# Regional Office for Asia and the Pacific









# INTERNATIONAL LABOUR ORGANIZATION

# GREEN JOBS PROGRAMME FOR ASIA AND THE PACIFIC





# INTRODUCTION

Green jobs are decent jobs that reduce consumption of energy and raw materials, limit greenhouse gas emissions, minimize waste and pollution and protect and restore ecosystems. "Green jobs" is a direct response to two major challenges of the 21st century: averting dangerous climate change and environmental degradation, and the need to deliver socially responsible development through decent work. Creating green jobs and adapting existing occupations are critical for promoting the transition to a low-carbon, climate resilient, environmentally friendly economy that is fair for all.

The ILO initiated the Green Jobs Global Programme in 2009 to promote opportunity, equity and a just transition to a green economy and inclusive growth for the world of work. The programme encourages governments, employers and workers to collaborate on generating coherent policies and effective programmes that will lead to decent work for all in a greener economy.

The **Green Jobs Programme for Asia and the Pacific** currently collaborates with ILO constituents in Bangladesh, China, Fiji, India, Indonesia, Malaysia, Nepal, Philippines, Sri Lanka and Thailand. The programme is implemented through technical cooperation projects supported by the Australian Government – ILO Partnership Agreement (2010-2015), the ILO/ Japan Multi-bilateral Programme and the ILO/ Korea Partnership Programme. The main objectives of the programme are to:

- enhance the capacity of ILO constituents to take part in dialogue on green jobs at local, regional and national levels by giving them access to quality data and information;
- influence national policies and so contribute to an inclusive growth model that is job-centred, environmentally sustainable, and that promotes decent work; and
- promote gender sensitive opportunities for green jobs by supporting demonstration activities and national programmes.

# Research on green jobs in Asia and the Pacific

#### Research on biogas in the dairy cluster in India

India is the largest milk producer in Asia as well as being the largest cow dung producer in the world, enabling opportunities for significant green jobs creation in renewable energy and organic fertilizer production. A recent economic study of dairy clusters in Jabalpur, Madhya Pradesh, India finalized in June 2012 by the ILO found that two jobs in the milk sector entail one job in the cow dung economy. Thus the removal and productive use of cow dung in India currently supports an estimated 980,000 jobs nationally. The study also estimates that 12 million small scale biogas digesters could be built across rural India potentially creating additional 100,000 permanent full time jobs in construction only. Even more jobs can be created by systematically collecting dung, building and operating community level biogas plants. The potential of biogas electricity from commercial dung is estimated at 5,000MW creating potentially 950,000 jobs. However, not all of these jobs at present can be classified as decent or green jobs. The net number and quality of green jobs finally depends on policy choices and on how a transformation is managed, but if administered with care the net gain could result in around 1,985 million new direct, permanent and full time Green Jobs (see Table 1 below).

The study argues for an integrated "Energy-Dairy" policy aligning dung management strategies to the national milk policy. The policy should foster skills training to create new Green Jobs and support the transition of the workforce from non-decent employment to decent work. Such holistic approach is expected to lead to the creation of million new green jobs while making existing jobs in cow dung more decent. At the same time, such a policy would increase the performance of the dairy sector as a whole. Reduced energy expenditures and increased farmers' income could lead to increased investment and higher milk production while biogas based sterilization systems could improve overall quality.



Table 1 - Potential of green jobs creation in India in biogas and electricity generation from an estimated commercial available dung of 1 million tons in peri-urban and 750,000 tons in rural areas

Potential Green Jobs creation	Dung absorbed from rural and urban (cluster) areas	Estimation
Electricity generating plants of 1MW capacity each, with total of 5,000MW including fertilizer production from slurry	1 million tons (200 tons per 1MW) from urban clusters	950,000
Transport and dung management in urban clusters for 660,000 tons (which are additional to already transported 440,000 tons)	660,000 tons (1 manager/ contractor manages 12 tons)	55,000
Construction and maintenance of 10 million small biogas plants (which are additional to 2 million existing and functioning ones)	750,000 tons (60kg dung per plant and day) from rural area	140,000
Dung collectors and cleaners for the additional 124 million animal	100% of commercial dung in peri-urban areas is collected assuming one full time job for 100 animals	1.24 million
Total		2.385 million
Jobs lost in dung cake making due to the absorption of dung by 5,000 MW in electricity generation		- 400,000
Total net employment gain		1.985 million

(Source: "The economics of cow dung-Creating green jobs in the dairy sector in India" by Marek Hardoff, ILO, January 2012)

