
International Labour Office

Geneva

# Green jobs in Mauritius

## Experiences from a Small Island Developing State

**Synthesis Report**

Employment Sector

# Green jobs in Mauritius

# Experiences from a Small Island Developing State

---

978-92-2-127426-1 (print)
978-92-2-127427-8 (web pdf)



---

Printed in Switzerland

# Table of Contents

# Foreword

Green jobs is a new concept. The organization and discussion around the Rio+20 Conference on sustainable development, held in June 2012, has moved many countries to review their development policies in the light of growing environmental challenges. In that discussion the relationship with the world of work is not always easily made. Yet, much of what determines the level of emissions, the use of resources and the degree of pollution is related to enterprises and the people that manage its operations.

The ILO has created the Green Jobs Programme with the aim of assisting member countries and social partners to better understand the employment and social opportunities and challenges in the evolving green economy and those related to the effects of climate change. The concept of green jobs signals an approach that focuses on the social dimension of sustainable development and, in particular, on the creation of sufficient opportunities for decent work.

The Government of Mauritius has adopted a sustainable development framework called "Maurice, Ile Durable". The ILO has collaborated in shaping the framework's implementation strategies, especially with regard to the employment dimension. The purpose of the collaboration was to strengthen the framework by making an operational link with jobs, skills, enterprise development and the role of employers' and workers' organizations.

This report summarizes the results of the ILO support provided in 2011 and 2012. The work was undertaken through a Regular Budget Support Allocation made available by the Regional Office for Africa. The bulk of the analysis and advice was provided by consultants based in Mauritius. ILO experts from Geneva and Bangkok contributed with technical guidance and strategic suggestions.

The overall coordination of the ILO support was ensured by Ms. Roshini Brizmohun-Gopaul, with management support from the ILO Office in Antananarivo. The final report was written by Silke Olsen, ILO consultant.

Geneva, February 2013

# Report Overview

The International Labour Organization (ILO) is supporting Mauritius in its endeavor to become a sustainable island through the promotion of green jobs in the country. This synthesis report presents the various initiatives that have been conducted in 2011-2012 within the “Maurice Ile Durable” framework.

The first part of the report presents the steps that Mauritius has taken toward sustainability through the Maurice Ile Durable (MID) vision. It goes on to highlight the contribution that the ILO’s Green Jobs Agenda can make to this process. Four studies have been conducted in Mauritius in 2011, with support from the ILO Green Jobs Programme, to explore the opportunities for green jobs in the country.

The second part of the report presents the findings and recommendations from these studies.

The third part contains the joint Action Plan by the Mauritian partners, developed as a follow up to the findings of the studies. The Plan aims to ensure that employment is part and parcel of the MID strategy.

The report concludes with a review of the key recommendations and an outline of the steps necessary to integrate the action plan into the MID process as well as in the employment policies of the country.

# PART I – Green jobs in Mauritius: The Context

## 1. Maurice Ile Durable: an Overview

Mauritius is a small island developing state which has set itself the target of becoming a model for sustainable development. The country is facing a number of environmental challenges, one of the most important being its reliance on fossil fuels. At the time of writing, only 21% of electricity is produced from renewable sources. This has enhanced the need for the country to adopt a more sustainable model of economic growth. In 2008, the Prime Minister of Mauritius, Dr. Navinchandra Ramgoolam, launched the Maurice Ile Durable (MID) vision for the country to lead the way in sustainable development through a participatory process.

> *''The Maurice Ile Durable project belongs not to its conceptors or to Government but to the whole Mauritian nation. It is a social project and is essentially a vision that seeks to transform the environmental, economic and social landscape of the country"* – The Honourable Dr. Navinchandra Ramgoolam

In its initial stages, MID was primarily focused on the development of renewable energies. An MID Fund was announced in the Budget Speech 2008-2009 with a provision of Rs. 1.3 billion to support efforts to promote a more efficient use of energy and increase the use of renewable energy. A Technical Support Unit was set up with the support of the United Nations Development Programme (UNDP), within the Ministry of Public Utilities and Renewable Energy, to process and approve projects sent for funding through the MID Fund.

However, it quickly became apparent that MID was a much larger concept reaching beyond renewable energies and that is should be expanded to education, environment, employment/economy and equity. Together, these pillars of sustainable development are known as the five E's. A Green Paper was prepared in April 2011 to outline the process for the development of an all-encompassing MID Policy, Strategy and Action Plan. Working groups, including all major stakeholders, were set up for each area and a series of national consultations were held to develop an MID Vision in a participatory manner. Workshops were held in June-July 2011 for the working groups to discuss and provide recommendations on the way forward for their respective pillar of sustainable development. A team of international consultant was recruited to work on a final policy based on these proposals. At the time of writing, the process of developing the MID Policy, Strategy and Action Plan was still on-going but expected to be completed by mid-2012.

## 2. The ILO's Green Jobs Agenda and Sustainable Development

Employment and social inclusion are key elements of a successful transition toward a green economy. Effectively, the world of work is the sphere where the social, economic and environmental dimensions of sustainable development intersect and where solutions for a greener economy can be identified. In order for a green economy to grow and succeed, it must generate productive and decent jobs for all. The concept of green jobs ensures that this connection between development and equity is established.

For the International Labour Organization (ILO), the notion of green jobs summarizes the transformation of economies, enterprises, workplaces and labour markets into a sustainable, low-carbon economy providing decent work. However, innovative strategies to promote green jobs can only succeed with the full involvement and participation of workers and enterprises. The ILO Green Jobs Agenda supports a socially fair transition for enterprises, workers and communities, where the impact of changes in labour markets, including vulnerabilities and inequalities and new business models are addressed through social dialogue.

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

- Reduce consumption of energy and raw materials
- Limit greenhouse gas emissions
- Minimize waste and pollution
- Protect and restore ecosystems

Greening jobs in core areas of the economy has the potential to have an effect across large sections of the economy and to contribute to the greening of other jobs that make up large sections of the total workforce. Green jobs span a wide array of skills, educational backgrounds and occupational profiles. They may occur in research and development; professional fields such as engineering and architecture; project planning and management; auditing, administration, marketing, retail, and customer services; and in many traditional blue-collar areas such as plumbing or electrical wiring. Green jobs exist in private businesses as well as government offices, science and academia, professional associations and civil society organizations.

The transition to a resource efficient, low-emission and climate resilience economy will affect employment in at least four ways:

1) In some cases, additional jobs will be created through, for example, the manufacturing of pollution control devices for existing production equipment.
2) Some employment will be substituted if there is, for example, a shift from fossil fuels to renewable energy.
3) Certain jobs may be eliminated without direct replacement, for example when packaging materials are discouraged or banned.
4) Many jobs may be redefined as sectors are greened. This could apply to plumbers, electricians and construction workers.

***The Green Jobs Programme: approach and programming framework***

The ILO's Green Jobs Programme supports constituents to integrate decent work objectives and target sustainable development strategies. It operates along three inter-connected strands:

(1) Supporting the analysis and decision making to assess employment and income impacts of national policy and programmes related to sustainable development
(2) Promoting green jobs in the greening of enterprises and the development of new businesses in energy efficiency and renewable energy, as well as in waste management and recycling;
(3) Strengthening social dialogue for a "Just transition" towards a sustainable low-carbon economy for enterprises and workers affected by restructuring aimed at reducing environmental impact and adaptation to climate change.

The ultimate aim of the Green Jobs Programme is to strengthen national capacities for assessing and formulating policy scenarios for green jobs promotion. This involves building up a knowledge base and a set of tested tools that partners can consult and apply. It also includes technical support in selected countries to actually apply some of the tools and approaches. This will, at the same time, provide feedback and new insights on green jobs, which can in turn be used to upgrade and expand the knowledge base.[1]

The Green Jobs Programme supports the implementation of the ILO's programme framework, which is centred on Decent Work Country Programmes (DWCP), where constituents jointly determine a limited set of priorities (2-3) and a related number of country outcomes (5-10). A Result-Based Management system provides for a conduit to link contributions from technical specialists to support the implementation of outcome strategies at country level, per biennium (2012-2013, 2014-2015).

In addition, the ILO has set a Strategic Policy Framework for the period 2010-2015, which includes 19 Strategic Outcomes. These are all reflected in the DWCP. In addition to the DWCP and Outcomes a number of cross-cutting issues are being promoted, like gender, knowledge sharing and policy coherence. Some of these are shaped as a coherent set of tangible deliverables and presented as Global Products (GP). The purpose of the GP is essentially to create new products and tools in support of the technical capacity in Field Offices to reach meaningful results at country level. Besides, GP operate at global level to raise visibility for decent work and other ILO values, and build partnerships with international agencies and donors. A Global Product on Green Jobs has been defined with a mainstreaming function and an interregional scope. It offers support for the inclusion of green jobs in all DWCP.

## 3. Developing a Green Jobs Programme for Mauritius

In order for Mauritius to reach higher levels of sustainable development, employment-led strategies must be at the core of such transition. The promotion of green jobs should therefore be integrated in the MID strategy and the employment policies of the country. The ILO is supporting this process through its Mauritian Green Jobs Programme.

In 2010, the UN Resident Coordinator's Office in Mauritius initiated a multidisciplinary mission to identify major areas of support to build the capacity of the country. The United Nations Country Team agreed to support the Government's priority on sustainable development and the Maurice Ile

[1] See also: http://www.ilo.org/empent/units/green-jobs-programme/lang--en/index.htm

Durable (MID) vision. The Green Jobs Programme for Mauritius also supports the joint UN configuration.

A desk review was carried out to review and compile the relevant existing documentation from the government of Mauritius, the United Nations, civil society and development partners in support of the envisaged programme. The ILO participated in the consultative workshop for the MID working group on employment/economy which took place in June-July 2011. The concept of green jobs was discussed with the participants and it emerged that there was a need for in-depth statistics and analysis on measuring the creation of green jobs. In support of the MID process, the ILO proceeded with a green jobs' analysis and carried out four specific studies within the MID framework.

A socio-economic assessment of green jobs in the country was subsequently carried out, mapping existing and potential green jobs in Mauritius. Based on the assessment, a number of recommendations were identified to create, sustain and secure decent and green jobs, and thus contribute to a transition toward sustainable development.

At the request of the Ministry of Labour, Industrial Relations and Employment, a policy applied research was conducted to determine the needs for a greener economy and to guide the government and its institutions on the training needs required for sustainable development, thus feeding into the MID process. Discussions were held with stakeholder in order to develop the most appropriate methodology for the Mauritian context.

As the green jobs programme progressed, a study was also conducted in collaboration with the Mauritius Employers' Federation to identify existing green initiatives undertaken by enterprises. In addition, the ILO received numerous requests from social partners to assist them in stocktaking and reviewing greens jobs from their perspective. The findings of both studies served as a basis for a set of recommendation to enhance the contribution of workers and enterprises to a transition toward sustainable development.

Together, these four studies have provided a comprehensive picture of green jobs in Mauritius and a broad set of recommendations to support the MID process. In addition, the findings inform and guide the ILO constituents in their policy planning and implementation. The studies were discussed and validated in February 2012 at a green jobs promotion workshop organized jointly by the ILO and the Ministry of Labour, Industrial Relations and Employment. Some 50 participants from government institutions, training institutions, private sector organizations and trade unions attended the two-day workshop. Following presentations and discussion on all studies, an action plan was developed based on proposed actions at sectoral level which would promote green jobs, green enterprises and ensure a just transition.

The second part of this report provides a summary of the various findings and recommendations that have emanated from the four studies conducted as part of the green jobs programme in Mauritius. The third part presents the action plan that has been developed to ensure that a focus on employment is included in the final MID strategy.

# PART II – Green Jobs in Mauritius: Four Studies

## 1. Green Jobs Assessment in Mauritius

### 1.1 Background and objectives

An assessment of green jobs in Mauritius was conducted by the ILO in 2011/2012 in order to support the Maurice Ile Durable (MID) process. It focuses on major economic sectors and provides an estimate of existing green jobs. It also examines the multiplier effect of a green investment strategy in terms of employment and output. Based on these results a number of policy recommendations have been made.

### 1.2 Methodology and findings

#### 1.2.1 Existing green jobs

Three methods were used to measure existing green jobs in Mauritius, namely (1) the process based method and (2) the output based method, which captures employment in 'market-valued' products and processes and (3) the natural conservation method which involves jobs providing public goods with no market value. This differentiation has been made to enable policy makers to better assess private and public investment options. The process-based method defines jobs in enterprises which are among the 10% most energy and water efficient as green jobs. This methodology has been used notably for manufacturing and tourism. The output-based method relies on the characteristics of the final product or service having as objective an 'environmental purpose'. This method has been applied to the agriculture and renewable energy sector. The natural resource conservation method seeks to identify sectors and employment which have a direct link with protecting or enhancing environmental quality and providing public goods. Green jobs in these sectors are found in national parks and marine conservation. In addition, further elements are used to determine whether green jobs are also decent, for example through the presence of certifications, such as Fair Trade in Agriculture or the formality of employment (official contracts). In this framework, only jobs in the formal recycling industry would for example be counted as Green Jobs.

As of 2010, green jobs in Mauritius stand at approximately 6.3% of total employment which is estimated at 558,100 jobs. Most green jobs were found in electricity generation with around 23% of jobs in areas such as the supply of bagasse derived from sugar cane to electricity plants. In agriculture 12% of employment can be considered green as well as decent, primarily in sustainable fishing, followed by forestry but also in organic agriculture. While only some textile companies have been greening their processes – with for example solar water heating systems, grey water use, recycling and natural air cooling – only around 5% of employment in that sector was defined as green. The same accounts for the results in the services sector where 3% of the jobs are found in highly energy and water efficient tourist resorts. Sectors such as recycling, waste management, green recreational activities, water and renewable energy also represent green jobs, though these sectors currently have low employment levels.

