural populations often depend directly on the environment and natural resources for their livelihoods, such as in agriculture, forestry, mining and tourism. For example, some 410 million indigenous people and communities depend on forests for their livelihood, and more than 180 million people on fisheries, many in coastal and rural communities.\(^1\)

However, ecosystems and the services or benefits they provide \(^2\), often referred to as “natural capital”, are increasingly threatened by excessive use of natural resources and their degradation, as well as environmental changes caused by climate change. Those rural communities that depend most on natural capital such as soil, forests, fish stocks and ecosystem services for their livelihoods, are often also poor and lack adequate social protection, and thus bear the highest costs of environmental degradation and climate change. Women are more likely to be affected by environmental degradation,\(^3\) and climate change.\(^4\) Women predominate among the poorest and are disproportionately concentrated in agriculture and tourism, sectors which depend on natural resources and are often characterized by poor pay and other decent work challenges.\(^5\) The consequences are growing risks to rural livelihoods, declining productivity, poverty and insecurity, conflicts over access to resources and rural to urban migration.

To address these challenges, it is important to develop interventions aimed at preserving, restoring and enhancing the quality of the environment across rural areas. One intervention is to create green jobs – jobs that are attractive and generate good returns and income, and that reduce consumption of energy, raw materials and natural resources, reduce emissions of greenhouse gases, minimize the production of waste and pollution, protect and restore ecosystems and biodiversity, and help adapt to climate change. Examples of such jobs are those related to reforestation, land and water management, organic agriculture, the development of clean sources of energy, eco-tourism, and recycling of agricultural waste. Because those most affected are the poor whose livelihoods depend on the environment, the Rio+20 outcome document, The Future We Want, states that “it is essential to generate decent jobs and incomes that decrease disparities in standards of living to better meet people’s needs and promote sustainable livelihoods and practices and the sustainable use of natural resources and ecosystems.”\(^6\)

According to ILO estimates, a continued rise of emissions until 2050 would result in the loss of over 7% of global economic productivity. On the other hand, a number of analytical studies and quantitative assessments have shown that a global transformation to a greener economy could generate 15 to 60 million additional jobs globally over the next two decades, and lift tens of millions of workers out of poverty, with important improvements in productivity and income levels for rural communities.\(^7\)

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\(^2\) Ecosystem services refer to: provisioning, e.g. production of food and water; regulating, e.g. controlling climate and disease; supporting, e.g. nutrient cycles and crop pollination; and cultural, e.g. spiritual and recreational benefits.

\(^3\) IPCC, 2007: Fourth Assessment Report: Climate Change (AR4).


\(^6\) UN: The Future We Want, Outcome Document of the Rio+20 Summit, UNCSD, 2012 (para. 30, p. 5).

\(^7\) ILO/IOE/ITUC/UNEP, 2012, op. cit.
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2. Scope and definitions

This policy guidance note focuses on a number of areas that are at the heart of rural economies and could be engines for a sustainable economic transformation. These are: a) powering the rural economy through access to clean energy; b) revitalizing agriculture through sustainable and high productivity farming methods; c) fostering sustainable tourism; d) restoring ecosystems for productivity, income and resilience; e) implementing social protection and just transitions programmes to offset the negative effects of development policies; and f) stimulating social dialogue for an effective, inclusive and productive transition to sustainable economies. These are policy areas in which the ILO has accumulated solid policy and project experience, building comparative advantage in line with its mandate in promoting sustainable socio-economic development.

BOX 1: Green and decent jobs

Jobs are green when they help reduce negative environmental impact, ultimately leading to environmentally, economically and socially sustainable enterprises and economies. More precisely, green jobs are decent jobs that:

- Improve energy and raw materials efficiency
- Limit greenhouse gas emissions
- Minimize waste and pollution
- Protect and restore ecosystems
- Support adaptation to the effects of climate change.