### Research on green jobs in the wind energy sector for the state of Gujarat, India

Under the support of the ILO/ Korean Partnership Programme, the National Council of Applied Economic Research (NCAER) of India and ILO experts developed an **Input-Output (I-O) table for the state of Gujarat, India** for the year 2009-2010. The I-O table was constructed using both secondary and primary data. The secondary data dealt with the creation of the seven sector transaction matrix based on the All-India I-O table 2006 – 2007 including the agriculture, mining, manufacturing, construction, electricity, other services and public sector. The wind energy sector was disaggregated from the electricity sector and included in the Gujarat State I-O table. Being a new and emerging sector, wind energy development has notable effects on employment across sectors. The report uses the newly developed Gujarat State I-O table to calculate the output, income and employment multipliers to study the nature of job creation due to the expansion of the wind energy sector. Analysing the wind energy sector in a multi-sectoral framework is important to understand impact on growth and employment creation in the renewable energy sector and its impact on all other sectors of the economy.

Some of the main findings for the wind energy sector in the State of Gujarat include:

- The wind energy sector is a growth sector that creates value and generates income in the economy
- The indirect employment generated in the wind energy sector is much higher than the direct employment generated for the same unit of energy output produced, more than a hundred times higher
- The indirect employment due to the wind energy sector is also significantly higher than indirect employment due to conventional electricity
- Indirect employment generated per unit of output in the wind energy sector is also higher than from other important sectors such as construction, electricity and services
- An increase in output of wind energy in the State of Gujarat has strong linkages with income and indirect employment generation in other States in India.



Table 2 - Employment multiplier

Sectors	Employment coefficients	Employment multiplier
Agriculture	1.513	1.876
Mining	0.037	0.133
Manufacturing	0.073	0.438
Construction	0.149	0.430
Electricity	0.026	0.268
Renewable Energy	0.003	0.334
Other services	0.227	0.390
Public	0.340	0.340

Source: "Estimating job in renewable energy sector using Input-Output analysis for Gujarat" by ILO/ NCAER, March 2012

# Knowledge-sharing and trainings of ILO constituents on green jobs

# Greener Business, Better Workplace training program for the auto sector in the Philippines



Presentation of group discussion, Core Training for Auto sector, Philippines, December 2011

The Greener Business Asia (GBA) project supported by the ILO/ Japan Multi-bilateral Programme promotes capacity building of social partners while demonstrating models of worker-employer cooperation that can achieve sustainable enterprises for both greener and better work places. The GBA project is currently working with companies from the automotive supply chain in the Philippines for the pilot roll-out of the 'Greener Business, Better Workplace' training and assistance package. The core (foundation) training was delivered in December 2011, followed by thematic sessions during the first quarter of 2012 on key technical topics identified through a training needs assessment process. This pilot roll-out was conducted in collaboration with the Employers' Confederation of the Philippines (ECOP) and other constituents. Participants consisted of both managers and workers from selected auto parts manufacturers who then formed into enterprise teams and were trained to lead initiatives to improve environmental performance and workplace conditions of their respective enterprises. The subsequent Thematic Sessions provided team members with in-depth technical knowledge through four modules including healthy & climate resilient workplaces; energy efficiency; resource efficiency & cleaner production; and sustainability reporting.

Once the enterprise teams start implementing actions based on what they have learned and identified as priority areas, they are supported by advisory visits from thematic experts. This is part of the GBA's approach to ensure that companies are well capacitated to sustain the greening and workplace improvement measures that they have initiated.

### Foundation training on green jobs in Bangladesh

**Foundation training on green jobs** was delivered in Dhaka, Bangladesh in April 2012 to help build a common consensus among ILO constituents on the concept of green jobs and its relevance in various sectors of the economy. The training, following similar workshops that have been conducted in other countries (Indonesia, Nepal, Philippines and Sri Lanka) between July and October 2011, was organized in collaboration with the Bangladeshi NGO Waste Concern as part of the capacity building programme under the **Green Jobs in Asia project** (funded under the Australian Government - ILO Partnership Agreement 2010 - 2015). A total of 45 delegates from government, workers' and employers' organizations as well as representatives from academia, the private sector and civil society participated in the training.

Held over two days, the training sessions provided participants opportunities to learn and discuss the links between environment-employment-economy, including the importance of green jobs and enterprises, analysis of climate change mitigation and adaptation, the challenges associated with shifting to a low-carbon economy and the need for green public policies in Bangladesh. Case studies and examples of green jobs and climate change initiatives were presented to assist participants in visualizing potential strategies for green jobs development in the country.