### 1.2.2 Potential for Green Jobs - Policy scenario of a green investment strategy

It is important to emphasize that each sector in the economy is linked in one way or the other with others. Thus, a strategy to enhance production in a particular sector (by investment and/or raising demand) will also lead to a rise in employment and production in other sectors, through backward and forward linkages along the supply chain. To assess these indirect linkages the output and employment multiplier has been calculated. The output multiplier shows the resulting rise in demand and output in other sectors producing inputs to be used in the production process of an increased final output. Similarly, employment multipliers show the generation of employment in other sectors which supply input to the final output sector.

In order to calculate the output and employment multiplier, the input-output method is used. The input-output table 2009 from the Statistic Office, Mauritius, has been disaggregated into sub-sectors such as green agriculture, sustainable fishing, green textile, recycling, green hotel, sustainable transport, renewable energy among others. Thereby, the production linkages for these sectors and sub-sectors have been adjusted.

Having disaggregated sectors into conventional and green, a hypothetical 'what if' scenario has been applied that is a one million Rupee increase in final demand. Such a scenario allowed comparing the output and employment effect in the conventional sub-sector with the green sub-sector. Table 1 below provides a summary of the findings for the sectors with the highest multiplier effect, namely agriculture (including fishing and forestry), manufacturing (including textile), services/tourism (including hotels) and energy (including electricity). An analysis of the data for the different sectors follows.

***Table 1: One million Rupee increase in final demand and its effects on output, direct and indirect jobs on selected sectors***

| | Contribution to GDP as % of total | Employment per sector as % of total and % of green and conventional sector shares | | Output multiplier | Direct jobs created by a 1million Rupee increase in final demand | Indirect jobs created by a 1million Rupee increase in final demand | Total jobs created by a 1 million Rupee increase in final demand |
|---|---|---|---|---|---|---|---|
| **Agriculture** | 4% | 8% | | | | | |
| Conventional | | | 88% | 1.21 | 2.28 | 0.29 | 2.57 |
| Green | | | 12% | 1.30 | 2.28 | 0.41 | 2.69 |
| **Manufacturing** | 18% | 21% | | | | | |
| Conventional | | | 95% | 1.58 | 0.7 | 0.8 | 1.5 |
| Green | | | 5% | 1.54 | 1.7 | 0.8 | 2.5 |
| **Services (Hotel)** | 7% | 7% | | | | | |
| Conventional | | | 97% | 1.37 | 0.67 | 0.55 | 1.23 |
| Green | | | 3% | 1.37 | 1.49 | 0.55 | 2.05 |
| **Energy** | 2% | 1% | | | | | |
| Fossil fuel | | | 77% | 1.6 | 0.2 | 0.6 | 0.8 |
| Renewable | | | 23% | 2.5 | 0.2 | 1.2 | 1.4 |
| **Other sectors** | **69%** | **63%** | | | | | |
| **Total** | **100%** | **100%** | **6.3%** | | | | |

**Agriculture**

The output and employment multiplier for the green sub-sector is higher than for conventional agriculture (1.3 vs. 1.2 for output and 2.6 vs. 2.7 for employment). Accordingly, employment gains range from +5 percent (and +7 percent output). This is since green agriculture relies relatively more on inputs which are produced locally such as organic fertilizers. This implies the use of more transportation, packaging and other processes in the production of these inputs. Thus, when planters use inputs from the domestic economy, they create relatively more demand and employment in other sectors in comparision to conventional agriculture.

**Green manufacturing and textile**

The green manufacturing sector stands out notably because of a higher direct employment effect (1.7 vs. 0.7). The higher employment effect translates into employment gains of +67% in comparison to the conventional sector. Given that renewable energy systems such as solar water heaters, recycling measures and grey water use are more labor intensive than operating conventional factories the higher employment effect is intuitive.

**Tourism**:

Hotels that are resource efficient use solar water heater systems, recycling facilities, energy saving equipment and continuous training of staff. These activities within the green hotel sector seem to be responsible for the – in comparison to the conventional hotel sector - higher direct employment effect of a 1 million Rupee increase in final demand (1.5 vs. 0.7). Employment gains of over 60% can be expected.

**Renewable Energy**:

Renewable energy creates relatively more output (2.5) and employment (1.4) than conventional fossil based electricity generation (output 1.6 and employment 0.8). This translates into employment and output gains of round +75%. The main reason is that the generation of renewable energy uses inputs from the domestic economy, notably bagasse, which in turn generate employment and output in the supply chain. Fossil fuels are imported, have a very short supply chain and hence entail little number of jobs. Conversely, the supply and by-firing of bagasse entails jobs in haulage, feeding and operation of the electricity generating plant.

**Comparing a green growth scenario with a conventional scenario**

For the purpose of informing policy choices a simple comparison can be made between a green and a conventional growth scenario, using the calculated output and employment multipliers. Assuming a conservative 2.5% growth in total industrial output per year – which is roughly around Rs. 10 billion – the model allows for a short term simulation between scenarios.

The four main sectors – agriculture (sugar), manufacturing (textile), tourism (hotel) and energy (renewable versus fossil fuel) – have been selected for simulation. An increase in industrial output in those sectors by a combined total of 10 billion Rs. would lead to an increase of 21,600 jobs in the green scenario as opposed to 15, 250 jobs when following a conventional growth path.

A difference, however, stands out for the energy sector. Due to the high multipliers the output effects are estimated to be also higher in the green scenario. Assuming a 2.5% growth in industrial output of the total energy sector (or roughly 280 million Rs.), a total output growth - all industries combined - of 700 million Rs. can be expected in a green scenario (i.e. when outputs growth is assumed in the renewable sub-sector). In comparison, Increasing output in the fossil fuel sub-sector by the same amount would only lead to an overall output growth of around 450 million Rs.

In terms of employment, the increase in jobs in the renewable energy scenario would be nearly double compared to the effect of simulated output growth in the fossil fuel sector.

The differences between the green and the conventional growth scenario - as illustrated in the renewable energy sector - are due to the higher integration of green industries, and notably renewable energy based activities through linkages into the value chains of the Mauritian economy. Conversely, fossil fuels are imported and have much weaker linkages into the domestic economy, therefore generating less additional employment and value added.

This simple model indicates that redirecting growth towards a greener scenario (through investment and increased demand) can result in higher output and more jobs.

## 1.3 Policy Recommendations

The study has highlighted the multiplier effect of green jobs in various sectors of the economy. Based on these findings, a number of initiatives are required to stimulate green employment. These recommendations stem from an analysis of the data, as well as in-depth interviews held with stakeholders.

### 1.3.1 General recommendations

**(i) Provide the right mix of incentive structures and support to encourage the greening of the economy**

- ***Introduce environmental tax reform, in particular an eco-tax, that shifts the burden to resource use and pollution and away from labour.*** For instance, other ILO studies (such as those based on the Global Economic Linkages (GEL) model) indicate that if an eco-tax is combined with employment-support measures, by 2020 multi-factor productivity would be 1.5 per cent higher than if green taxes are not used to support employment, and by 2050 it would be 5 per cent higher. Growing evidence indicates that the net impact on employment is also likely to be positive. At the global level, if a tax on $CO_2$ emissions was imposed and the resulting revenues were used to cut labour taxes, then up to 14 million net new jobs could be created.

- ***Provide targeted support to enterprises, notably SMEs.*** The role of SMEs in the transformation to a green economy will be critical for successful greening of the economy, especially in terms of improved employment and social outcomes. Indeed, SMEs provide two-thirds or more of all employment and are also the biggest source of new job creation and innovation. The creation and growth of SMEs are particularly sensitive to a number of

factors, including a generally enabling regulatory and institutional environment – one which makes it easy for businesses to start and grow as part of the formal economy – and access to information, green markets, skills programmes, technologies and finance. Environmental regulation, research and development, as well as public procurement need to be mindful of the needs and limitations of SMEs.

**(ii) Ensure that employment, decent work and social inclusion are integral parts of any sustainable development strategy**

- ***Put in place social and labour market policies, which are essential for sustainable development with social inclusion.*** Efforts are needed to strengthen social protection, active labour market policies, in particular skills development, and targeted programmes for disadvantaged groups. Income-support measures such as unemployment benefit and transfers will be central and will need to be linked with other measures, such as assistance with job search and matching through employment services. While most of these policies are relevant to any type of structural change in labour markets, they need to be tailored for the shifts and dynamics that are specific to the greening of enterprises across the economy and which vary between sectors.

- ***Place emphasis on skills and education policies to facilitate job transition and improve employability***. This is critical because without skilled workers and competent enterprises the shift to a greener economy will neither be technically feasible nor economically viable. A greener economy will see the emergence of some new occupations, but it will mostly require new competencies in existing jobs and shifts in demand for occupations. There is ample evidence from around the world that it is both possible and necessary to anticipate future skills needs and make adjustments in education and training systems.

- ***Leverage social protection for sustainable development.*** The value of social protection floors in attenuating the impacts of economic shocks on individual households and the wider economy has been well documented. The same mechanisms at work in periods of crisis can also facilitate green transitions, for example, by protecting redundant workers as they look for new opportunities or undergo retraining. They can be an important part of a package of measures to help the poor in developing countries affected by climate change, to pay the poor for environmental services and to address energy poverty.

  The power of social protection to build rural productive capacity and climate resilience is demonstrated by the large-scale investments under the National Rural Employment Guarantee Act in India and the Expanded Public Works Programmes in South Africa. Successful examples of income-support schemes paying poor households for environmental services they provide by protecting forests and marine life are the 'green grant' programme in Brazil and the Plan Nacional de Quisqueya Verde in the Dominican Republic.

**(iii) Place social dialogue at the centre of policy making to improve coherence and to ensure a successful shift to a new development model**

- ***Social dialogue will lead to better and more sustained outcomes.*** The programme of renovation of buildings for energy efficiency in Germany has mobilized about €100 billion over the past decade, making it the largest of such programme worldwide. The programme

was originally proposed to the government by the German trade unions and employers' organization as a 'pact for the environment and employment'. It is reducing energy bills, reducing emissions and providing around 300,000 direct jobs per year.

- ***Tripartism will ensure that job quality is at the heart of a green economy***. A greener economy does not automatically create high-quality, decent jobs. Job quality needs to be monitored and measured to ensure labour legislation is applied and that workers and employers can organize and make use of collective bargaining. In this regard, International Labour Standards provide both a legal and institutional framework and practical guidance for work in a greener and more sustainable economy. Similarly, while a green economy is very likely to be healthier and safer for workers and the public, care is nonetheless needed to prevent possible new occupational hazards.

- ***Effective social dialogue is necessary to ensure that policies are coherent and that change is adopted.*** Well-informed and coherent policies that result from broad support and active commitment among stakeholders and in society will be essential to ensuring that the shift towards a greener economy is sustainable. These can only be achieved through active dialogue with stakeholders, particularly with employers' organizations and trade unions, as key actors in the labour market. Major national programmes and policies have, for example, been implemented with the help of social dialogue under the Grenelle de l'Environnement in France, the climate strategy in Brazil and the Green Economy Accord in South Africa.

### 1.3.2 Sectoral recommendations

**Green agriculture**

*Green agricultural certification* – In order to generate green employment, especially in the agricultural sector, there is a need to create demand for green products. This could be achieved by increasing the visibility of green agricultural products available on the market through an official certification system. There are currently no clear mechanisms in place to identify whether a product is green and whether *sustainable* agricultural farming practices are being employed. A project by the Global Environment Facility's Small Grants Programme (GEF-SGP) could, however, be taken as a model: farmers who adopted sustainable agriculture within the project were certified as green by Eco-cert.

*Awareness raising campaign* – The green agricultural certification should be supported by an awareness raising campaign, aimed at both planters and the general public, which would highlight the advantages and importance of green agriculture and green products for an island like Mauritius.

*Incentives to planters* – A number of strategies have been introduced to allow planters to move toward greener processes. However, given the low-level of sustainable practices to date, more incentives are required. For example, green loans with preferential interest rates could be provided.

*Synergy between climate change and green jobs* – Climate change adaptation is a priority for the government. Projects to enhance the adaptation capabilities of farmers could be developed within

this framework and simultaneously support efforts to move toward sustainable farming and green employment.

*Enhanced supply-chain linkages* – While planters may wish to use organic fertilizers and adopt other green farming practices, they lack the necessary information and connections to engage with relevant suppliers. Efforts should be made to gather this information and make it readily available to planters in order to develop the necessary supply chain linkages.

*Off-lagoon fishing* – The government has already spearheaded initiatives to encourage fishers to move toward off-lagoon fishing. Lessons learnt from such projects should guide efforts to move toward sustainable fishing more generally.

**Green manufacturing and textile**

*Visibility of green businesses* – Green businesses and green employment are commonly perceived as costly to achieve. However, this study has found that a number of initiatives have been undertaken at enterprise level to lessen the use of fossil fuel energy and to, for example, enhance the reuse of water and the recycling of waste. The gains from such initiative should be made more visible to other enterprises via a media strategy.

*Carbon footprint and eco-labeling* – The Blue Carbon Award initiated by the Mauritius Export Association (MEXA) highlights the attempts of private entrepreneurs to contribute to a low carbon economy and rewards enterprises, which have developed and implemented strategies to reduce their carbon footprint. A similar initiative could be implemented in the manufacturing sector to assess low carbon initiatives and encourage enterprises to report on their green practices and their contribution to a low carbon economy. Similarly, eco-labels and green certification could also be implemented to differentiate between conventional and green businesses.

