



Compilation of executive summaries of MID working groups

Information Paper NRFE 03/11

Working Group 1

Energy

2 EXECUTIVE SUMMARY

One of the main objectives of the Maurice Ile Durable project is to make Mauritius, Rodrigues and the outer Islands be less dependent on fossil fuels. This can be achieved by increasing energy efficiency in order to reduce the consumption of energy in sectors which are high energy consumers; for example: transport, land use, buildings, and industrial processes.

Consideration of prosperity in terms of profitability only, based on the current economic paradigm, is often at the expense of social and environmental aspects. In order to address such a distortion and internalise the latter aspects, sustainability criteria are needed. Among the criteria used for sustainability assessment are GHG considered over an entire chain, competition with other applications like food supply, biodiversity, quality of soil, water and air, contribution to local communities as well as parameters of well-being. In this report, a **recommendation** is a proposal from the WG as a whole, on the basis of consensus. Wherever, dissenting views are expressed, this is explained. It is not a policy directive as the WG is not mandated to outline policies, strategies and action-plans. It is proposing measures based on feasibility studies.

The conduct of **feasibility study** currently focuses on the financial aspect, with reference to market forces. However, MID requires a new economic framework, integrating environmental and social costs. Long term holistic feasibility rather than short-term profitability will be possible only if externalities are fully integrated in the MID context.

This WG focuses on the INTEGRATED management of Energy issues and is closely linked to Climate Change Mitigation. The topics addressed were as follows: Energy Sources, Buildings, Transport, Housing, and Land Use.

After discussions of the WG, the categories were redefined and were the following: Energy sources, Transport, Buildings – including housing, Industrial/Manufacturing processes and Land use.

Apart from climate change, democratisation of the energy sector, green economy, institutional and regulatory aspects, technological dimensions, sensitization, training, capacity-building and research as well as reference to international/regional cooperation, Rodrigues, Agalega / outer-islands will be cross-cutting issues.

1. Recommendations

The WG 1 is of the opinion that the following are non-MID: 24/7, 2 million tourists in 2020, triple GDP to 1 trillion rupees in 2020.

After the discussions, the WG Energy came up with the following recommendations: **Sustainability Indicators**: Instead of using only GDP, a set of sustainable indicators should be introduced to gauge the progress of the Republic towards the MID vision.

Recommended studies

- A study should be carried out to assess the feasibility conditions of capping the number of vehicles in Mauritius and to assess the carrying capacity of the Mauritian road network by 2020
- A land use survey should be undertaken for the whole country prior to devising strategy related to integrated land use by 2015
- A study to assess the allocation of land for priority to attain 60% food security in the country as well as the demands from the other sectors including energy self-sufficiency by 2040. Consideration of potential of marine resources and regional cooperation should be included.
- Solar and wind maps should be produced in order to make efficient use of these renewable resources, including in Rodrigues.

Demand Side

The government should promote alternate modes of travel:

- The mass transport system should be introduced without delay and be operational by 2020, a priority for the WG as it would reduce the number of cars on the roads. It should be powered with clean energy sources in line with MID.
- Government should provide quality and efficient public transport to the population and should (along with private companies with more than 200 employees) promote alternate travel vehicles by providing company buses to 50% of its staff (target 2015).
- Alternate travel vehicles should be promoted by consolidating taxes based on car emissions and car occupancy (Car pooling should be promoted by introducing toll based on car occupancy by 2015).
- Cycle and pedestrian paths should be introduced and selected roads be converted for pedestrian use only.

Strategies, policies and regulations should be reviewed and made stricter in terms of enforcement in order to promote MID concepts:

- More efficient land use whenever applicable.
- Minimum energy performance standards for equipment should be enforced without delay and existing policies and regulations should be made stricter for new development projects.
- New guidelines to promote sustainable development and there should be incentives provided to people in order to encourage them to adhere to these new guidelines

- Energy audits in industries and assistance should be given in implementing recommendations. Voluntary initiatives should be promoted strongly in the context of Energy Management programmes.
- Administrative processes for industries using sustainable sources of energy should be facilitated to encourage industries to use lesser carbon fuels. This will encourage industries to adopt industrial ecology principles and design.
- Industries should be encouraged to promote a circular economy where materials should be reused as new raw materials. There is less consumption of resources and energy in a circular economy.

Holistic and Integrated approach to Transport and Land use should be promoted in line with MID concepts:

- There should be an integrated approach to development in order to have regulations and policies more appropriate to the local context and better enforcement.
- Good governance should be promoted – for example there should be more transparency in decision making on tariffs for energy
- Delocalisation and decentralisation should be promoted in the event that the mass transit system is not implemented in order to reduce time and need of travel to work in the long term. While road construction has to be considered as favouring the car transport system and as a generator of more traffic problems and therefore shall not be encouraged; any ring road/by-pass road development should be thought in a holistic manner and should promote the use of mass transport. But, decentralisation should be encouraged to empower local authorities/organisations.
- Consultations with stakeholders should be led in a pro-active and preventive manner – for example, developers should have an opportunity to discuss their projects with decision makers in a pro-active manner and input of local consultants should be promoted in local projects by encouraging their participation.
- Review of land use for water shed management taking into account climatic changes in the Short Term.
- Clustering of shared facilities and mixed-use development in order to make an efficient use of the existing facilities/infrastructure, preventing the need for building new facilities and infrastructure and reducing need for travel.