Discussions on the way forward focused on the need to advance government efforts to identify the specific sectors and areas for green jobs, mainstreaming green jobs into the national employment strategy and the role of tripartite constituents in ensuring a just transition for the workforce. In conclusion, the participants agreed upon the need to bring all stakeholders together including trade unions, employer's federation, relevant government ministries, non-governmental organizations, community-based organizations, the private sector and policy makers on a common platform and to develop policies conducive for promoting, training and increasing capacity for green jobs in Bangladesh.

### Capacity building for social partners in the Philippines

As part of ongoing capacity building efforts being implemented by social partners in the Philippines, the Employers' Confederation of the Philippines (ECOP) finalized a **position paper** on Green Jobs, as well as a **Green Jobs Roadmap 2012-2013** in April 2012. These products, results of the Green Jobs in Asia project in the Philippines (supported by the Australian Government – ILO Partnership Agreement 2010-2015), were developed after a series of consultations among ECOP members. This includes Green Jobs Orientation workshops which were held in Luzon, Visayas and Mindanao between February and March 2012 and a perception survey targeting 45 senior officials and representatives of the Confederation.

The ECOP Green Jobs Roadmap defines three overall objectives: (i) increasing awareness about green jobs in the private sector, (ii) enhancing dialogue (on green jobs) between the private sector and the government, and (iii) supporting companies in the implementation of green initiatives. ECOP identifies research, outreach and communication as strategies for achieving the Roadmap's vision. The ECOP position paper confirms the organization's goal to "adhere to the concept of just transition: a shift towards green practices in all means and levels of production that transform the country into low carbon economy". Further, the Confederation urges companies to "commit to implement green projects and dedicate resources to the creation of green jobs". ECOP plans to take the lead as representative of the private sector to advance policy dialogue with the government on green jobs, serving as the portal through which companies can gain expertise and best practices on green initiatives.



"Best Green Me Model" during a structured learning exercise on Green Me, ToT on Orientation and Negotiating on Green jobs, Philippines, May 2012

A **Training of Trainers programme on orientation and negotiating on green jobs,** also supported by the Green Jobs in Asia project, was organized on 10-12 May 2012 in Tagaytay City, Philippines for 18 members of the Trade Unions and Workers Associations of the Philippines. Participants worked to enhance their understanding of the impacts of climate change on employment and practice their negotiation skills for green jobs especially with regard to collective bargaining agreements. The training resulted in the development of 15 individual roll-out training plans to support wider outreach among workers' across the Philippines as well as a Training of Trainers module.

# Seminar on green jobs in Indonesia

In order to further promote green jobs and enhance the visibility of green jobs initiatives in Indonesia, a national **seminar on green jobs** was held in Jakarta, Indonesia on 22 May 2012. At the initiative of the Ministry of Manpower and Transmigration (MoMT) and with the technical support of the Green Jobs in Asia project (supported by the Australian Government – ILO Partnership Agreement 2010-2015), the seminar was attended by approximately 50 representatives from different government ministries, including the National Climate Change Council of Indonesia, employers and workers' organizations, international donors, and relevant stakeholders from non-governmental organizations, academia and the private sector.

The seminar covered a wide range of topics related to green employment, sustainable development and low-carbon economy, focusing on labour market interventions to promote green jobs, address climate change and ensure a just transition in Indonesia. Drawing on national experiences, the seminar highlighted government policies with potential to support green jobs creation and promotion in different economic sectors, including tourism and fishery, and highlighted the skills challenges and requirements necessary for achieving green economy.



Mr Abdul Wahab Bangkona, Director General of the Directorate General of Training and Productivity Development, MoMT delivered speech at the national seminar on green jobs, Indonesia, May 2012



### Radio Show and Talk Show on Green Jobs

The SMART FM's radio show titled "SMART Workers" was broadcasted on 31 May 2012 in Indonesia featuring the work being implemented in the country under the Green Jobs in Asia project supported by the ILO - Australian Government Partnership Agreement 2010-2015. During the show, the ILO's National Project Coordinator explained the project interventions on eco-tourism and green homestays. Also present were the guests from the National Council of Climate Change in Indonesia and the Ministry of Youth and Sports who participated in the discussion on climate change policies in Indonesia, ecopreneurship programme as well as how green jobs could support government initiatives and targets.