*"Shades of green" concept* – Enterprises may view a transition to green jobs as very demanding. A "shades of green" approach which focuses on a gradual transition and offers rewards according to a graduated scale could serve as an incentive.

*Skills for green employment and green businesses* – Skills for green jobs need to be developed in this sector. Relevant training opportunities should, therefore, be developed and promoted. Know-how and expertise on techniques and technologies to reduce environmental degradation should also be disseminated in order to stimulate use.

*Green product development* – A number of initiatives should be adopted to increase the demand for green products in this sector and thus enhance the number of green jobs. Initiatives could for example be adopted to encourage technological innovation through incubators.

**Green hotels and eco-tourism**

*Green certification and star rating* – A green certification system should be created to allow hotels which are making efforts to move toward more environmentally-friendly activities to differentiate themselves and stand out from the rest. The degree of greening could also be highlighted through a 'star rating'.

*Green procurement in hotels* – In order to encourage hotels and restaurants to purchase green products in their operations, a green procurement strategy should be developed.

*Eco-tourism* – An eco-tourism strategy could be used to attract more tourism. This would also serve to encourage the creation of more green jobs within the economy beyond tourism, such as forestry, fishing and recreation industries.

**Green and renewable energy**

*Regulation of the energy sector* – Institutional arrangements should be made to develop the use of renewable energy. However, issues existing in the conventional electricity sector must first be addressed in order to move forward with renewable alternatives.

*Energy conservation incentives* – Additional incentives to conserve energy, such as the solar water heater scheme may be envisaged. Such schemes create green employment opportunity through their retail branch but also through the installation and maintenance of equipment.

*Precedent setting in the use of renewable energy* – The government may lead by example and opt to generate its own renewable energy through solar system on official buildings.

## 1.4 Conclusions

The study has drawn two key conclusions. Firstly, green jobs already exist in a number of sectors of the Mauritian economy and are estimated at 6.3% of the total number of jobs. Secondly, a green jobs investment strategy would have a higher multiplier effect in terms of output and employment throughout the economy in comparison to a Business-as-Usual strategy.

A number of initiatives have already been implemented by the government, the private sector and international organization to make Mauritius a sustainable island, albeit on an ad-hoc basis. These initiatives provide examples of successes which should inform the MID project.

# 2. Skills for Green Jobs in Mauritius

## 2.1 Introduction

### 2.1.1 Background

The right skills are a prerequisite to make the transition to a greener economy in Mauritius possible. Skills for green jobs refer to the technical skills, knowledge, values and attitudes needed in the workforce to develop and support sustainable social, economic and environmental outcomes in business, industry and the community.

### 2.1.2 Objective

The ILO has undertaken a policy orientated research on the needs for a greener economy with respects to new and changing occupational profiles, greening of existing occupations, and the identification of skills and occupations that become obsolete.

The objective of the study is to identify strategic skills development responses in the context of the Maurice Ile Durable (MID) process. In particular, the study seeks to strengthen the national human resources development strategy to ensure that the needs for a green economy based on decent work are met.

### 2.1.3 Methodology

The assessment focuses on the sectors most likely to be affected by a transition to sustainable development according to their contribution to the GDP of Mauritius. These sectors which are among the highest employers in the Mauritian economy are:

- Energy supply (carbon sequestration, co-generation, and renewables)
- Transport (more fuel-efficient vehicles, car-sharing, public transport)
- Manufacturing (clean technologies, energy efficiency)
- Buildings (green buildings, retro-fitting, solar heating)
- Materials management (recycling, de-materialization)
- Retail (eco-labels, non-product services)
- Agriculture (soil conservation, water efficiency, organic farming)
- Forestry (reforestation, agro-forestry)

In order to gather the relevant data for the study, emphasis was placed on stakeholder participation from these sectors. Face to face interviews were held with the support of a structured questionnaire. Documents related to the sustainable development process in Mauritius were also reviewed. Findings were validated and complemented through a workshop in February 2012 organized jointly by the Ministry of Labour, Employment and Industrial Relations and the ILO.

## 2.2 Findings

### 2.2.1 Existing programmes for green skills

The assessment found that Mauritius does not yet have a skills development strategy in place to meet the skills needed for greening the economy. A number of institutional factors seem to be hindering such a development, namely:

- the absence of a clear message regarding MID from the authority;
- the lack of stakeholder support for the implementation of MID, both at a regional and international level;
- the lack of necessary institutional and planning capacity at the various educational and training institutions;
- the lack of a clear policy agenda to develop the necessary skills for a green economy; and
- the limited participation of key stakeholders from the industries in the implementation mechanisms in related key areas.

Nonetheless a limited number of courses are available to develop green skills, though the majority of these are on an ad-hoc basic. Out of 130 undergraduate courses at the University of Mauritius, only 8 have a component on sustainable development. At the University of Technology, 5 out of 56 undergraduate courses and 8 out of 39 postgraduate courses have built-in components on this area.

The Mauritius Institute of Training and Development (MITD) is trying to establish training networks between public sector training institutions and employers, however the development of skills for green jobs is not a priority. Most respondents felt that compulsory level education was crucial in the promotion of green skills. Technical Vocational Education and Training (TVET) and Continuing Vocational Training (CVT) are also instrumental in this process.

Overall, the current education and training system, including general schooling, does not have a strategy to mainstream sustainability and environment protection issues. Such a strategy should be developed through a process of consultation and with the participation of a wide range of stakeholders.

### 2.2.2 Green restructuring

The Green Jobs report produced by UNEP, ILO, IOE and ITUC in 2008 identified four ways in which employment will be affected as economies are redirected toward greater sustainability. First, additional jobs will be created. Second, some employment will shift – for example from fossil fuels to renewables, or from truck manufacturing to railway rolling stock manufacturing, or from landfilling and waste incineration to recycling. Third, certain jobs may be eliminated without direct replacement. Finally, the jobs of many existing workers (for example, plumbers, electricians, metal workers and construction workers) will simply be redefined as day-to-day skill sets, work methods and profiles are greened.

In addition, the report identified two sources of structural adjustment linked to climate change and environment. First, the destruction of natural habitats, natural resources and ecosystems leads to a decline of income-generating opportunities. Economic changes are wrought by flooding,

contamination of land and water, deforestation, loss of biodiversity etc. Second, new markets, technologies, products, policies and regulations lead to the decline of certain economic sectors and the rise of others. Green structural change is induced through environmental regulations and policies, such as carbon taxation, cap-and-trade schemes and emissions targets. Likewise, green structural change is led by economic forces, as businesses take advantage of new market opportunities and develop and apply new green technologies. Both sources of structural changes may lead to job losses. The first source requires active adaptation measures and diversification of income opportunities. The second source requires a proactive restructuring approach at enterprise, community and national level to alleviate the negative consequences for the labour market and to realize the potential of these structural changes for economic growth and decent work.

Currently in Mauritius, there has not yet been substantial restructuring toward a greener economy from different sectors of the economy. There have been a number of initiatives but these are mostly concentrated in the renewable energy sector. Nevertheless, possible human resources and skills requirements for a wider green restructuring process should be considered.

### 2.2.3 Anticipation of skills requirements

The respondents of the assessment provided an extensive list of the skills required for a greening of the different sectors of the economy. These are listed below.

***Tourism sector***

The tourism sector is already implementing a number of projects requiring green skills, for example in waste management, recycling of water, desalination and solar water heaters. However, if an increase in the number of initiatives were to occur, there would likely be a shortage of green skills. The respondents proposed that a number of training activities should be created to develop the following skills:

- Planning and implementing minimal impact operations
- Planning and developing ecologically sustainable tourism operations
- Participating in environmentally sustainable work practices
- Developing workplace policy and procedures for sustainability

***Agricultural sector***

The respondent identified a number of jobs in the agro industry most likely to be affected by a transition toward a green economy. These jobs are found primarily in organic farming and in the production of sugar cane biomass fuels. The transition will also impact the jobs of farmers whose land has been reconverted following the introduction of Integrated Residence Schemes (IRS) projects. The following training and sensitization activities should be initiated:

- Degree course in agriculture with core subjects in green skills
- Change from a consumer 'brown' society to a green one
- Sensitization on climate change
- Compost/waste management

***Construction Sector***

The construction sector includes a wide range of professionals - architects, engineers, project managers, operators, etc. – depending upon the type and size of construction.

Architects need skills which will enable them to:

- Incorporate environmental and energy management practices and processes in building design and construction
- Apply sustainable building design principles to water management systems
- Build thermally efficient and sustainable structures
- Minimize water on building and construction sites
- Carry out energy audits
- Handle painting and decorating materials efficiently
- Develop workplace policies and procedures for sustainability

For engineers and energy managers, the following skills are required:

- Techniques to save energy
- Techniques to protect the environment
- Knowledge of renewable energies and conservation measures
- Management of electrical/electronic installations
- Auditing of energy consumption in buildings and industry

New skills are also required for other categories of workers involved in the construction sector. The skills for building contractors are as follow:

- Knowledge on how to construct future green buildings and to retrofit existing buildings
- Use of run offs and rain ponds to collect water

For technicians, the following skills are required:

- Design and installation of photovoltaic systems to produce electricity
- Design and installation of solar water heaters

***Manufacturing sector***

According to the respondents from this sector, skills are needed for workers to be able to:

- Sustain improvements in the production process to continuously enhance efficiency
- Use sustainable energy practices and sustainable environmental practices
- Participate in environmentally sustainable work practices
- Implement and monitor environmentally sustainable work practices
- Develop workplace policies and procedures for environmental sustainability
- Identify and minimize environmental hazards
- Contribute to sustainability related audits
- Develop strategies for a more sustainable use of resources
- Optimize sustainability of a process or plant area
- Apply proactive maintenance strategies to ensure the sustainability of efficient production processes
- Contribute to sustainability related audits

- Develop strategies for more sustainable use of resources
- Develop strategic sustainability plans
- Design sustainable product or process
- Conduct sustainability water audit
- Assess the environmental impact of a project process/activity
- Identify and improve sustainability interactions relations with the community

## 2.3 Conclusions and Recommendations

Based on the findings of the study, a number of measures have been identified to support the development of green skills.

### 2.3.1 A coherent human resources development strategy

A coherent strategy should be developed to propose the green skills needed in line with the MID vision. It should include information on where those skills are required, for whom, who should provide them, what the training providers should deliver in order to avoid skills mismatch, etc.

Workers' and employers' representatives should concert with education/training stakeholders through social dialogue to ensure that appropriate national unit standards are developed and accredited. The Mauritius Qualifications Authority should set up an industry training advisory committee to develop unit standards for each economic sector.

For successful sensitization, capacity building should occur at all levels of society, including the workplace. Experts from organizations involved in environmental protection, renewable energy and home economics, should interact more actively at school and community levels. They should receive training to facilitate this process.

Training in green skills should be further encouraged through:

- Post graduate part-time conversion course for graduates and/or professionals
- Scholarships in sustainable development
- Adequate career guidance to help students choose careers in green jobs or seek studies with built-in components on sustainable development
- An introduction of green skills in all training programmes
- Additional training for those already using green skills
- An association of professionals to encourage members to equip themselves with green skills

### 2.3.2 Targeted actions by educational institutions

Green skills should be incorporated in all the certificates and diploma courses of the main TVET provider, Mauritius Institute of Training and Development (MITD) by 2015. TVET curricula should be reoriented to better prepare trainees with the conservation and sustainable use of resources, social equity and appropriate development as well as with competencies to practice green jobs at the workplace. To this end, all national certificates and diplomas offered by the MITD and accredited by the Mauritius Qualifications Authority should be reviewed to ensure the integration of green skills

components into all TVET programmes. In addition, accompanying training materials should be developed.

Universities should restructure their courses to address sustainable development by 2017. All courses offered should have modules which include components on sustainable development. Undergraduate courses should have a compulsory component on social service and volunteerism. The Ministry of Tertiary Education should ensure that these measures are enforced, while local universities should interact more closely with the government and private institutions to carry out research with a focus on sustainable development.

A conversion post graduate certificate/diploma should be structured and set up by universities for all professionals.

Local public universities and the MITD should collaborate to create joint projects on sustainable development. A fund should be set up to finance such projects.

### 2.3.3 Institutional and human capacity building

There is a need to sensitize all segments of society. Institutional as well as human resource capacity should, therefore, be developed to respond to potential demand. Training of trainers programmes should be established to allow for large scale capacity building.

### 2.3.4 Special sponsorship scheme offered by Human Resource Development Council (HRDC)

The HRDC should offer a scholarship scheme for approved training programmes and extend the Pre-Operational Training Incentives (POTI) scheme to companies sponsoring potential employees in green skills.

### 2.3.5 Sensitization campaign

The Government of Mauritius, through the Energy Efficiency Management Office, must develop campaigns to sensitize the general public to climate change and encourage environmentally-friendly practices within their homes.

# 3. The Greening of Mauritian Enterprises

## 3.1 Introduction

### 3.1.1 Background

Mauritian enterprises of all sizes and from different economic sectors have an important role to play as drivers for a successful transition toward a green and sustainable development path in line with the Maurice Ile Durable (MID) vision.

Enterprises create wealth and employment but simultaneously contribute to resource depletion, environmental degradation and climate change. It is widely recognized that the prevailing business model is unsustainable and that there is an urgent need to improve resource efficiency and the environmental performance of enterprises.

### 3.1.2 Objective

A study was conducted by the Mauritius Employers Federation (MEF) in 2011-2012 to highlight green initiatives undertaken by enterprises in the country. It also explores possible factors acting as constraints to the greening of enterprises in Mauritius. The objective of the study is to guide appropriate strategies to further promote sustainable patterns of production and business operations.