The policy interventions proposed below would benefit a wide range of actors and stakeholders in rural communities: agricultural producers, service providers, local authorities, local entrepreneurs, trade unions, youth and women’s groups.

a) Powering rural economies through access to clean energy

Lack of access to modern sources of energy is widespread in rural areas of developing countries and hampers economic growth, jobs and livelihoods. Most of the 1.5 billion people lacking access to electricity are in rural areas, and the job creation potential through the production and supply of clean energy systems is significant in rural economies. The sources of renewable energy, e.g. sun, wind, biomass or geothermal sources, are often widely available in rural areas. As such energy may be produced both on a large or small scale using locally available resources; it is well adapted to rural areas. It can mean good revenues for producers, land rents for installations (e.g. in the case of wind turbines), and jobs in construction, operation, maintenance and distribution of the systems. More importantly, access to energy enables a range of other productive activities, in particular food processing, storage, and transport of agricultural products with the development of bioenergy based transport fuels. Many of those jobs can be attractive to youth as they require advanced skills and offer relatively better income opportunities. Early experience suggests that young people

can benefits from opportunities to set up or engage in new energy service companies serving rural communities.9 Cooperatives can be a vehicle to promote clean energy access in rural areas.10 Locally produced energy provides a solution to the key problem of insufficient energy supply in the rural economy.

b) Revitalizing agriculture through sustainable and high productivity farming methods

With over 1 billion people employed in the sector, agriculture is the second greatest source of employment worldwide after services. The sector faces serious challenges to sustainable growth and has the highest concentration of the working poor in developing countries.11 Agricultural activities are both adversely affected by and contribute to climate change and environmental degradation. Agriculture can be highly resource-intensive, using over 70 per cent of fresh water available globally and contributing to 13 per cent of greenhouse gas emissions.12 Conventional farming practices that depend on intensive use of pesticides are also a major health hazard for workers, causing some 70,000 poisoning deaths each year and at least 7 million cases of acute and long-term non-fatal illness.13

A major challenge is to produce food in more efficient and sustainable ways, reducing resource use and food waste and food loss, while improving productivity, incomes and working conditions. It is estimated that 70 per cent more food is required by 2050 to feed an anticipated 9.2 billion people.14 Yields in rain-fed agriculture are predicted to be reduced by up to 50 per cent in some parts of the world already by 2020.15 Understanding the environmental impact of agriculture and promoting climate-smart agricultural practices, which address the interlinked challenges of food security and climate change, is vital to achieving sustainable rural development.

c) Fostering sustainable tourism

Tourism is one of the fastest growing sectors, and rural destinations are gaining popularity due to their slower pace of life, locally-grown foods and natural environment. Tourism has significant economic and employment potential for rural areas, both directly, through jobs in the sector, and indirectly, through supportive sourcing industries like construction, agriculture, fishing, food processing, furniture, handicraft, transport, utilities, and other services. These jobs can be highly attractive to youth, as the sector and many of its activities and occupations may be viewed as “modern”, entailing social “status”, requiring advanced skills, and constituting a good source of income.

d) Restoring ecosystems for productivity, income and resilience

Green works (i.e. infrastructure and related work that have direct environmental benefits or respond to specific environmental contexts such as changes in climate and extreme weather events) in rural areas can be an effective strategy for job creation, protection of vulnerable livelihoods and restoration of natural capital.16 The local resource-based approach to infrastructure-related work (water and soil conservation, flood protection infrastructure and rural transport improvement and maintenance) and the greening of rural enterprises promotes local job creation, and by employing local people, it encourages responsible use of local resources.

A combination of market-based instruments that have immediate impact on land and resource use decisions (e.g. taxes, emission trading schemes, carbon sequestration, watershed protection, etc.) with broader environmental policy instruments can yield gains. For instance, in the forestry sector, targeted international investments of US$ 30 billion a year into projects that reduce deforestation and forest degradation (REDD) have the potential to sustain up to 8 million additional full-time workers in developing countries.17