A talk show on "Green Jobs in Bangladesh" hosted by the ILO Bangkok office was also produced in July 2012 within the Green Jobs in Asia project framework. Guest speakers were from the project regional coordination unit, the project country office in ILO Bangladesh, and representative of the Grameen Shakti - a national project partner in the field. The talk show covered issues on green jobs and green jobs promotion and creation in renewable energy sector in Bangladesh. With the roll-outs of solar home systems under the project interventions, new jobs have been created for the installation and maintenance of solar energy products. They also bring a clean and alternative form of energy to rural areas, and promote the role of women who still face barriers entering into the labour market. This win-win situation is further advanced because greater access to energy opens up new opportunities for business and economic growth in rural areas.

### **Hotels - Experience - Sharing with the Business Sector**



Closing Ceremony and Experience Sharing Event, Phuket, June 2012

Marking the completion of the pilot exercise in Phuket of the Greener Business Asia (GBA) project (supported by the ILO/ Japan Multi-bilateral Programme), the workshop entitled "Hotels – Experience - Sharing with the Business Sector" held on 30 June 2012 offered a local platform to share and disseminate good practices and achievements by the hotels participating in the training and advisory service program. The event was attended by high-level representatives including Phuket Vice – Governor, worker-manager teams of the participating hotels, delegates from industry associations and business community, local authorities, and members of the academia.

Participants to the workshop had rich discussions on initiatives and results in key areas of hotel improvement, such as energy efficiency, water management, waste management, occupational health and safety, 5S (the Japanese methodologies for workplace improvement) and workplace issues, and human resources & service excellence. The exhibition stands and displays set up by each hotel were in support for thematic panel discussions where participants shared remarkable achievements and provided insights on the strategies they used to secure them.

Some of the most notable actions and results by individual hotels included:

- Reduction in water and electricity consumption for laundry operations resulted from an innovative guest engagement program leading to a 25% reduction in laundry costs
- Reduction by 11% of energy bills with the introduction of measuring systems and small equipment changes
- Reduction by 50% of plastic packaging
- In-house production of environmentally-friendly cleaning products from food waste and phasing out of chemical products
- Implementation of 5S in different departments, removal of occupational hazards and workplace improvements driven by revived Occupational Health and Safety Committee

These actions and achievements were made possible through the establishment of worker-management teams guided by a logic of workplace cooperation. This created a space for exchanging views, generating ideas, and carrying out of joint initiatives. Stronger mechanisms of worker-management cooperation are not only a key factor for the success of the program but a benefit in themselves, and essential to the longer term sustainability of the improvement process, which is meant to continue beyond the project completion.



Stands set up by hotels during the workshop, Phuket, June 2012



# Promoting a just transition to a green economy and inclusive growth for the world of work

### The ILO 15th Asia Pacific regional meeting

The 15th Asia and the Pacific regional meeting (APRM) of the ILO was held between 4 and 7 December 2011 in Kyoto, Japan. More than 410 delegates, representing governments, workers and employers' organizations and academics from 38 countries attended the meeting. Three thematic panels discussed issues related to (i) the co-ordination of macro-economic, employment and social protection policies, (ii) the development of productive employment, sustainable enterprises and skills, and (iii) the promotion of rights at work and social dialogue.

The meeting considered the challenges of realizing decent work across Asia and the Pacific, mindful of the region's great diversity, the impact of natural disasters and rapidly changing social, economic and political developments in the Middle East. The central message of the regional meeting is highly relevant to all countries, social partners and people in the region. Employment and social protection, backed by fundamental principles and rights at work and social dialogue, are critical to the recovery and to the pursuit of economic, social and environmental sustainability.

In addition, the ILO also organized two special discussions including Green jobs and Partnerships for decent work at this event. The green jobs discussion shared information on the opportunities and challenges created by the shift to sustainable patterns of growth in the region. The discussion examined green jobs' policies in terms of its support of workplace rights and social dialogue, and considered the potential for combining good employment, social and environmental outcomes that benefit the poor and vulnerable people. Employment and social-economic policies will need to be streamlined with environmental agendas to ensure that labour, enterprise and social protection measures are in place to prepare the workforce for transition.