### 3.1.3 Methodology

The concept of green enterprises offers an integrated approach to sustainable growth and development. According to the ILO, green enterprises can be seen as comprising two strategies, namely the use of green (i.e. environment friendly) and efficient processes, and the provision of green products and services. Both strategies have been examined in the survey. In order to gather the necessary data, a questionnaire was developed and sent out to all MEF members. Findings were complemented through interviews with selected enterprises[2].

## 3.2 Findings

The study revealed that enterprises in Mauritius are generally supportive of good environmental practices which could contribute to the sustainable development of the country. In most cases, good environmental practices are associated with business growth. However, the impact on profitability is perceived more negatively. Table 2 illustrates business sentiment with respect to good environmental practices.

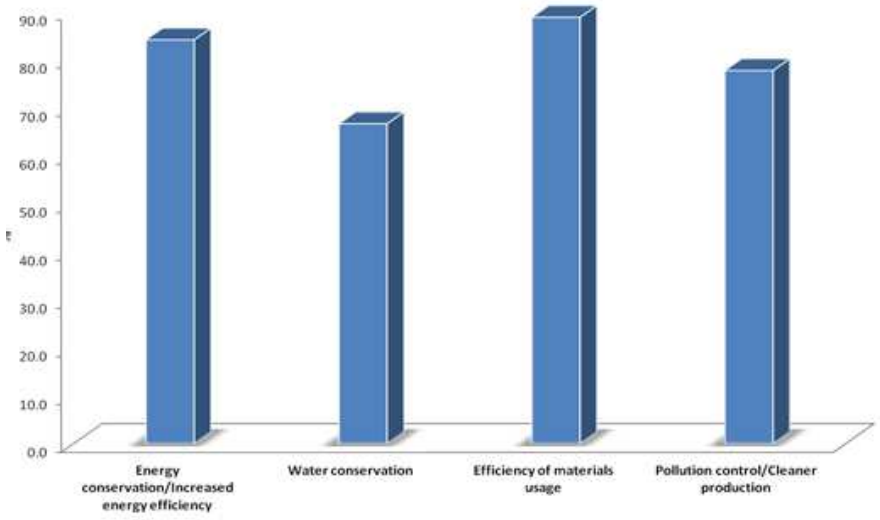
[2] See Appendix I for sample questionnaire

***Table 2: Support from enterprises for environmental practices***

| | Strongly agree/Agree (%) | Neutral (%) | Strongly disagree (%) |
|---|---|---|---|
| We support sustainable environmental practices | 72.2 | 22.2 | 5.6 |
| Good environmental practices help our business grow | 77.8 | 11.1 | 11.1 |
| Good environmental practices help maintain profitability | 50.0 | 27.8 | 22.2 |

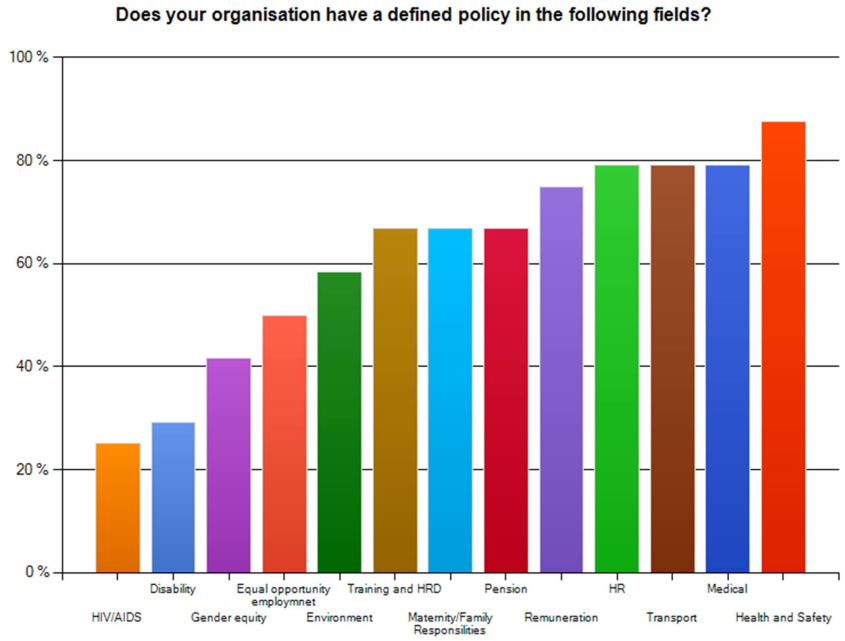
Increasing prices of energy, commodities and materials, the scarcity of water and the direct impact of business operations on the environment have made most Mauritian enterprises conscious of the need to save energy, increase energy efficiency, use materials more efficiently, conserve water, and adopt pollution control and cleaner production methods. The figure below illustrates what issues enterprises prioritize, which they feel need/require intervention.

***Figure 1: Priority environmental issues for enterprises***




Many enterprises have expressed their commitment to the environment through a defined environmental policy. However, policies related to other aspects of the enterprise – especially those which may be legally mandatory – are given higher priority, such as occupational safety and health (OSH) or other labour issues. Figure 2 illustrates the percentage of enterprises having defined policies in these fields.

***Figure 2: Percentage of enterprises that have adopted policies in different mandatory and non-mandatory areas***




Likewise, only 20% of the enterprises surveyed employ dedicated staff responsible for the environment as opposed to OSH which is required by law. It could, therefore, be concluded that regulations would be important drivers for greening enterprises.

Less than 20% of enterprises do not yet adhere to any national or international environmental standards. Furthermore, while they recognize the market potential for green products and services, the majority of Mauritian enterprises (70.8 %) do not yet manufacture green products or provide green services.

Nonetheless, the study has revealed that many Mauritian enterprises have been taking initiatives to turn green, albeit on an ad-hoc basis. Some of the common initiatives with respect to energy, water, materials, waste and pollution are summarized in table 3.

***Table 3: Green initiatives taken by Mauritian enterprises***

| | |
|---|---|
| **Energy** | Solar water heaters, renewable energy production and use, energy audits, energy efficient devices (lights, AC, equipment) |
| **Water** | Rain harvesting, water recycling |
| **Materials** | Monitoring and judicious use of materials, continuous improvement policy |
| **Waste** | Reduce, Reuse, Recycle |
| **Pollution** | Less polluting technology/equipment, waste water treatment, production systems and procedures designed to minimize pollution |

Enterprises undertaking green initiatives generally expect to derive benefits in terms of:

- Cost savings
- Enhanced company image
- Increased workers' satisfaction

- Better legal compliance
- Improved environmental performance
- Promotion of green economy
- Contribution to society
- Strengthened social dialogue

## 3.3 Factors impeding the greening of enterprise

There are, however, a number of factors that have been constraining a deeper engagement of enterprises toward more sustainable and environmentally responsible practices.

- Enterprises generally lack the necessary funds, human resources and know-how to significantly improve their environmental performance
- The policy and regulatory framework is not clear and sufficient to encourage investments in environment-friendly equipment and practices
- There are no adequate support and financial incentives in place to facilitate green investments
- Information, capacity building and training on environmental issues are lacking
- Investment in green technology is perceived to be expensive with a long payback period
- Cost savings in the short term may not be attractive
- Top management may not have the strong commitment required to drive the green transition within their enterprises
- Employees may not be sufficiently aware of and committed to green initiatives implemented at the workplace

These constraints represent important challenges to sustainable and green enterprise development in Mauritius.

## 3.4 Conclusions and recommendations

This study has shown that although Mauritian enterprises are favourable to good environmental practices that contribute to sustainable development, these practices are often short-term in nature. In addition, environmental interventions are generally perceived as a cost rather than a long-term investment. They do not necessarily relate to green practices as potential sources of efficiency gains, cost reduction and higher profitability. Consequently, Mauritian enterprises tend to engage in green initiatives mostly on an ad-hoc basis. A strategic and integrated approach to the transition toward green practices is clearly lacking. However, there are indications that some of the larger enterprises, with the necessary resources, are moving strategically toward greener processes and products/services.

Overall, a number of challenges to the development of green enterprises have been identified, underlining the need for an enabling environment, including coherent policies and strategies, to further promote sustainable and environmentally responsible practices among Mauritian enterprises. The following recommendations have been identified to encourage this transition:

- Adoption of a holistic approach to the development of green enterprises and green jobs through the alignment of economic, industrial, skills development and environmental policies
- Sensitization, guidance and capacity building of Mauritian enterprises to encourage the adoption of green practices and the provision of green products and services

- Financial incentives to facilitate green investments
- Encouragement for enterprises to develop and implement sound environmental policies and strategies
- Development of an adequate platform for the sharing of knowledge, information and best practices to enable enterprises to learn and collaborate in the implementation of green initiatives
- Establishment of a cleaner production centre to support the greening of industrial sectors
- Advice and guidance for enterprises on green certification for their products and services
- Effective social dialogue to advance the greening agenda among both employers and their employees
- Identification of the occupational and skills development needs for a green economy and establishment of appropriate training systems

# 4. Stocktaking Exercise on Trade Union Involvement/Activities in Green Jobs in Mauritius

## 4.1 Introduction

### 4.1.1 Background

The success of a transition to a green and sustainable development path depends on the active participation of those whose lives it affects. The involvement of workers and their representatives is essential in this process, in particular to ensure a just transition whereby the negative impacts on employment from a shift to sustainability are curtailed.

### 4.1.2 Objective

A study was conducted to take stock of trade unions activities and/or involvement in green jobs, and to provide a better understanding of their participation within the sustainable development process in line with Maurice Ile Durable (MID). Based on the findings, recommendations have been provided to enhance their involvement and participation in the greening process.

### 4.1.3 Methodology

Both primary and secondary sources of data were used to carry out the stocktaking exercise. A structured survey questionnaire was developed and administered through interviews with seven Mauritian trade unions[3]. It gathered information on a number of subject areas, such as the existence of green policies, training and the level of participation in the national dialogue on sustainable development. Findings were supplemented with documents related to trade union activities.

***Table 4: Trade unions involved in the survey***

| Name | Members | Sectors covered |
|---|---|---|
| National Trade Union Confederations | 35,000 | All sectors (public, parastatal, and private) |
| Confédération des Travailleurs du Secteur Privé (CTSP) | 40,000 | All sectors including: public, private and parastatal |
| Government Servants Association | 10,000 | All sectors (Government including Rodrigues) |
| Mauritius Labour Congress | 21,000 | All sectors |
| Confederation of Trade Union Congress | 18,000 | All sectors (public, parastatal, and private) |
| Federation of Parastatal Bodies and other Unions | 7000 | Parastatal bodies and private |
| Federation of Civil Service and Other Unions | 25,000 | Public Service and approved bodies |

## 4.2. Findings

### 4.2.1 Existence of green policies and structures

The study found that all the trade unions which participated in the survey were concerned with environmental degradation and felt they should be involved in national or global level responses. 43% of the unions already have policies on environmental issues, energy efficiency and green jobs in place, and 57% have a policy related to MID.

[3] See appendix II for sample questionnaire

Half of the unions involved in the survey already have a committee in place to deal with the environment, green jobs and/or MID. Only one union has established a department to deal with these issues specifically. There is, therefore, a need to support trade union organizations in Mauritius to help them develop structures which will provide better advice to their members in terms of environmental issues and green jobs.

### 4.2.2 Involvement in the development of environmental policies at national level

Six out of seven trade unions have been involved with the government in the development of environmental policies at national level. In most cases, they were called upon as representatives for their members. In some instances, the unions did, however, play an instrumental role in guiding the State's position on certain issues. For example, union intervention led to a ban on asbestos and the establishment in June 2001 of an inter-ministerial Committee chaired by the Deputy Prime Minister and Minister of Finance to explore the health dimension of asbestos in Mauritius. In addition, the involvement of trade unions also led to the successful shift toward the use of energy saving bulbs as well as the introduction of government subsidies for the purchase of solar water heaters.

### 4.2.3 Involvement in national and international committees

While all the respondents participate in committees on occupational safety issues, only one-third are currently involved in committees on the greening of workplaces. Most of the unions have, however, been involved in the MID Working Groups to provide recommendation on the formulation of the MID Policy, Strategy and Action Plan. Table 5 provides a summary of the involvement of trade unions in national and international committees.

***Table 5: Trade union involvement in national and international committees***

| Trade union organization involved in committees | Yes | No | If yes, achievements to date |
|---|---|---|---|
| **MID working groups** | 5 | 2 | Trade union representative appointed as Vice-chairperson of the MID Working Group on Employment/Economy.<br>Several initiatives launched including: development of green jobs and green business; sensitization of the public; and organization of debates at national level. |
| **Drafting of MID policy** | 5 | 2 | Trade unions members involved through the Working Groups. |
| **Environmental issues** | 3 | 4 | Trade union representative acting as Chairperson of the Commission on Sustainable Development at the National Economic and Social Council (NESC).<br>Sensitization of members.<br>Banning of asbestos imports. |
| **Greening of workplaces** | 2 | 5 | Agreements signed by several enterprises to protect the environment while ensuring health and safety at the workplace. |
| **Occupational safety issues** | 6 | 1 | Members of the unions sensitized regularly on healthy and safe working environment through workshops at regional, sectoral, and national levels. |
| **Health issues** | 6 | 1 | Regular workshops organized for members.<br>E.g.: Workshop for members on HIV/AIDS (December 2011) |

| | | | |
|---|---|---|---|
| **International Committees: Public Services International, ITUC-Africa, ILO, ITUC-International** | 5 | 2 | Participation of members in seminars organized abroad as opportunities arise.<br>E.g.: Participation in the conference on Global Warming in Durban. Participation in ILO conference on Occupational Safety, Green jobs and decent work. |

One significant achievement is the appointment of one workers' representative as the Vice-Chairperson of the MID Working Group on Employment/Economy. Another representative also acts as Chairperson to the Commission on Sustainable Development at the National Economic and Social Council (NESC). The knowledge acquired through their participation in the committees is eventually disseminated to the members during meetings, workshops and seminars. The involvement of workers' representatives in committees appears to play a pivotal role in the dissemination of findings and key messages to a larger number of workers. It is important to note that none of the trade unions have participated in the Coordination Committee for implementation of National Programme on Sustainable Consumption and Production 2008-2013.