9 ILO: Promoting entrepreneurship in East Africa. Accessible at: https://www.youtube.com/watch?v=M-ECYrupQlU&list=PL635910DABF27F34O&index=3, and ILO: Bringing green energy and green jobs to Bangladesh. Accessible at: https://www.youtube.com/watch?v=UpG_PovlogQ&list=PL635910DABF27F34O&index=4
10 ILO: Providing clean energy and energy access through cooperatives (Geneva, 2013).
14 FAO: How to feed the world in 2015, FAO discussion paper (Rome, 2009).
16 ILO: Local investments for climate change adaptation: Green jobs through green works, Bangkok, 2011.
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e) Implementing social protection and just transitions programmes to offset negative effects

Policies to green the rural economy, including measures to control and limit timber extraction, may have unexpected impacts on jobs, costs of production, incomes and social security. To offset such potential negative effects, flanking policies and programmes are required to create income replacement opportunities, to provide social protection and to help build rural productive capacity. Innovative programmes in that direction have been implemented in Brazil in the forestry and fisheries sectors. In addition, targeted training and customized education systems can help anticipate and address the skill needs and potential shortages in the environmental goods and services sectors, facilitate the emergence of new occupations, and help workers adapt to transformations in existing occupations.

f) Stimulating social dialogue for effective, inclusive and productive transitions

Social dialogue has a major role to play in greening the rural economy. It requires active involvement of Government, workers and employers in established formal sectors and in the informal economy and newly-established sectors, where workers are not unionized and employers’ organizations are not yet formed at all levels (supranational, national, regional and local). Effective tripartite engagement in the design of local strategies for sustainable development and the conduct of specific capacity-building and awareness-raising programmes can trigger consensus-building and common ownership among social partners. In addition, it can enhance their understanding of the challenges and opportunities of the green economy. More inclusive dialogue is often conducive to a successful implementation of policies.

3. The ILO’s approach

The ILO’s approach involves implementation of sectoral programmes as well as projects related to microfinance, cooperatives, skills and employability, sustainable enterprises, employment-intensive investment and public works programmes, employment policy, social dialogue, and the application of international labour standards. The comparative advantage of the ILO, as opposed to other organizations and institutions, is in its experience in combining job promotion, social protection and inclusion, environmental protection, social dialogue and economic development, all vital for the development of rural economies. The ILO also has a widespread network of internal as well as external experts on various relevant fields of research.

The ILO Green Jobs Programme, established and endorsed by the Governing Body in 2008, represents a steadily expanding knowledge base and a growing pool of ILO expertise. The Green Jobs Programme adopts a cross-cutting approach under which: (i) implementation takes place through an Office-wide network, with joint delivery and learning by the Decent Work Teams, field offices, projects, the International Training Centre (Turin) and ILO headquarters; (ii) products and deliverables integrate the four dimensions of decent work; and (iii) human and financial resources are pooled in teams composed of staff from relevant technical units in all departments and supported by funding from regular budget and extra-budgetary sources.
BOX 2: Key findings from global Green Jobs Reports

The Green Jobs Initiative is a partnership established in 2007 between the United Nations Environment Programme (UNEP), the International Labour Organization (ILO), the International Trade Union Confederation (ITUC) and the International Organisation of Employers (IOE) to assess, analyse and promote the creation of decent jobs, while encouraging policies to address global environmental challenges.

In 2008, it produced the report Green Jobs: Towards decent work in a sustainable, low carbon world, that represents a milestone in the identification of the potential for green job creation and social inclusion, and encourages a just transition for workers and enterprises by:

- documenting the large number of jobs created in the shift towards a low-carbon economy;
- highlighting the importance of greening all enterprises across the economy;
- calling for attention to the quality of jobs, not just their number;
- recommending green investments in key sectors and measures addressing their possible decent work deficits.