ILO Director General Juan Somavia delivers speech at APRM opening, Japan, December 2011

The ILO 15<sup>th</sup> APRM concluded with 53 policy conclusions as steps to shape a model of growth that is more socially inclusive, environmentally friendly and economically efficient. Five of these policy conclusions were directly related to the 'greening' of the economy and jobs and fell under all main themes addressed by the conference. This confirmed that the green jobs program of the ILO is fully recognized as being part of the ILO agenda in the region. Secondly, it highlighted the cross-cutting nature of green jobs and its relevance to all four pillars of the Decent Work Agenda. These five conclusions are:

Meeting the demand for decent work

- (i) The greening of our economies hold great potential for increased opportunities for decent work (C.22) Economic, employment and social policies
- (ii) Working to ensure that decent work and full employment are at the heart of policies for strong, sustainable and balanced growth and inclusive development (C.31)

Sustainable enterprises, productive employment and skills development

- (iii) Promoting a well-designed transparent, accountable and well-communicated regulatory environment for business, including regulations that uphold labour and environmental standard (C.40)
- (iv) Promoting greener growth and green jobs, consistent with maintaining economic and social sustainability (C.51)

Right at work and social dialogue

(v) Making full use of social dialogue to anticipate and address labour market changes, including those that will come with the transition to low-carbon economies (C.58)

# Meeting of the multi-stakeholder task force on climate change and green jobs in India

The third meeting of the multi-stakeholder task force on climate change and green jobs in India was held in New Delhi on 24 May 2012. The event brought together representatives from government agencies, workers' and employers' organizations, research institutes and non-government organizations to discuss green jobs and climate change issues in the context of Indian development plans.

The task force meeting addressed the need to align its action plans with the goals of energy and environmental management, climate change and green jobs as defined in the National 12<sup>th</sup> Five-Year Plan (2012-2017). It also expressed the requirement to mainstream green skills into green employment potentials as well as the need to commence green jobs scoping studies in states other than Gujarat.



Key issues discussed during the meeting included: the development of analytical research based on Input-Output model for the green power sector in Gujarat to estimate core environment-related employment in the State, the research on the economics of cow dung which presented the large potential for green jobs in the dairy sector and biogas plants at the community level in Jabalpur, and the experiences from the Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) green jobs pilot programmes in Kaimur and Bhilwara districts to address the need for skills development at the local level.

# Support for green jobs creation

Over the past two years of implementation, the **Green Jobs in Asia project** (supported by the Australian Government – ILO Partnership Agreement 2010-2015) has made significant progress in strengthening the conditions for green jobs creation and promotion through technical cooperation activities. A driving focus of these efforts has been the development of sectoral **employment models**, designed to provide a framework for green job growth and to illustrate how project partners from both the public and private sector are actively contributing to the scaling up of green jobs opportunities at the local and national levels.

### **Employment model in renewable energy sector in Bangladesh**

The **employment model for green jobs in Bangladesh** focuses on the formation of innovative partnerships, the development of curricula and competency standards, and skills training courses on the installation and maintenance of solar home systems (SHS). A Public-Private Partnership has been set up to implement the project with Grameen Shakti (a private technical training and service provider) as well as other service providers on the market, the Bureau of Manpower Education and Training (BMET), for the institutionalization of the training curriculum and roll-out training in collaboration with the Infrastructure Development Company Limited (IDCOL), the public partner for SHS job market expansion. The project is being implemented in partnership with ILO's tripartite constituents including the Ministry of Labour and Employment, Bangladesh Employers Federation and the National Coordination Committee on Workers Education.

Through this partnership, the project is institutionalizing skills training for SHS (assembling, installation, trouble-shooting and maintenance) with the development of manuals and a standardized curriculum, which includes modules on Occupational Safety and Health (OSH) and Labour Standards. BMET, Grameen Shakti and other service providers have already conducted trainings for 100 master trainers, who are rolling-out the training in 10 BMET Technical Training Centres across the country. Approximately 1,500 beneficiaries are targeted for training (with an emphasis on women as trainees). The aim is to develop the SHS market to ensure it is competitive and efficient, providing increasing numbers of jobs and greater outreach of solar provision and services. The employment model shows how efforts to link trainees with renewable energy service providers expand productive opportunities for green jobs, reducing poverty and vulnerability in rural areas.

# Employment model in sustainable tourism sector in Indonesia



Ecotour guides with tourists, Indonesia, March 2012

The **employment model for the sustainable tourism sector in Indonesia** sets the normative and technical conditions for the large-scale creation of jobs and livelihoods in the country linked to ecotourism and green homestays. In line with the Ministry of Tourism and Creative Economy's Destination Management Organization (DMO) programme, the project works to promote green jobs in selected tourism destinations through local development strategies based on sustainable tourism principles of environmental conservation and cultural preservation.

The employment creation model includes skills training, training on entrepreneurship, promotion of association-building to strengthen private enterprises in ecotourism and green homestays. Also included are financing options to promote green private enterprise growth and entrepreneurship at provincial and district levels. In so doing, the project is working closely with relevant stakeholders to develop and better link **national and provincial industry standards** for eco-tourism and green homestays based on existing ASEAN tourism standards with **competency based training programme** for delivery through the national network of vocational training institutions.