### 4.2.4 Participation in awareness raising activities

The success of any workplace initiative to reduce environmental degradation relies on the awareness of staff members and their active participation in their implementation. Nearly all the trade unions involved in the survey have carried out awareness raising programmes on environmental issues, half on energy efficiency and one-third on green jobs. Two-third of the unions also made their members aware of MID. In addition, several approaches have been used to enhance workers' participation, through for example: the distribution of calendars with informative messages, posters, brochures and stickers, seminars, discussion groups, meetings, and interviews in the press.

### 4.2.5 Participation in training related to environmental issues, energy efficiency, green jobs and MID

Appropriate training is essential to achieve the targets set out in MID. One trade union organization has followed training on environment issues at national level, and three at international level. There is, therefore, a need to provide training by experts to raise the capacity of worker representatives. Training-of-trainer courses are useful to amplify training capacity. One representative already had the opportunity to follow such a course organized by the ILO which allowed him to in turn train members of his own organization.

None of the respondents had participated in training related to energy efficiency in the country. Only one had followed such training at international level. This highlights the need for a skills audit and a national energy strategy on skills and training. It is essential to train the workers whose jobs are likely to be affected by the shift toward a greener Mauritius. This should be explored through a tripartite dialogue on new skills necessary at the workplace.

None of the respondents were fully familiar with the concept of green jobs, though five trade unions affirmed that some of their members were working in green jobs in various sectors (public service, health, construction, cleaning, breeding, production of paint and chemicals, irrigation, wastewater treatment, and forestry). One also pointed to a collective bargaining agreement related to green jobs. There is a gap in terms of training available on green jobs locally, which needs to be filled as all

respondents have expressed an interest in learning more about the concept. They also stressed the necessity to develop an effective regulatory framework through collective bargaining to ensure that jobs are not only green but also decent.

Two out of seven respondents have received training on MID at national level. A total of 13 participants were present during this particular training session. One participant subsequently trained 25 members on MID.

### 4.2.6 Production of publications and training material

Despite limited resources, two trade unions have produced publications related to environmental issues, energy efficiency, green jobs and MID with a view to sensitize a larger number of their members. The objective of these publications is also to contribute to policy development. One respondent gave the example of a study on amending labour laws to provide a conducive environment for decent green jobs that has been submitted to ministries and the ILO.

Most of the trade unions have not yet developed training materials beyond informative brochures and pamphlets which points, once again, to the need to develop appropriate training structures.

### 4.2.7 Impact of environmental degradation, waste treatment, and environmental policies on workers

Unions cover sectors which are dependent on natural resources such as breeding, fishing, and aquaculture. Environmental degradation is, therefore, an important concern, with water scarcity affecting respondents the most. In addition, all respondents recognized that environmental degradation had an impact on the workers' health, which in turns affects their performance and productivity.

Similarly, dumping and inadequate treatment of industrial waste can also have severe effects on workers' health. According to the unions, industrial waste is either recycled, left untreated or dumped. With a lack of law enforcement, the risks of dumping and inadequate treatment are higher. Adverse effects have, however, been mitigated by industries who are treating the waste appropriately.

Three out of seven trade unions have taken action to address the negative impact of environmental degradation, climate change and waste treatment on workers. These actions range from taking cases of malpractice to both local and international authorities concerned, to the sensitization of workers.

Five out of seven respondents stated that national and international environmental policies on climate change adaptation and mitigation have an impact on workers in the sectors covered by the trade union organization. The policies include protection of workers, hygienic working conditions, provision of safety equipment and a standard working environment.

### 4.2.8 Challenges and opportunities

A number of challenges faced by the trade union organization in relation to the environment, green jobs and MID were identified, such as the lack of time available to dedicate to these issues, the difficulty in changing the mind-set of employers on the importance of a green transition and limited financial and human resources.

However, all the trade unions unanimously welcomed the MID project, as well as the support from the ILO on the promotion of green jobs. This has given workers' representative the opportunity to be more actively involved in this area and to promote better and decent green jobs.

Overall, the perception of the respondents is that the MID process and the greening of jobs will create new employment opportunities. They were optimistic that this shift will transform or redefine certain jobs without eliminating them, promote social dialogue, promote training of workers in green technologies, as well as lead to an overall increase of decent and productive jobs.

## 4.3 Conclusions and Recommendations

A number of key recommendations have been made on the basis of the findings from the stocktaking exercise which would serve to enhance the involvement and participation of workers' representatives greening process.

- **Role of trade unions** – Trade unions should be involved throughout the MID process and related activities through social dialogue. They should receive the necessary support to be able to promote decent green jobs. Collective bargaining must be recognized as an effective tool for mitigating the impact of a transition to a green development path at the workplace. The creation of a national college of trade unions would ensure sustained participation in the MID process and encourage representative to have a common voice in discussions.

- **Just transition** – The concept of a just transition must be adopted as a principle in all efforts to adapt and mitigate to climate change. This will ensure a transition that is fair, ethical, socially just and morally right for all. Adaptation and mitigation policies should be adopted in consultation with workers in order to limit negative impacts. Social protection measures should be put in place in order to support workers at risk of losing their jobs as a result of the transition. A "just transition fund" could for example be established with funds from both the private and public sectors to provide compensation when jobs losses do occur. However, authorities should not spare efforts in ensuring that there is no job loss during the shift. All greening movements should assure that the most vulnerable and poorest workers do not fall into deep poverty.

- **Training opportunities** – Workers should receive adequate training and education to develop green skills, as well as re-skilling opportunities when there is a risk of jobs being eliminated.

- **Occupational safety and health** – The risks to workers' health associated with environmental degradation should be prevented. A framework to phase-out or ban substances which are both harmful to the environment and workers should be developed.

- **Legal framework** – A comprehensive legal framework to promote the development of decent green jobs should be established.

- **Gender equality** – Green jobs should be developed in a way that also serves to reduce inequalities at the workplace.

- **Role of the government** – The government should support a green transition by encouraging investment in green technologies, by supporting enterprises in the transition through incentives, by encouraging better recycling of industrial waste, by conducting research on decent green jobs, by setting up indicators to monitor progress, by creating a space for tripartite dialogue and by supporting initiatives to raise workers' awareness on environmental protection.

- **Role of enterprises** – Enterprises should set up green structures, for example, by nominating environmental officers and a committee of workers on greening the workplace.

# PART III – Action Plan

An action plan has been developed on the basis of the recommendations that came out of the workshop on the promotion of green jobs in Mauritius held in February 2012 (see Part I)[4].

The objective of the action plan is to ensure that employment is placed at the core of the final Maurice Ile Durable (MID) strategy and that the Ministry of Labour, Industrial Relations and Employment implements a Green Jobs Policy and Action plan.

The action plan includes an overall outcome at national level to be conducted under the leadership of the Ministry of Labour, Industrial Relations and Employment. It is followed by a series of outcomes and actions at sectoral level for the following industries:

- Renewable Energy
- Agriculture
- Tourism
- Textile Industry
- Recycling and Waste Management

***Table 6 : National outcomes***

| | |
|---|---|
| **Objective at national level** | **An employment focus is included in the final MID strategy and a Green Jobs Policy and Action Plan is implemented by the Ministry of Labour, Industrial Relations and Employment** |
| **Outcome at national level** | **An employment policy for green jobs is formulated within MID and Ministry of Labour, Industrial Relations and Employment** |
| **Action** | **Review the Employment Policy to promote green jobs.** As the Employment Policy is under review the integration of a Green Jobs Policy is timely, feasible and promising. A dedicated chapter could be drafted and fully integrated into Mauritius' Employment Policy. |
| | **Work with working group 4 of MID to include green jobs strategy and action plan.** As the MID strategy is being drafted, working group 4 strongly recommended to focus the MID strategy on green jobs. It needs to be ensured that MID includes the full recommendations of the green jobs studies and workshop action plan and formulate a holistic Green Jobs Policy including the promotion of green jobs, upgrading skills, greening enterprises and a just transition for workers. |
| **Lead** | **Ministry of Labour, Industrial Relations and Employment** |

[4] See Appendix III for additional recommendations that have emanated from the workshop.

*Table 7: Sector outcomes*

| **Outcome at sectoral level** | **Institutional capacities are strengthened to promote green jobs at sectoral & enterprise level** | | | |
|---|---|---|---|---|
| | **I** | **II** | **III** | **IV** |
| **1. Renewable Energy (RE) Outcome** | **Increased SMEs and jobs in renewable energy and share in total energy consumption whilst improving availability and affordability for all** | | | |
| **Action** | **Promoting Green Jobs** | **Upgrading skills** | **Greening enterprises** | **Just Transition** |
| Lead | **Ministry of Employment** | **MITD** | **MEF** | **Trade Unions** |
| | Employment impact evaluation of RE action plan | RE needs assessment comparing existing skills with new required skills, and introduce needs assessments on a regular (yearly) basis | Support enterprises to implement energy efficiency measures and integrate RE | Training for trade unions to increase energy efficiency and use of RE at the workplace including general information campaigns and sector specific training |
| | Industry and enterprise analysis to assess whether the supply structure and market regulations are conducive to enable the RE action plan to materialize | Develop a comprehensive university and TVET education and training curricula which is technology and occupation specific | | |
| | Formulate (industrial) policy to create an enabling environment for renewable energy industry and enterprises to grow; notably low technology assembly (solar water heater) and wind and biomass technology | | | |
| | Introduce a budget neutral energy, CO2, eco or fossil fuel tax using the revenue to reduce labour cost (take example of Germany) | | | |
| | Introduce feed-in tariff for PV, wind and biomass which is attractive enough to incentivize investment (take example of Germany) | | | |
| | Engage energy auditors providing advice on how to green enterprises and their operations | | | |

| Outcome at sectoral level | Institutional capacities are strengthened to promote green jobs at sectoral & enterprise level | | | |
|---|---|---|---|---|
| | I | II | III | IV |
| **2. Agriculture Outcome** | **Increased farm businesses and jobs applying sustainable agricultural practices producing an increasing share out of total agricultural production** | | | |
| **Action** | **Promoting Green Jobs** | **Upgrading skills** | **Greening enterprises** | **Just Transition** |
| | Based on existing initiatives by Ministry of Environment introduce a national label and certification scheme for eco-products | Develop a curricula for organic farm practices | Undertake an economic analysis of benefits of green agriculture to show business case to farmers going green | Initiate programmes to reduce workers dependency on pesticides while promoting hygienic working conditions |
| | Assess with MEXA the opportunities for exporting organic certified products and what support structures are needed for international certification | Reopen government agricultural centres and transform them into farmer field schools with organic farming curricula | Build capacity of local planters to produce organic products for export | Enable trade unions to the right of appropriate equipment as well as training on proper usage of chemicals and fertilizers while reducing usage to a minimum |
| | Design policy for green public procurement for all official institutions to buy from certified green planters | Design and roll out extension services and skills trainings for sustainable practices | Promote green agricultural cooperatives societies | |
| | Introduce a Green Public Work Programme on soil and water conservation, water harvesting, erosion control, reforestation, marine protection, waste management and climate change adaptation measures | | Incentivize hotels and restaurants to source from green and local producers | |

| Outcome at sectoral level | Institutional capacities are strengthened to promote green jobs at sectoral & enterprise level | | | |
|---|---|---|---|---|
| | I | II | III | IV |
| **3. Tourism Outcome** | **Increased jobs and number of hotels adopting greening practices and offering green labeled stay** | | | |
| **Action** | **Promoting Green Jobs** | **Upgrading skills** | **Greening enterprises** | **Just Transition** |
| | Establish a national certificate for green hotels | Plumbers to be skilled in use of rainwater harvesting and use of grey water by MITD | With ARHIM develop a hotel greening strategy and support programme<br>Roll out the programme (capacity building, support in green auditing, green accounting and green investment) | Introduce a Unions employees training to acquire green skills and to adapt to new green environment and encourage/incentivize participation in the training |
| | Design hotel specific energy, waste and water audits and support programs to enable hotels to become more energy and resource efficient including the use of own resources e.g. rainwater, energy generation | Operators to be skilled in waste management, recycling of water, desalination | Develop a sector specific green purchase and procurement policy | Promote green product and services at all levels (eventually set standards) e.g. laundry, cleaning of places, limit hazardous products, organic pest control, more green gardens |
| | Introduce a profit sharing scheme by hotels to workers to share profits among workers in case of energy and resource reductions through better management leading to increased profits | Managers to be trained to develop workplace policy and procedures for sustainability by MEF | | |
| | Develop a strategy for eco-tourism (including training, green destination) Emphasis on quality, value added rather than quantity | | | |

| Outcome at sectoral level | Institutional capacities are strengthened to promote green jobs at sectoral & enterprise level<br>I | II | III | IV |
|---|---|---|---|---|
| **4. Textile Industry Outcome** | **Increased number of jobs and textile enterprises adopting green processes in manufacturing plants and offering green certified textiles for export as well as for local market** | | | |
| **Action** | **Promoting Green Jobs** | **Upgrading skills** | **Greening enterprises** | **Just Transition** |
| | Undertake research and consultations on the opportunities of creating and marketing the first eco-export processing zone world wide | Upgrade skills to develop strategies for more sustainable use of resources and to optimize sustainability of process or plant area by UOM | Start a sector-wide capacity building programme for greening processes of the textile industry | Establish a regular control mechanism to enforce: decent working conditions, control of pollutions, effective recycling of waste, use of protective equipment, hazardous product, review conditions (dust control), making amenities available |
| | | | Establish a cleaner production programme e.g. UNIDO | Within unions, recruitment of specialized environment, health and safety officers |
| | | | Undertake studies to develop a sector wide strategy for textile industry to explore niche markets for green products |  |
| | | | Establish a support programme for enterprises willing to access international green certified textile labels | |

| Outcome at sectoral level | Institutional capacities are strengthened to promote green jobs at sectoral & enterprise level | | | |
|---|---|---|---|---|
| | I | II | III | IV |
| **5. Recycling and Waste Management Outcome** | **Increased number of jobs and cooperatives with decent working conditions in waste management, collection, sorting and recycling** | | | |
| **Action** | **Promoting Green Jobs** | **Upgrading skills** | **Greening enterprises** | **Just Transition** |
| | Establish a 'cooperative waste law' based on the Brazilian example which formalizes the creation of waste cooperatives and gives them preferential access to all waste for collection, sorting and recycling | Provide a training programme for cooperatives and individuals on Start Your Waste and Recycling Business | | Enforce use of protective equipment and proper vehicles to carry waste, proper recycling plants |
| | Design a proper waste management, collection, sorting and recycling plan for municipal as well as industrial waste | | | Review and enforce environment, health and safety regulations |
| | Establish sorting and recycling facilities at each of the five dumpsites including proper handling machines, transport, storage and recycling equipment | | | |

| General Comments | |
|---|---|
| | 1. Reskilling and Training of employees to acquire green skills<br>2. Set up a "one-stop shop" for green jobs as an advisory body to accompany enterprises during the transition<br>3. Sensitization by training to empower trade unions and members<br>4. Empower SMEs and provide them with incentives to acquire green technologies and to have a green workplace |