In 2012, shortly before Rio+20, a second global report, Working towards sustainable development. Opportunities for decent work and social inclusion in a green economy, was produced. This report:

- provides policy lessons, good practices and examples of successful programmes to demonstrate that a green economy;
- promoting more and better jobs, poverty reduction and social inclusion - is both necessary and viable;
- analyses the challenges, drivers of change, on-going practices and policy options in 8 sectors that will be most affected by environmental degradation: agriculture, forestry, fisheries, energy, manufacturing, recycling, building construction and transport;
- highlights the inextricable link between environmental and social challenges, and provides evidence of the positive employment effects of applying green policies that address them together;
- draws special attention to the importance of social dialogue as a mechanism for achieving sustainable development.
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4. The ILO’s experience to date

The ILO has accumulated solid experience through policy and project interventions in a vast array of areas and sectors of importance to rural development. Since 2008, 27 countries have been assisted directly with capacity-building and advisory services on green jobs, as well as demonstration and pilot projects, including technical cooperation projects in 16 countries.

Rural clean energy access in Bangladesh: In Bangladesh, solar home systems (SHS) and entrepreneur skills training activities implemented between 2008 and 2010 trained young women and men in the installation and maintenance of SHS. An Australian-funded Green Jobs in Asia Project implemented between 2010 and 2012 in five countries (Bangladesh, Indonesia, Nepal, Sri Lanka and the Philippines) aimed at scaling up and ensuring long-term sustainability of the previous interventions. This included (1) institutionalization of training curricula (assembling, installation and maintenance) in the National Technical and Vocational Qualification Framework; (2) provision of sustainable employment opportunities by linking trainees with renewable energy service providers (27 additional service providers) for job placements as solar technicians; and (3) promoting solar entrepreneurship by providing skills for entrepreneurs and access to finance.

Youth Green Entrepreneurship in East Africa (2010-2014): Within the Youth Entrepreneurship Facility (YEF), a partnership among the Africa Commission, the Youth Employment Network (YEN) and the ILO in Kenya, Uganda and Tanzania, key stakeholders in Kenya identified the promotion of green jobs and green entrepreneurship as one of their key priorities. YEF in Kenya based its strategy on the assumption that new untapped markets for green products (such as photovoltaic cell phone chargers) and green services (like eco-tourism or carbon credit trading,) can be sourced locally. In addition, the enterprise and job creation potential of these green businesses is expected to be higher than for traditional ones, particularly for youth, thus also addressing the country’s major youth unemployment challenge.

Green Jobs in Asia Project (2010-2012): The GJA Project was implemented to deepen ILO constituents’ understanding of and commitment to the promotion of gender-sensitive green jobs opportunities and a just transition for workers and employers towards low-carbon, climate-resilient, environmentally friendly development. The project contributed to:

- promoting the capacity of ILO constituents to engage in dialogue on green jobs through increased access to reliable sources of data and information on green jobs and training, including on the employment impact of environment-related policies and good practices on green jobs in all participating countries;
- mainstreaming green jobs in national labour and social policy of participating countries;
- establishing Green Jobs demonstration programmes that respond to the different needs of women and men, implemented in key sectors selected on the basis of research and consultations in four of the project countries.

Four employment models have been piloted in different countries and sectors:

- Sri Lanka: Promoting Green Jobs and Livelihoods in Municipal Solid Waste Management;
- Philippines: Promoting Green Jobs and Livelihoods in Environmentally Sustainable Construction of Social Housing;
- Indonesia: Promoting green jobs and livelihoods through ecotourism and green homestays;
- Bangladesh: Promoting green jobs in the renewable energy sector.

The cases of Indonesia and Bangladesh are of special interest because they take advantage of the high potential for job creation and livelihood protection in two key sectors – tourism and energy – to improve working conditions and reduce poverty in rural areas. The project in Indonesia helped establish the normative and technical conditions for the development of sustainable tourism at the national level, by combining innovative partnerships, skills development, entrepreneurship and financial training. In Bangladesh, the target beneficiaries were unemployed women and men in 10 rural districts.

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Migration and environmental sustainability in the Sahel: This project looking at environmental degradation as one of the sources of migration in west Africa, aimed, among other objectives, at generating opportunities in potential growth sectors (such as green jobs) and at better guiding policies to promote employment and productive investment for migrants. Results from this project in 2012 included more than 2,000 young people participating in social and occupational orientation workshops, in collaboration with the International Latin American Foundation for Public Administrations and Public Policies (FIIAPP). Hundreds of migrants and their families have had access to training and awareness courses on investment opportunities, managing family finances, and promoting the use of remittances.  