The model is being piloted in two destination areas, Bromo in East Java and Toba in North Sumatra. The project has since expanded to other sites in Lombok and Central Kalimantan. The project also helps local communities access funds for the development of green businesses by working with the provincial SME & Cooperative office and a local micro finance institution.

Implemented in close partnership with the Ministry of Tourism and Creative Economy, Ministry of Manpower and Transmigration and social partners, as well as collaboration with the Ministry of Environment, the Provincial Government of East Java and North Sumatra, relevant District Governments, the Indonesian employment model provides a blueprint for promoting green jobs opportunities through sustainable tourism in Indonesia.



### Green skills training for social housing construction in the Philippines

The Green Jobs in Asia project works to promote green jobs in the sustainable construction of social housing in the Philippines. The project works to support policies and standards, as well as training aimed at fostering green skills development and creating green(er) job opportunities at a pilot demonstration site in Rodriguez, Rizal, Philippines. Interventions will focus on capacity building and technical training on the production and installation of green products (modified Concrete Hollow Blocks (mCHB) and Coco Coir Nets) to targeted beneficiaries (particularly focusing on women), and the development of green masonry and green construction guidelines. The project also supports entrepreneurial, financial training and business development of green community-based enterprises.

As part of the project activities, the skill trainings on the **production of mCHB** and **twining and weaving CocoNet materials for soil erosion control** took place during April and May 2012. Beneficiaries of these on-the-job trainings were 67 male and female out-of-school youths (in the mCHB training provided by MCM Eco Chem Management Corporation) and 36 women (Coconet materials training provided by CocoTech Corporation). Trainees who passed through the mCHB trainings were absorbed by the MCM as workers. Others who decided to become entrepreneurs were assisted with business formation and development by the ILO, NHA and the two private enterprises.



On-the-job training on production of mCHB, Philippines, April 2012

# Training on Work Adjustment for Recycling and Management of Waste in Sri Lanka



WMA waste collector on the field, Sri Lanka, April 2012

As part of the Green Jobs in Asia project (supported under the Australia Government - ILO Partnership Agreement 2010-2015), the ILO, in partnership with the Waste Management Authority (WMA) of Sri Lanka's Western Province and the National Institute of Occupational Safety and Health (NIOSH) under the Ministry of Labour and Labour Relations of Sri Lanka completed a series of seven training workshops based on the ILO's Work Adjustment for Recycling and Management of Waste Manual (WARM) for 300 lead trainers from 48 local authorities of the Western Province in April 2012. The training programme sought to enhance the awareness on occupational safety and health and improve the environmental practices of waste collectors. The WARM manual developed by ILO in the region was adapted to the Sri Lankan context and translated into local languages and was supplemented by visual tools such as leaflets and presentations to stimulate the learning experiences. This training manual was validated by the Tertiary and Vocational Education Commission, and was integrated into the National Vocational Qualification (level 1 and 2) certified training courses for Assistant Waste Operators. Trained focal points (34% of whom are women) are now equipped to reach out to 4,000 field workers through 48 rollout trainings under the Green Jobs in Asia project.

To commemorate this year's **World Day for Safety and Health at Work** theme of "Promoting Safety and Health in a Green Economy" on 27 April 2012, an event was organized for all workers prior to the seventh and final session of the Training of Trainers on WARM, which included a ceremonial handing-over of 130 personal protective equipment and first aids kits to the waste operators. The event was attended by high-profile delegates that included the Chairperson of Local Authority, the Head of the WMA and representatives from national Trade Unions and the Employers Federation of Ceylon (EFC).

# **Greening of Mahatma Gandhi National Rural Employment Guarantee Act (MGNREGA) in India**

Green employment opportunities created by the MGNREGA scheme in India includes regeneration of the natural resource base of local communities, water conservation and harvesting, afforestation and tree-plantation, irrigation, renovation of traditional water bodies, flood and the rehabilitation and maintenance of rural infrastructure. The ILO has been working with the United Nations Development Programme and other local partners to support an innovative approach under MGNREGA to forge vertical and horizontal linkage between MGNREGA and other programmes in Bhilwara district in Rajasthan. Such linkages added value to MGNREGA works through enhanced service delivery, skill development and improved ecological synergies. The horizontal linkages converged with other sectoral programmes at the district/ block/ village level and contributed to capacity development for the Panchayti Raj Institutions at the grass root level to promote green jobs.