# Part IV – Conclusion: Key Recommendations and Way Forward

This report has provided an overview of the Green Jobs Programme in Mauritius which began in 2011 to support the country's transition toward a resource efficient, low-emission and climate resilient economy – both through MID and the employment policies of the country. Four studies were carried out as part of the programme to explore the opportunities for green jobs in the country. The Green Jobs Assessment found that in 2012 green jobs stood at 6.3% of total employment in Mauritius and that the multiplier effect of green jobs in major economic sectors was high. A number of policies should, therefore, be adopted to stimulate green employment in the country's major economic sectors, such as eco-labeling systems for agricultural and manufacturing outputs. According to the Skills for Green Jobs study, Mauritius is lacking a skills development strategy which would ensure the needs for a green economy in terms of employment are met. A key recommendation would be for the development of a coherent human resources strategy which would establish and provide the green skills necessary for the Maurice Ile Durable (MID) vision. The study on the Greening of Mauritian Enterprise revealed that while enterprises are generally supportive of environmental practices, they do not yet implement such practices which are perceived as costly. A strategic and integrated approach would, therefore, be required to overcome the impediments to the greening of Mauritian enterprises. The Stocktaking Exercise on Trade Union Involvement/Activities in Green Jobs in Mauritius highlighted that trade unions are keen to participate in the MID process, particularly because of the potential in terms of green jobs creation. A number of recommendations are made to enhance their involvement – through the provision of training opportunities for example – but also to ensure that the transition toward a sustainable development path would be a just one.

The key recommendations from the studies were validated and complemented by relevant stakeholders during a workshop on the promotion of green jobs held in February 2012. These recommendations were then transposed into an action plan, which at the time of writing was yet to be implemented under the leadership of the Ministry of Labour, Industrial Relations and Employment. At the national level, the projected outcome of the action plan was the integration of a green jobs strategy in MID through working group 4 on Employment/Economy.

At sectoral level, the action plan set out a number of activities to strengthen institutional capacities to promote green jobs in major sectors of the economy. In the Renewable Energy sector, the objective is to increase the number of small and medium enterprises providing affordable renewable energy, thus allowing a shift away from fossil fuels. In the Agricultural sector, the proposed activities are set out to help increase the number of farms and jobs which would apply sustainable agricultural practices. In the Tourism sector, the objective is to increase the number of jobs and hotels which would adopt green practices. Finally, the activities as part of the outcome for the Textile Industry should lead to an increase in the number of jobs and enterprises which use green processes in manufacturing plants. In all sectoral activities, the involvement of the relevant government institutions as well as workers and employers representatives is essential to promote the creation of green jobs, to develop the necessary green skills, to green enterprises and to ensure a just transition.

Following the validation workshop, the Ministry of Labour, Industrial Relations and Employment agreed to circulate the action plan among other government institutions for comments and validation. At the time of writing in mid-2012, work was still underway to finalize the MID Policy, Strategy and Action Plan. The draft

Policy and Strategy were released by the Ministry of Environment and Sustainable Development in May 2012. The MID Action Plan was still being prepared by a team of international consultants but was expected to be completed by July 2012. The final MID Strategy should lay out a ten-year plan toward sustainability for the country. The MID Action Plan should guide the activities of all the ministries over a three-year period and should become embedded into their finance programme. An employment focus should be included in this framework to support sustainable development and ensure a just transition.

The draft Employment Strategy already referred to the creation of more employment opportunities in a green economy which would also be inclusive, innovative, resilient, robust and diversified. It called for the development and implementation of national indicators of the green economy, green jobs and sustainability to monitor and report progress on the green economy and the creation of enabling policies for new and emerging decent jobs. Policies to enable the creation of new and emerging green jobs and reduce poverty were also requested. The actions for this particular strategy echoed some of the recommendations that came out of the four studies and were included in the action plan, namely the provision of subsidies and tax advantages to green businesses. At the time of writing, both documents were yet to be finalized.

In conclusion, Mauritius has been working towards shaping a model of sustainable development for other Small Island Developing States (SIDS). The country's experience in turning the MID vision into reality is certainly a strong example which could be emulated. Similarly, it is hoped that the results of the Green Jobs Programme in Mauritius offer scope for replication in other SIDSs. The approach followed by Mauritius is a solid basis on which national governments can build on to ensure that the transition to a green economy is also equitable. This includes the identification of existing green jobs and sectors which have a high potential in terms of green jobs creation, complemented with the mapping of the necessary skills needed for a green economy, and the identification of strategies to green enterprises and ensure the participation of workers and employers representatives in the transition towards a green economy.

# APPENDICES

## Appendix I – Questionnaire used in the Greening of Mauritian Enterprises study

### 1.0 General

| | | | | |
|---|---|---|---|---|
| **Name of Organisation** | | | | |
| **Sector of Activity** | | | | |
| **Nature of Products/Services** | | | | |
| **No. of Employees as at September 2011** | | **Male** | **Female** | **Total** |
| | Permanent | | | |
| | Casual/Seasonal | | | |
| **Name of Person filling the Form** | | | | |
| **Tel:** | **Fax:** | **Email:** | | |

### 2.0 Managerial Aspects at the Workplace

2.1 Does your organisation have a defined policy in the following fields?

| | | | | | |
|---|---|---|---|---|---|
| (a) | HR | ☐ | (i) | Worker's welfare: | |
| (b) | Remuneration | ☐ | | (i) Transport | ☐ |
| (c) | Health and safety | ☐ | | (ii) Medical | ☐ |
| (d) | Training and HRD | ☐ | | (iii) Maternity/Family Responsibilities | ☐ |
| (e) | Equal opportunity employment | ☐ | | (iv) Pension | ☐ |
| (f) | Gender equity | ☐ | (j) | Disability | ☐ |
| (g) | Environment | ☐ | (k) | Other (*Please Specify*) | |
| (h) | HIV/AIDS | ☐ | | ..... | |

2.2 Does your organisation employ:

(a) A Health and Safety Officer ☐

(b) An Environmental/Energy Officer ☐

2.3 Has your business been granted any national or international sustainability standards (e.g environmental)

Yes ☐ No ☐

*Please Specify* _____

2.4 Energy utilised in Year 2010

| **Energy Used** | **(a) Cost (Rs)** | **(b) Quantity used** |
|---|---|---|
| (i) Electricity (megawatt) | | |
| (ii) Gas (kilos) | | |
| (iii) Coal (kilos/Tons) | | |
| (iv) Oil | | |
| (v) Solar | | |
| (vi) Other | | |

(c) (i) Have you introduced any measures to reduce your energy cost?

Yes ☐ No ☐

(ii) If Yes, how?

1. Through behaviour change ☐
2. Workplace Design ☐
3. Environment-Friendly Technology *(Please Specify)*

_____

4. Other *(Please Specify)*_____

(iii) If No, Why?_____

_____

2.5 (a) Do you manufacture/provide green products/services? Yes ☐ No ☐

(b) What are the growth prospects for such green products/services?

High ☐ Low ☐ None ☐

(c) What market opportunities exist for your green products/services?

High ☐ Low ☐ None ☐

(i) Are you familiar with green label certification such as European Free Bio-label, Global Green Tourism Label, Eco-label? Yes ☐ No ☐

(ii) If yes, Please Specify_____

(d) Are you interested in having your products/services certified or assessed according to green label(s)?

Yes ☐ No ☐

(e) Are you familiar with certification requirements/procedures for green products/services?

Yes ☐ No ☐

## 3.0 Green Jobs

3.1 Have you felt the need for:

(a) Energy conservation/ Increased energy efficiency Yes ☐ No ☐

Please explain _____

(b) Water conservation Yes ☐ No ☐

Please explain _____

_____

(c) Improving the efficiency of raw material usage/other inputs consumables

Yes ☐ No ☐

Please explain _____

(d) Pollution control and or cleaner production technologies Yes ☐ No ☐

Please explain _____

3.2 Are you considering implementation of any of the above described at **3.1** in the near future?

Yes ☐ No ☐

(a) If Yes, please explain _____

(b) If No, please list reasons:

(i) Lack of Government Policy ☐
(ii) Lack of technical staff ☐
(iii) Lack of funds ☐
(iv) Lack of information ☐
(v) Lack of concerted industry approach ☐
(vi) Lack of technical support ☐
(vii) Lack of training ☐
(viii) Cost savings are not attractive ☐
(ix) Other (*Please Specify*) _____

3.3 Does your organisation currently have any green job initiatives? Yes ☐ No ☐

If Yes, please list the green jobs occupations in your organisation?

| Green Job Initiatives | Full-time Part-time Casual | No. of employees | Additional training/skills/technical assistance required |
|---|---|---|---|
| (a) Energy Auditor | | | |
| (b) Solar panel installation Technician | | | |
| (c) Auto mechanics (hybrid car maintainance and repair) | | | |
| (d) Other *(Please Specify)*<br>(e)<br>(f) | | | |

3.4 Does your organisation have in-house mechanisms in place for dialogue and cooperation on green jobs issues that involve employers and workers?

Yes ☐ No ☐

3.5 What do you think is the best strength of your organisation in implementing green jobs initiatives?___

_____

3.6 What do you think is the most important benefit that you expect in adopting green jobs?

(a) Cost savings ☐
(b) Compliance with legal framework ☐
(c) Enhanced company image ☐
(d) Workers' satisfaction ☐
(e) Other (*Please Specify*) _____

3.7 For each of the following statements, please circle the number which corresponds to whether you agree or disagree with that statement.

| Statement | Strongly Agree | Agree | Neutral | Disagree | Strongly Disagree |
|---|---|---|---|---|---|
| (a) Our organisation creates green jobs because we support sustainable environmental practices | 1 | 2 | 3 | 4 | 5 |
| (b) The creation of green jobs in our organisation helps maintain profitability | 1 | 2 | 3 | 4 | 5 |
| (c) Adherence to good environmental practices helps our organisation grow | 1 | 2 | 3 | 4 | 5 |
| (d) Producing environmentally friendly products and services is a part of our business strategy | 1 | 2 | 3 | 4 | 5 |
| (e) Our organisation only employs people in green jobs because we are required to conform to existing legislation | 1 | 2 | 3 | 4 | 5 |
| (f) I believe that the green jobs will grow substantially over the next five years | 1 | 2 | 3 | 4 | 5 |
| (g) Further increase in green jobs is desirable | 1 | 2 | 3 | 4 | 5 |
| (h) Policies for green jobs are well defined | 1 | 2 | 3 | 4 | 5 |

## 4.0 Enterprise Policy

4.1 What do you think prevents your organisation (or in being less committed to) from implementing green initiatives? _____

4.2 Would going green strengthen social dialogue at the workplace and help workers' involvement?

Yes ☐ No ☐

4.3 Is the regulatory framework clear and sufficient to encourage investments:

| | | Yes | No |
|---|---|---|---|
| (i) | Environmentally friendly equipment | ☐ | ☐ |
| (ii) | Practices in your industry? | ☐ | ☐ |

4.4 Are there adequate financial incentives in place in your sector to facilitate:

| | | Yes | No |
|---|---|---|---|
| (i) | Access to green equipment | ☐ | ☐ |
| (ii) | Access to information | ☐ | ☐ |
| (iii) | Capacity building and training | ☐ | ☐ |

4.5 Are there any national or international Sustainability Standards being used by your sector?

Yes ☐ No ☐

4.6 (a) Would you consider engaging in a programme of certification under national or international sustainability scheme?

Yes ☐ No ☐

(b) If yes, what help would you consider most important to receive?