Climate adaptation in the Philippines: In partnership with the Government, the ILO developed the Climate Change Adaptation Project that established a financial and risk insurance scheme throughout the country for rice and corn farmers in vulnerable areas against climate-related disasters (floods, excessive rain, droughts). Poverty and lack of access to financial and productive resources made these farmers more vulnerable to climate-related disasters. The Integrated Financial Package developed by the project increased access to credit for farmers through Rural and Cooperative Banks, provided them with saving facilities, formal and informal insurances including the innovative Weather-Index-based Insurance Package. It further facilitated access to productive services including the upgrading of skills for farmers to be able to adapt their agricultural production to new climate change conditions. As a result, the farming communities were able to continue with production in the face of climatic risks, diversify their economies, strengthen their assets base and apply more effective risk-based decision-making to farming. They saved ten times more money than in the absence of the project. In parallel, farmers were provided with information and capacities towards environmentally friendly production through, among other things, the use of locally produced organic fertilizers.

What have we learned? Several lessons arise from the implementation and review of these projects. First, the “greening” of programmes has been marginal, often being seen as an “add on” rather than “mainstreaming” of sustainability dimensions in programmes and projects. Second, a thorough analysis of international labour standards of relevance to environmental sustainability is non-existent at present. The Conclusions of the 2013 ILC call for a review of the provisions of international labour standards most relevant to achieving a job-rich, equitable, environmentally sustainable economy, and their consolidation for dissemination in a user-friendly form. Finally, there are gaps in linking environmental interventions with labour market policies and the four dimensions of the Decent Work Agenda, which require a more systematic approach in further interventions.

5. Practical guidance and resources

The ILO has developed a steadily growing portfolio of interventions through policy advice and technical cooperation projects. Moreover, the Programme’s network approach has led to strong cooperation with different ILO departments, as well as with external partners. The ILO Green Jobs programme operates at various levels: research and advocacy; national level policy and technical advisory services; capacity development of constituents through training and knowledge sharing; and strategic partnerships.

The Green Jobs Programme Cycle

Assessment of Green Jobs Potential

Implementing Green Jobs projects, programmes and policies

Strategy and policy formulation based on social dialogue

Sectors, Skills, Enterprises, Social protection, Youth, Gender

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22 More information is available at: https://bitmigrant.wordpress.com/  
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Research and advocacy
The ILO has developed and is applying several quantitative and analytical tools to assess the employment, income and skills needs of promoting greener economies at the enterprise, sector and economy-wide levels. In addition to pioneering global studies, national and sub-national level assessments have been completed or initiated in Bangladesh, Brazil, India, Indonesia, Kenya, Mauritius, Mexico, Mongolia, Peru, Tunisia, Zambia and other countries.

In March 2013, the ILO established a Green Jobs Assessment Institutions Network (GAIN) as a research platform to build and improve knowledge on the application of models for quantitative measurements and policy analysis of green job using Input-Output tables, Social Accounting Matrixes, and other modelling approaches. GAIN also serves as a vehicle to share knowledge and build the capacity of institutions in developing countries. GAIN is composed of policy and research institutions operating in the fields of economics, labour, energy policy, development cooperation, environmental policy, education and training, and social development.

Support to constituents at national level
Building on research, the ILO supports the development of action plans on employment and labour market related policies and measures, covering decent and productive work, sustainable enterprises, just transitions and social protection, and helping constituents target labour market instruments to youth and vulnerable groups.

Through advocacy, policy advice and support, certain countries have started to integrate green jobs in their national employment policies and strategies (e.g. Mauritius, Namibia and Sri Lanka).

The Programme is further supporting the implementation of technical cooperation projects in a range of areas promoting decent work: through green entrepreneurship and the greening of enterprises, skills development, local development for adaptation to climate change, and sectoral projects in waste management and recycling, housing, tourism and forestry.