As part of the greening MGNREGA, with technical support from ILO, training manuals on watershed development and rural connectivity were developed. Subsequently, two trainings were delivered in December 2011 targeting 76 village development officers, junior technical officers and mates. Participants had opportunities to enhance their knowledge on key issues including: labour productivity; quality assets and green jobs through participatory approaches; on-site decent work conditions; and improved capacity in watershed management and road construction.



Training for village development officers, junior technical officers, India, December 2011



# Q&A



Interview conducted by ILO - RO Asia and the Pacific

# Rachmart Witoelar, Executive Chair, National Climate Change Council of Indonesia (NCCCI) talks about Green jobs

1. The NCCCI is the designated national institution to provide guidance to the government and national stakeholders on speeding efforts to combat global warming, including the formulation of national policies, strategies, programmes and activities to control climate change; What importance does the NCCCI give to green jobs, employment and social inclusiveness in its analytical work and policy guidance to national partners?

Firstly, we need to include green factors into the overall science, policy and investment framework for climate change. However this has to be done within a clear set of standards and codes that will help define and categorize green products and services. Such an approach will need to cover not only new products and services, but existing ones as well. This will create the necessary environment within which green jobs can be created and promoted.

Such an approach will provide the necessary impetus to channel investment into green policy targets set up at the national level. This green investment should look into the entire product cycle, combining the concepts of green jobs and decent work that lies at the core of ILO's work.

In Indonesia, there are different groups of green jobs including:

- Jobs related to the transformation from high carbon intensity to low carbon intensity activities such as renewable energy and energy efficiency developers, carbon market players as well as relevant consultants and contractors.
- Jobs related to demand for green products in different sectors including agriculture, food and beverages, waste management, etc.
- Jobs related to conserving the natural resources and biodiversity as well as water and energy conservation related jobs.
- Jobs related to enabling the three others such as regulators, campaigners, etc.

We also need to co-opt the private sector as a vehicle to deliver the green jobs policies to the consumer. This raises their awareness on the green economy and provides them with opportunities to consume products that are essentially green, leading on to the opening up of market opportunities for green jobs and the greening of the economy as a whole.

Private sector initiatives in materials and energy efficiency need to be further encouraged, expanded and linked to the consumers so as to increase the proportion of participating private sector entities, and their potential contribution to creating green jobs. But the private sector also needs assistance in helping them respond to new market demands for better and more efficient green products and services. This will lead to green jobs in other sectors as well, including green technology research and development.

Economic development is imperative for our country and poverty alleviation is the main priority. Therefore, combating climate change cannot just be through mitigation actions to reduce emissions but also by increasing resiliences to the adverse impacts of climate change by adding stimulation for acceleration of economic development of the poor.

2. For countries in Asia and the Pacific region who are facing rising demand for energy, degradation of natural resources and high unemployment rate, what are the key challenges in their journey to build green economy as a way to tackle climate change?

Scientists now do agree that climate change patterns we are seeing clearly have anthropogenic origins – in other words, it is our everyday lifestyles and consumption patterns that are cumulatively causing the changes we are seeing in the global environment. This needs to be the starting point for our journey to a green economy, at the level where decisions on everyday lives and consumption patterns are being taken. We will need to examine this decision making level where market opportunities to influence choices are created. This may need concerted efforts in institutional transformation towards these issues that will help us realize the goals of a green economy. This could include direct transformation of non-green factories into green industries, or their transformation into new green companies. This could also potentially create further market opportunities for green jobs and services.

For Indonesia, a green economy is not just about green lifestyles and cleaner production. It has to also include the sustainable way of utilizing its natural resources including its biodiversity. Such processes can only be achieved by adding its values through clear development vision, research and development as well as public involvement.

3. What are the Council's messages to the discussion of "green economy in the context of sustainable development" at the Earth Summit (Rio+20) in Brazil in June 2012?

Rio+20 is an opportunity for us to go beyond grand words and interpolate and channel our energies in order to embed the goals of sustainability within a green economy. These two issues "green" and "economy" are not exclusive, and can mutually support one another, in creating better lifestyle choices and market opportunities. It would therefore mean that we will need to use existing mechanisms and frameworks (for example, the Rio summit has laid the necessary foundation to respond to the issues of climate change through the UNFCCC). The principle of the three goals of sustainable development - harmonizing social, economic and environmental goals - can be substantiated through the ongoing processes of the UNFCCC in responding to the unprecedented challenges of climate change that we are facing. In other words, Rio+20 will eventually be an arena to restate and reaffirm our commitments to sustainability and fill the gaps in our capacity to fulfill our commitments – and to take the leap to economic growth that is also green.