_____

4.7 Is there a shortage of green skilled/qualified workers in your industry?

Yes ☐ No ☐

If Yes, please list green job occupations for which there is a shortage of technical personnel. Indicate the severity of shortage on a scale from 1 to 4.

| | No | Slight | Moderate | Severe |
|---|---|---|---|---|
| (a) Energy Auditor | 1 | 2 | 3 | 4 |
| (b) Solar panel installation | 1 | 2 | 3 | 4 |
| (c) Auto mechanic (hybrid car maintain and repair) | 1 | 2 | 3 | 4 |
| (d) | 1 | 2 | 3 | 4 |
| (e) | 1 | 2 | 3 | 4 |
| (f) | 1 | 2 | 3 | 4 |

4.8 What training would your organisation require in green jobs but which is difficult to obtain or currently unavailable?_____

4.9 What green jobs related factors do limit the growth of your organisation? Please comment on what you feel can be done at the national policy level to assist growth in this sector._____

_____

4.10 Are you sufficiently informed on the benefits of 'going green' in your sector of activity?

Yes ☐ No ☐

If No, please further specify whether you would like to receive additional information on:

(a) Business case for green products and services ☐

(b) Link between productivity and resource/energy efficiency ☐

(c) Link between productivity and occupational health and safety ☐

(d) Sources of information and potential support ☐

(e) Other(*Please Specify*) _____

4.11 How important is it for you to communicate on your green initiatives?

_____

_____

4.12 Would you like to be contacted by MEF to discuss your training needs for a green transition of the workforce?

Yes ☐ No ☐

4.13 Would you accept to have your enterprise participating in membership programme organised by the MEF, e.g "How to start your green business?" "Productivity gains through cleaner production" or similar green enterprise programmes.

Yes ☐ No ☐

4.14 Does your organisation directly or indirectly **produce** and/or **use** renewable energy?

Yes ☐ No ☐

If Yes, please **Tick** one or more of the following:

| | | | **Produce** | **Use** |
|---|---|---|---|---|
| *(a)* | *Directly* | | | |
| | (i) | Hydro | ☐ | ☐ |
| | (ii) | Solar | ☐ | ☐ |
| | (iii) | Biomass | ☐ | ☐ |
| | (iv) | Wind | ☐ | ☐ |
| | (v) | Geothermal | ☐ | ☐ |
| | (vi) | Ocean Waves | ☐ | ☐ |
| | (vii) | Other (*Please Specify*) _____ | | |
| *(b)* | *Indirectly* | | | |
| | (i) | Education and training on renewable energy | ☐ | |
| | (ii) | Research and development on renewable energy | ☐ | |
| | (iii) | Operations and maintenance on renewable energy | ☐ | |
| | (iv) | Other (*Please Specify*) _____ | | |

4.15 Do your business activities directly or indirectly adopt the methods for increasing energy efficiency?

Yes ☐ No ☐

If Yes, please **Tick** one or more of the following:

| | | | |
|---|---|---|---|
| *(a)* | *Directly* | | |
| | (i) | Green construction/buildings | ☐ |
| | (ii) | Building retrofitting | ☐ |
| | (iii) | Indoor climate control | ☐ |
| | (iv) | Energy auditing | ☐ |
| | (v) | Adoption of smart grid for electricity | ☐ |
| | (vi) | Recycling of heat waste | ☐ |
| | (vii) | House-keeping measures | ☐ |
| | (viii) | Use of green devices, green technologies to improve production process | ☐ |
| | (ix) | Use of energy efficient motors | ☐ |
| | (x) | Other (*Please Specify*) _____ | |
| *(b)* | *Indirectly* | | |
| | (i) | Education and training of managers on energy efficiency | ☐ |
| | (ii) | Education and training of workers on energy efficiency | ☐ |
| | (iii) | Research and development on energy efficiency | ☐ |
| | (iv) | Social dialogue between managers and workers specifically on energy efficiency (or environment) | ☐ |
| | (v) | Manufacturing, marketing or assembling | |
| | (vi) | Energy efficient/green products | ☐ |
| | (vii) | Other (*Please Specify*) _____ | |

4.16 Do your business activities directly or indirectly conserve natural and other resources?

Yes ☐ No ☐

If Yes, please **Tick** one or more of the following:

*(a) Water conservation*

(i) Rainwater or Boreholes ☐
(ii) Use of Groundwater ☐
(iii) Wastewater reclamation/recycling ☐
(iv) Other (*Please Specify*) _____

*(b) Forests/Wetlands/Coastal Areas*

(i) Afforestation ☐
(ii) Reforestation ☐
(iii) Wetlands restoration ☐
(iv) Land reclamation ☐
(v) Other (*Please Specify*) _____

*(c) Soil/Minerals/Raw Materials and other Resources*

(i) Land use management ☐
(ii) Organic farming ☐
(iii) Reuse/recycling of raw materials (eg: paper/metals) ☐
(iv) NiCad Batteries/ULAB batteries/ solvents/etc) ☐
(v) Other (*Please Specify*) _____

4.17 Do your business activities directly or indirectly **produce** and/ or **use** clean transportation and fuels?

Yes ☐ No ☐

If Yes, please **Tick** one or more of the following:

*(a) Directly*

| | | **Produce** | **Use** |
|---|---|---|---|
| (i) | Fuel cells/Advanced batteries | ☐ | ☐ |
| (ii) | Alternative Fuel Vehicles/ Hybrid Vehicles | ☐ | ☐ |
| (iii) | Biofuels | ☐ | ☐ |
| (iv) | Other (*Please Specify*) _____ | | |

*(b) Indirectly*

(i) Group transportation ☐
(ii) Mass transportation ☐
(iii) Encourage pooling of vehicles ☐
(iv) Cycling ☐
(v) Schedule supply chain ☐
(vi) Other (*Please Specify*) _____

## 5.0 General Comments

5.1 If you have any comments you would like to make concerning green jobs or greening of enterprise or want to expand on your answers to previous questions then please do so here.

_____
_____
_____

## 6.0 Technical Aspects *(This section is to be filled only if your enterprise is engaged in an agricultural processing, manufacturing or tourism activity)*

6.1 Does your organisation generate following pollutants and take action to minimize/ prevent pollutants by any interventions?

*(a) Air Quality* Yes ☐ No ☐

If Yes, please **Tick** one or more of the following:

| **Pollutants Generation** | **Approx. Quantity (Specify Units)** | **Pollutants Minimization/Prevention** | |
|---|---|---|---|
| PM (particulate matter) | | Filter bags | ☐ |
| $SO_2$ | | Scrubbers | ☐ |
| NOx | | Any other, (*Please Specify*) | |
| CO | | | |
| HC(hydro carbon) | | | |
| GHG ($CO_2$, $CH_4$, $O_3$) | | | |
| $NH_3$ | | | |
| Any other (*Please Specify*) | | | |

*(b) Wastewater* Yes ☐ No ☐

If Yes, please **Tick** one or more of the following:

| **Wastewater Generation** | | **Approx. Quantity (Specify Units)** | **Wastewater Minimization/Prevention** | |
|---|---|---|---|---|
| Grey water | ☐ | | Septic tank with soakage pit | ☐ |
| Black water | ☐ | | Septic tank with other arrangement | ☐ |
| Industrial wastewater | ☐ | | Wastewater Treatment plant | ☐ |
| Any other (*Please Specify*) | | | Common wastewater treatment plant | ☐ |
| | | | Disposal to sewer | ☐ |
| | | | Any other (*Please Specify*) | |

*(c) Storm water* Yes ☐ No ☐

If Yes, please **Tick** one or more of the following:

| **Storm water Generation** | **Approx. Quantity (Specify Units)** | **Storm water Minimization/Prevention** | |
|---|---|---|---|
| Storm water | | Diversion to nearby waterways/roadside canals | ☐ |
| | | Rain water harvesting | ☐ |
| | | Ground water recharge | ☐ |
| | | Other (*Please Specify*) | |

*(d) Municipal Solid Waste* Yes ☐ No ☐

If Yes, please **Tick** one or more of the following:

| **Waste Generation** | | **Approx. Quantity (Specify Units)** | **Waste Minimization/Prevention** | |
|---|---|---|---|---|
| Biodegradable | ☐ | | Composting | ☐ |
| Non-biodegradable | ☐ | | Biogas generation | ☐ |
| Recyclable | ☐ | | Landfills | ☐ |
| Any other (*Please Specify*) | | | Open burning | ☐ |
| | | | Trade-off | |
| | | | Transfer to local authority | ☐ |
| | | | Any other (*Please Specify*) | |

*(e)* *Hazardous Waste* Yes ☐ No ☐

If Yes, please **Tick** one or more of the following:

| **Waste Generation** | | **Approx. Quantity (Specify Units)** | **Waste Minimization/Prevention** | |
|---|---|---|---|---|
| Paints, solvents | ☐ | | Trade off | ☐ |
| Agrochemicals | ☐ | | Storing at back yard | ☐ |
| Batteries | | | Disposal with municipal solid waste | |
| E-wastes | | | Handing over to authorized entity | |
| Infection waste | ☐ | | Any other (*Please Specify*) | |
| Any other (*Please Specify*) | | | | |

## Thank you for taking the time to fill in this survey.

*Please return your completed questionnaire to the Mauritius Employers' Federation.*

*Email: mef@intnet.mu or Fax: 465 8200*

**Glossary**

**Green Jobs: Definition**

Green Jobs are integrally decent jobs in agriculture, manufacturing, research and development, administrative and service activities that contribute substantially to preserve or restoring environmental quality. It includes jobs that help to protect ecosystems and biodiversity, reduce energy, materials and water consumption through high efficiency strategies, de-carbonise the economy and minimise or altogether avoid generation of all form of waste and pollution.

**Decent Work**

Opportunities for women and men to obtain decent and productive work in conditions of freedom, equity and human dignity.

## Appendix II – Questionnaire used in the stock taking exercise on Trade Union involvement/activities in Mauritius

**Stock taking Exercises on Trade Union Involvement/Activities in Green Jobs in Mauritius**

The objective of this survey is to have a better understanding of the unions' work related to green jobs, environment, and energy as well as their involvement and participation in the MID (Maurice Ile Durable) process.

A green job is one that directly produces green products or services in any of the following areas:

A. Produce renewable energy.
B. Increase energy efficiency; reduce consumption of energy and raw materials.
C. Conserve natural resources; protect and restore ecosystems.
D. Prevent, reduce, and clean up pollution; limit greenhouse gas emissions; minimise waste.
E. Produce clean transportation and fuels.

If you find it difficult to insert a tick (☑), please use a cross (X) in the boxes wherever applicable.

**1** Your Trade Union Organisation

a. Name _____

b. Number of members _____

c. Sector(s) covered _____

**2** Do you have a **policy** on:

| (Please tick) | Yes | No | If Yes, is it (Please tick) Internal | Regional | Sectoral | National |
|---|---|---|---|---|---|---|
| Environmental Issues | | | | | | |
| Energy efficiency | | | | | | |
| Green Jobs | | | | | | |
| MID | | | | | | |
| Other related:..... | | | | | | |

**3** Does your trade union organization have: (Please tick)

| | Yes | No |
|---|---|---|
| A **department** on environment, green jobs, MID, etc. | | |
| A **committee/unit** on environment, green jobs, MID, etc. | | |
| A **focal point** on environment, green jobs, MID, etc. | | |
| Others (please state:.....) | | |

**4** Has your union been involved with

| (please tick) Yes | No | If yes, in areas and how? |
|---|---|---|

| | | | | |
|---|---|---|---|---|
| | the government in developing environmental policies at national level? | ☐ | ☐ | _____ |

| | | | | |
|---|---|---|---|---|
| **5** | Is your trade union organization **involved** in the national committees: | Yes | No | If yes, according to you, what has been achieved till now? |
| 5a | MID Working Groups | ☐ | ☐ | _____ |
| 5b | Drafting of MID Policy | ☐ | ☐ | _____ |
| 5c | Coordination committee for implementation of national programme on sustainable consumption and production 2008-2013 | ☐ | ☐ | _____ |
| 5d | Environmental Issues | ☐ | ☐ | _____ |
| 5e | Greening of Workplaces | ☐ | ☐ | _____ |
| 5f | Occupational Safety Issues | ☐ | ☐ | _____ |
| 5g | Health Issues | ☐ | ☐ | _____ |
| 5h | International (name(s):.....<br>.....) | ☐ | ☐ | _____ |
| 5i | Any other (name:.....<br>.....) | ☐ | ☐ | _____ |

| | | | | | |
|---|---|---|---|---|---|
| **6** | Are you aware of the following reports that have been produced? | (Please tick) | | If yes, were you involved in drafting the report? (Please tick) | |
| | | Yes | No | Yes | No |
| 6a | National Programme for Sustainable Consumption and Production 2008-2013 | ☐ | ☐ | ☐ | ☐ |
| 6b | National Environment Policy 2007 | ☐ | ☐ | ☐ | ☐ |
| 6c | National Programme on Sustainable Consumption and Production 2008-2013 | ☐ | ☐ | ☐ | ☐ |