Capacity development and knowledge sharing
Since its creation in 2009, the Green Jobs Programme has put emphasis on the creation and exchange of relevant information among ILO constituents. In the past years, several knowledge products and tools were produced by the Programme, including global, regional and national reports, tools for green jobs assessments, policy papers and strategy notes, case studies, training and awareness-raising material as well as general information material. The growing interest among stakeholders and partners on the impact of environmental degradation and climate change on economic activities and employment is answered by the Green Jobs Programme with the provision of training and capacity-building. Training programmes, offered at international, regional and national level, aim to provide stakeholders with the necessary knowledge to engage efficiently in labour and environmental policy discussions. This includes an annual Green Jobs Forum in Turin.

Office-wide engagement: The Green Jobs Network
The Green Jobs Programme initiated ILO internal networks on Green Jobs with the aim to better mainstream environmental issues into the different ILO programmes and projects. Regular network meetings at Headquarters and at regional level ensure strong cooperation between the different departments and have led to joint reports, project development and programming for ILC and Governing Body meetings.

BOX 3: Examples of ongoing Technical Cooperation (TC) supported projects

- Zambia green building project: One UN programme
- Youth entrepreneurship facility in East Africa
- Greening the hotel sector in Thailand
- Green entrepreneurship in China
- Occupational training on green jobs in Central America and the Dominican Republic
- South Africa’s Free State Province project on waste management
- Migration and environmental sustainability in the Sahel (West Africa)
- Promoting sustainable green livelihoods for local communities in Indonesia
Strategic partnerships - The Green Jobs Initiative and Beyond

The ILO has been actively engaged in strategic partnerships, starting with the Green Jobs Initiative involving the ILO, UNEP, ITUC and IOE. More recently, a Partnership for Action on Green Economy (PAGE) was launched together with the UNEP, the United Nations Industrial Development Organization (UNIDO), the United Nations Institute for Training and Research (UNITAR), and the United Nations Development Programme (UNDP) to deliver support to 20 countries over 7 years. The ILO is also involved as a partner in the Green Growth Knowledge Platform by the World Bank Group, the Organisation for Economic Cooperation and Development (OECD), UNEP and the Global Green Growth Institute. Finally, the ILO participates actively in the UN Inter-agency Coordinating Group for the 10 Year Framework of Programmes on Sustainable Consumption and Production patterns (10-YFP).

Tools


—. 2013. *Providing clean energy access through cooperatives*, Cooperative Branch (Geneva).


ILO. 2012. *Greening the Economies of Least Developed Countries: The Role of Skills and Training* (Geneva).


Overview of Policy Guidance Notes on the Promotion of Decent Work in the Rural Economy

Supporting inclusive agricultural growth for improved livelihoods and food security
- Decent Work for Food Security and Resilient Rural Livelihoods
- Decent and Productive Work in Agriculture

Promoting economic diversification and triggering productive transformation for rural employment
- Economic Diversification of the Rural Economy
- Promoting Decent Work for Rural Workers at the Base of the Supply Chain
- The Role of Multinational Enterprises in the Promotion of Decent Work in Rural Areas
- Transitioning to Formality in the Rural Informal Economy

Promoting access to services, protection and employment-intensive investment
- Providing Access to Quality Services in the Rural Economy to Promote Growth and Social Development
- Extending Social Protection to the Rural Economy
- Developing the Rural Economy through Financial Inclusion: The Role of Access to Finance
- Employment-Intensive Investment in Rural Infrastructure for Economic Development, Social and Environmental Protection and Inclusive Growth

Ensuring sustainability and harnessing the benefits of natural resources
- Greening Rural Economies and Green Jobs
- Decent Work in Forestry
- Harnessing the Potential of Extractive Industries

Increasing the voice of rural people through organization and the promotion of rights, standards and social dialogue
- Rights at Work in the Rural Economy
- Promoting Social Dialogue in the Rural Economy
- Building Local Development in Rural Areas through Cooperatives and other Social and Solidarity Economy Enterprises and Organizations

For more information please visit www.ilo.org/rural or contact rural@ilo.org