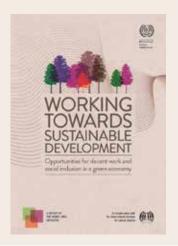


### ILO FEATURED PUBLICATION ON GREEN JOBS

# Working towards sustainable development: Opportunities for decent work and social inclusion in a green economy

A green economy is necessary if sustainable development is to be realized. According to this new released report by the ILO's Global Green Jobs Programme, the world's transition to a greener economy, coupled by the right policy mix, could generate up to 60 million additional jobs globally over the next two decades and lift tens of millions of workers out of poverty.

A new development model – one which puts people, fairness and the planet at the core of policy-making – is urgently needed, and is eminently achievable. More fundamentally, the report demonstrates that employment and social inclusion must be integral parts of any sustainable development strategy and must be included in policies that address climate change and ensure the preservation of the environment. In particular, the report assesses the sectoral, employment and income implications of the transition to a green economy. It highlights the necessary conditions, policy prescriptions and good practices required to ensure that the green economy is characterized by gains in job quality, reductions in poverty and improvements in social inclusion.



### **NEW DEVELOPMENTS ON GREEN JOBS**

#### Sustainable livelihoods through local resource-based approaches in Central Kalimantan, Indonesia

In the context of the Green Jobs in Asia project funded by the Australian Government – ILO Partnership Agreement 2010-2015, the ILO has collaborated with the National Task Force on Reduction of Emission from Deforestation and Forest Degradation (REDD+) and the National Climate Change Council of Indonesia to implement various joint initiatives and participation in respective trainings and information sharing activities. Consultations have been made on the importance of employment rich and socially inclusive policies to prevent deforestation and peat land regeneration in the country. This close collaboration has led to the preparation of an ILO proposal for a pilot project on "sustainable livelihoods through local resource-based approaches in Central Kalimantan, Indonesia".

The pilot project was endorsed by the National REDD+ Task Force of Indonesia in May 2012 and funded with USD 1.4 million for one year (2012-2013). The project will focus on introducing local resource-based approaches and building local capacity to rehabilitate degraded forestland, promote sustainable livelihoods and improve access to socio-economic facilities and markets. Traditional knowledge and practices will be drawn upon to promote green value chains, local economic development and community driven participatory decision-making to ensure the sustainability of the approach.

# Scaling up risk transfer mechanisms for climate vulnerable farming communities in Southern Philippines

The Global Environment Facility (GEF) Secretariat has approved a project proposal entitled "Risk transfer mechanisms for climate vulnerable farming communities in Southern Philippines". This is a joint initiative of the ILO Green Jobs programme at the Regional Office for Asia and the Pacific, the Department of Trade and Industry of the Philippines, the Department of Labor and Employment of the Philippines, the Philippine Crop Insurance Corporation and the United Nations Development Programme.

The project aims to facilitate the access to innovative financing packages, including weather index based insurance (WIBI) and integrated financial packages to farmers in disaster prone areas of the Southern Philippines. It is expected that project beneficiaries will be able to enhance climate resilience through sustainable and diversified livelihoods, a reduction of risks resulting from the establishment of early warning systems and strengthened awareness and ownership of the adaptation and risk reduction mechanisms. The project will be implemented by the ILO with a total budget of at least USD 1 million. It will also leverage USD 9 million during the implementation from central government agencies, local governments, training service providers, financial service providers, non-governmental organizations and farmers associations. This will enable further investments to help farming communities in this area escape from the "poverty trap" towards a pathway out of poverty.

#### Green jobs Malaysia project

The ILO Regional Office for Asia and the Pacific and the Ministry of Human Resources of Malaysia signed an agreement in May 2012 to initiate the Green Jobs Malaysia project in collaboration with the Ministry of Energy, Green Technology and Water (KeTTHA) that will be implemented during one year with a total budget of USD 347,000 coming from the National Treasury of Malaysia. The project will raise awareness of ILO constituents and develop a study to assess the economy-employment and economy-environment linkages at the national level and map existing green jobs in the Malaysian labour market. The project will build upon the Green Jobs mapping studies undertaken in Indonesia and the Philippines under the Green Jobs Asia Project (Australian Government – ILO Partnership). The project aims to provide an estimate of the number of green jobs in the economy, the level of economic activity that is dependent on the environment in Malaysia and the employment impact of environment-related policies. It supports wider efforts by governments, employers and trade unions to promote sustainable development in a resource scarce and climate changed world.



You can join our ILO Community of Practice on Green Jobs by going to http://apgreenjobs.ilo.org and register as a member.

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