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| 6d | The Energy Strategy 2011-2025 Action Plan | | | | | | |
| 6e | National Biodiversity Strategy and Action Plan 2006-2015 | | | | | | |
| 6f | Food Security Fund Strategic Plan 2008-2011 | | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| **7** | Has your trade union carried out **awareness raising activities** related to | | | If Yes, was it (please tick) | | If yes, state the type of activities: |
| | | Yes (please tick) | No | Internal: for members only | External | |
| 7a | Environmental Issues | | | | | |
| 7b | Energy efficiency | | | | | |
| 7c | Green Jobs | | | | | |
| 7d | MID | | | | | |
| 7e | Other related:..... | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| **8** | Has your trade union participated in **training** related to **Environmental issues** organised | (please tick) | | If yes, state how many men and women were trained? | | If yes, state type of training: |
| | | Yes | No | Number of men | Number of women | |
| 8a | at **national level** | | | | | |
| 8b | at **international level** | | | | | |
| 8c | internally for **members only** | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| **9** | Has your trade union participated in **training** related to **Energy efficiency** organised | (please tick) | | If yes, how many men and women were trained? | | If yes, state type of training: |
| | | Yes | No | men | women | |
| 9a | at **national level** | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| 9b | at **international level** | | | | | |
| 9c | internally for **members only** | | | | | |

| **10** | Has your trade union participated in **training related to Green Jobs** organised | (please tick) | | If yes, how many men and women were trained? | | If yes, state type of training: |
|---|---|---|---|---|---|---|
| | | Yes | No | Number of men | Number of women | |
| 10a | at **national level** | | | | | |
| 10b | at **international level** | | | | | |
| 10c | internally for **members only** | | | | | |

| **11** | Has your trade union participated in **training related to MID** organised | (please tick) | | If yes, how many men and women were trained? | | If yes, state type of training: |
|---|---|---|---|---|---|---|
| | | Yes | No | men | women | |
| 11a | at **national level** | | | | | |
| 11b | at **international level** | | | | | |
| 11c | internally for **members only** | | | | | |

| **12** | Has your trade union produced any **publication** related to | (please tick) | | If yes, state the area of focus of the publication |
|---|---|---|---|---|
| | | Yes | No | |
| 12a | Environmental Issues | | | |
| 12b | Energy efficiency | | | |
| 12c | Green Jobs | | | |
| 12d | MID | | | |

| **13** | Has your trade union produced any **training material** related to | (please tick) | |
|---|---|---|---|
| | | Yes | No |

| | | | |
|---|---|---|---|
| 13a | Environmental Issues | ☐ | ☐ |
| 13b | Energy efficiency | ☐ | ☐ |
| 13c | Green Jobs | ☐ | ☐ |
| 13d | MID | ☐ | ☐ |

**14** Has your trade union organization **signed collective bargaining agreements**: (please tick)

| | | Yes | No |
|---|---|---|---|
| 14a | For workers in green jobs | ☐ | ☐ |
| 14b | With content related to environment, green jobs, climate change, etc. | ☐ | ☐ |

| | | Yes | No | If yes, in which sector(s)? | If yes, how are they organised? |
|---|---|---|---|---|---|
| **15** | Does your trade union have members doing green jobs? | ☐ | ☐ | | |

| | | Yes | No | If yes, in which sector(s)? |
|---|---|---|---|---|
| **16** | Are the sectors your trade union organization cover dependent on natural resources? | ☐ | ☐ | |

| | | Yes | No | If, yes, state how? |
|---|---|---|---|---|
| **17** | Has the following environmental degradation had an **impact on workers** in the sectors the trade union organization are covering? | | | |
| 17a | Air Pollution | ☐ | ☐ | |
| 17b | Water Pollution | ☐ | ☐ | |
| 17c | Water scarcity | ☐ | ☐ | |
| 17d | Climate change | ☐ | ☐ | |
| 17e | Waste | ☐ | ☐ | |

**18** What **type of energy** is mainly used in the sectors your trade union organization cover?

| | | Yes | No |
|---|---|---|---|
| 18a | Fossil Fuels (Petroleum, Coal, Natural Gas) | ☐ | ☐ |
| 18b | Hydroelectric | ☐ | ☐ |
| 18c | Biomass | ☐ | ☐ |
| 18d | Solar | ☐ | ☐ |
| 18e | Wind | ☐ | ☐ |
| 18f | Geothermal | ☐ | ☐ |

Others (please state):. ..... .....

**19a** State the kind of waste that is produced (solid, liquid, etc.) by the sectors the trade union organization cover? _____

**19b** How is the waste in 19a treated? _____

| | | Yes | No | If yes, how? |
|---|---|---|---|---|
| **19c** | Has the waste or the treatment of the waste you mentioned under 19a. and 19b. an impact on the | | | |
| | sector | ☐ | ☐ | _____ |
| | workers | ☐ | ☐ | _____ |

| | | Yes | No | If yes, which actions? |
|---|---|---|---|---|
| **20** | Have any **actions** been taken by your trade union organization to address the **negative impact** environmental degradation/climate change/waste treatment **on workers**? | ☐ | ☐ | |

| | | Yes | No | If yes, which one and how? |
|---|---|---|---|---|
| **21** | Have **national and international environmental policies** (mitigation, adaptation, etc.) had an **impact on workers** in the sectors the trade union organization are covering? | ☐ | ☐ | _____ |

**22** **According to you what are the challenges for the trade union organization in being involved or carrying out activities on environment, green jobs and MID?**

**23** **According to you what are the opportunities for the trade union organization in being involved or carrying out activities on environment, green jobs and MID?**

**24** **According to you to what extent greening of jobs and the MID process will**

(please tick)

| | | Not at all | To a little extent | To some extent | To a large extent | Extremely |
|---|---|---|---|---|---|---|
| 24a | create new additional jobs | ☐ | ☐ | ☐ | ☐ | ☐ |
| 24b | eliminate certain jobs without replacement | ☐ | ☐ | ☐ | ☐ | ☐ |
| 24c | transform or redefine certain jobs | ☐ | ☐ | ☐ | ☐ | ☐ |
| 24d | cause net job losses | ☐ | ☐ | ☐ | ☐ | ☐ |
| 24e | create mostly low-paying jobs | ☐ | ☐ | ☐ | ☐ | ☐ |
| 24f | increase energy bills | ☐ | ☐ | ☐ | ☐ | ☐ |
| 24g | have to be government-subsidised | ☐ | ☐ | ☐ | ☐ | ☐ |
| 24h | be less productive | ☐ | ☐ | ☐ | ☐ | ☐ |
| 24i | interfere with trade policies | ☐ | ☐ | ☐ | ☐ | ☐ |
| 24j | improve livelihoods of employees | ☐ | ☐ | ☐ | ☐ | ☐ |
| 24k | be beneficial to employees | ☐ | ☐ | ☐ | ☐ | ☐ |
| 24l | prove effective in poverty reduction | ☐ | ☐ | ☐ | ☐ | ☐ |
| 24m | improve occupational and public health | ☐ | ☐ | ☐ | ☐ | ☐ |
| 24n | promote social dialogue | ☐ | ☐ | ☐ | ☐ | ☐ |
| 24o | increase decent work opportunities | ☐ | ☐ | ☐ | ☐ | ☐ |

| | | | | | | |
|---|---|---|---|---|---|---|
| 24p | promote consultation and respect for human and labour rights | | | | | |
| 24q | promote training for workers in clean processes and technologies | | | | | |

| | | | | |
|---|---|---|---|---|
| **25** | During the next 12 months, do you expect local firms green practices to: | **Decrease** | **Remain the same** | **Increase** |
| | | | | |

**26** Any other comment:

Kindly email filled questionnaire as well as any other comment you may have at ks.sukon@gmail.com Feel free to use additional sheets if necessary.
For any further information call Dr K S Sukon on 2581126.

***Kindly let us have the name and contact details of a person whom we may contact in the future for further collaboration.***
***Thank you.***

**Appendix III – Additional recommendation from the workshop on the promotion of green jobs**

| **Outcome at sectoral level** | **Institutional capacities are strengthened to promote green jobs at sector and enterprise level** | | | |
|---|---|---|---|---|
| | **I** | **II** | **III** | **IV** |
| **Renewable Energy (RE) Outcome** | **Increased SMEs and jobs in renewable energy and share in total energy consumption whilst improved availability and affordability for all** | | | |
| **Action** | **Promoting Green Jobs** | **Upgrading skills** | **Greening enterprises** | **Just Transition** |
| Lead | **Ministry of Employment** | **MITD** | **MEF** | **Trade Unions** |
| | Design a government plan to equip all official buildings with PV and SWH | | Assess opportunities for enterprises to invest into RE and energy efficiency | Assess Trade Unions role, benefits and eventual shifts in jobs in promoting RE, energy efficiency and greening workplaces |
| | Green loan scheme to be reviewed tailoring investment schemes for SME's to purchase RE | | Build capacity and train enterprises on RE options and finance possibilities | |
| | Review 3MW capacity of CEB to accommodate more renewable energy in the grid | | | |
| | Review existing SWH scheme which is too restricted and allow more people to the scheme including decentralization | | | |
| **Agriculture Outcome** | **Increased farm businesses and jobs applying sustainable agricultural practices producing an increasing share out of total agricultural production** | | | |
| **Action** | **Promoting Green Jobs** | **Upgrading skills** | **Greening enterprises** | **Just Transition** |
| | Design tax and loan incentives for planters to grow green as well as incentives for access to training, technology and equipment | Provide training, skilling and re-skilling opportunities to ensure that employees can join other sectors especially when they are laid off | Build capacity and train enterprises on eco-labels and certification | Provide facilities and logistics to promote well-being of employees (e.g. access to clean water, bath after use of pesticides, etc.) |
| | Extend Governmental Conservation Services in forestry, land and maritime conservation. | Consumer education (health issues) | Promote research on green production techniques and crop varieties | |

| | | | | |
|---|---|---|---|---|
| | Design a strategy to establish a better/ prestigious status for green planters | Compost/waste management by UOM/AREU | Regroup small planters in greening programmes which includes training, awareness, technology and knowledge transfer | |
| | Land conversion scheme to be reviewed to promote favourable access for those wanting to plant green | Sensitized on climate change by UOM/AREU | Encourage composting training, facilities, know-how | |
| | Assess opportunities to encourage customers to buy green outputs through reduced VAT for certified green products, preferential regimes for shops offering a certain % of green products and services etc. | Sensitized to change from brown consumer society to a green one by AREU | Make food security and sustainable agriculture a priority and establish a proper strategy | |
| | Incentivize organic fertilizer and green pest management through tax exemptions and taxes on chemical fertilizer (marginal cost of the negative externality of chemical fertilizer) | Trained to have roof garden, balcony garden or kitchen garden by RTC/AREU | Optimize use of agricultural lands, including reclaiming of unutilized/underutilized government lands | |
| | Introduce payment for environmental services schemes to the benefit of green planters, forest-, shore and maritime managers and holders | | Encourage hotels and restaurants to source from green and local producers | |
| | | | In large establishments make an environmental officer and environmental policy mandatory | |
| **Tourism Outcome** | **Increased jobs and number of hotels adopting greening practices and offering green labels stay** | | | |
| **Action** | **Promoting Green Jobs** | **Upgrading skills** | **Greening enterprises** | **Just Transition** |
| | Establish a national certificate for green hotels | In implementation of minimal impact operations and to development of ecologically sustainable tourism operations by MITD | Enable hotels to access loans at preferential rates for investment into retrofitting, green construction, green equipment, renewable energy | Establish regular control visits to hotels to enforce decent working conditions as this sector functions 24/6 |
| | Design hotel specific energy, waste and water audits and support programs to enable hotels to become | Conduct water audit and identify water saving initiatives | Engage hotels in conservation of biodiversity - marine, sea shore and other natural resources the | |

| | | | | |
|---|---|---|---|---|
| | more energy and resource efficient including the use of own resources e.g. rainwater; energy generation | | tourism industry depend on | |
| | Introduce and incentivize a hotel procurement scheme for green local produce | | A green fund taking as model the CSR fund might be established with contributions from hotels and other players dependent or impacting natural beauty | |
| | Marketing Mauritius as a Green Island destination | | Make environmental officers and an environmental policy mandatory | |
| **Textile Industry Outcome** | **Increased number of jobs and textile enterprises adopting green processes in manufacturing plants and offering green certified textiles for export as well as for local market** | | | |
| **Action** | **Promoting Green Jobs** | **Upgrading skills** | **Greening enterprises** | **Just Transition** |
| | Incentivize green innovative technology to move the industry into high value products | In using sustainable energy and environmental practices and sustaining process improvements as well as sustainable work practices | Strictly enforce pollution control and reward companies which overshoot the target | Introduce a unions training and awareness programme on new green machinery |
| | Establish national eco-labels and certification scheme | Skills in sustainability related audits by MITD | Create incentives to invest in green technologies including solar | |
| | Offer free of charge technical expertise by government for energy, water and material audits to provide guidance on how to green enterprises | Training to assess the environmental impact of a project/process or activity by UOM | Make environmental officers and an environmental policy mandatory | |
| | Introduce an award, annual price or other scheme to make green enterprises visible making them role models for the industry | | | |
| | Engage with MEXA, Trade Ministry and relevant national and international partners to negotiate preferential trade agreements for | | | |

| | | | | |
|---|---|---|---|---|
| | green products from Mauritius | | | |
| | Introduce a governmental guarantee or other security scheme for banks to hand out preferential green loans for greening enterprises | | | |
| | Undertake studies, consultations and agreements with international and national partners to create the first eco-export processing zone world wide | | | |
| **General Comments** | 1. Promote Just Transition in all sectors and enforce decent working conditions through the setting up of an "MID Authority<br>2. Transfer of knowledge and expertise from foreign countries e.g. foreign engineers coming to construct green buildings must train local ones<br>3. Enforce standard working conditions<br>4. Establish an adequate pay and minimum wage<br>5. Compensation for workers during green transition<br>6. Trade unions must be given all support including financial and human resources e.g. adequate time off for advocacy and training<br>7. Protect vulnerable workers as well as poorest workers during transition by establishing a "Just Transition Fund"<br>8. Ensure employee well-being, safety, security by setting up an appropriate "MID Authority"<br>9. Proper time-table and plan for transition in order to avoid chaotic moves<br>10. Enterprises must have environment officers just as health and safety officers | | | |

ISBN 978-92-2-127426-1