Capacity building in the main institutions is a high priority:

- Allocation of more resources (especially for capacity building) to the main institutions specially Local Authorities (with the creation of new posts like architects, legal counselors) for better implementation of policies & regulations should be carried out in the short term.
- Empowerment of citizens/community to encourage community participation in decision making process - the bottom-up approach should be privileged by empowering citizens and communities to participate in the decision-making process.

Creation of awareness / mindset of people – awareness campaigns

- On MID concepts using the funds available in the short term and be on-going (for example, on eco-driving, bio-climatic architecture) in order to promote sustainable quality of life and to reduce amount of energy consumption
- About energy efficiency and incentives to industries to establish energy efficiency processes
- For reforestation & awareness about the negative carbon impacts in the short term

Fiscal incentives or taxation

- Fiscal policy to promote the use of renewable energy in the transport sector by 2015 and promote cleaner vehicles through incentives, green procurement and CSR in Mauritius and Rodrigues
- Energy+ buildings should be encouraged by giving financial incentives
- In order to promote local distribution and consumption, financial incentives and measures should be given to small planters to adapt to climate change in the long term. The distribution policy should also be reviewed to help these planters. Incentives should be given to planters to produce goods needed for local consumption and should ensure markets for the products in the Short Term

Use of new technologies should be promoted in order to reduce waste of energy and to increase efficiency in buildings

- New technologies could be used to reduce the amount of energy waste in our daily lives in the very short term as these technologies are already available
- To undertake Energy Management projects particularly in airport, port and cold storage which are the high consumers of electricity on the island and in Rodrigues

Supply Side

Fuel imports

- All petroleum and coal imports for local consumption be displaced by local sustainable substitutes by 2040.

Given the threats that high fossil fuel prices and supply interruptions pose to our economy and way of life, it is vital to decouple our economy from them as quickly as possible. Peak oil occurrence, as well as climate change, is additional compelling reasons. Contingency plans have to be drawn up to cope with significant interruptions or reductions in petroleum-based fuel imports.

Production of Electricity

Recommendation, in order of priority of the following options is favoured for base-load power generation in the short/medium term.

Working Group 2

Environment: Preservation of
Biodiversity & Natural Resources

Executive Summary

The Government has placed environmental issues high in its order of priorities for making Mauritius a sustainable island. A large number of policies, laws, regulations and guidelines have been formulated to ensure that the various facets of our natural and built environment remain clean, healthy and productive. However, gaps and discrepancies in the legislation and fragmentation of jurisdiction, coupled with dispersed institutional responsibilities and poor implementation and enforcement, undermines legal and institutional authority, leading to failures in achieving the high standards expected by Government and society.

It is recommended to develop and promulgate a single **Biodiversity Act** that will encompass all the various facets of the country's terrestrial and aquatic biodiversity, including its protection, management, preservation and use for the benefit of one and all. It is further proposed that a new Ministry be created-the **Ministry of Ecology and Sustainable Development**, which will be responsible, *inter alia*, for all the various aspects of the identification, investigation, archiving, study, management, preservation and sustainable utilisation of ecosystems in all sectors of the economy. The Biodiversity Act must come under the jurisdiction of the Ministry of Ecology and Sustainable Development. Pending the establishment of these two core instruments necessary for preservation of the biodiversity and natural resources, it is proposed that a Gap Analysis of existing legislation and regulations be carried out with a view to **updating and harmonising** them. This should be followed by allocation of clear, **unambiguous mandates** to existing institutions and organisations for the various components of biodiversity and natural resources.

There are considerable gaps in our knowledge of the exiting terrestrial (e.g. mountain, wetlands, and caves) and aquatic (freshwater and marine) biodiversity. We also know and understand very little of the effects of invasive alien plant and animal species on local biodiversity. Similarly, the effects of varying climate and global climate change on our flora and fauna are not sufficiently studied. It is therefore necessary to undertake large scale investigations on **identifying, inventorying and characterizing local plant and animal species**.

It is strongly recommended to establish **Ecological Corridors** that are contiguous areas of natural habitats. This will reduce habitat fragmentation, reduce competition for space, food and shelter, and effectively increase the geographical area available to plants and animals to spread out and carry out their ecological functions.

Environmental impacts of anthropogenic changes for economic development are normally evaluated through the same set of parameters and threshold values (e.g. noise, odour, emissions, smoke, wastes generated, effect on water quality, on surrounding vegetation, etc). However, land use and habitat changes cannot be supported by all species and all ecosystems to the same extent. Hence it is not appropriate to use the same measuring yardstick for estimating environmental impacts of developmental projects. EIA requirements make mention of ‘carrying capacity of the site’, but does not specify whether this refers to the carrying capacity of the natural habitat/ecosystem. Furthermore, there is no baseline data available in the country on the carrying capacity of ecosystems, for whatever purpose. It is therefore imperative that detailed scientific studies be conducted on investigating the ecosystems in depth with a view to **estimating the carrying capacity of every ecosystem for different activities**. This should be a periodic exercise, since carrying capacity of an ecosystem will vary with even minor changes in the composition and structure of the habitat.

A number of recommendations have been made for the protection and conservation of biodiversity and natural resources associated with various key sectors of the economy, such as forestry, agriculture, fisheries, tourism, and also in different ecotypes such as mountains, rivers and river reserves, wetlands, caves, islets, etc. The recommendations vary according to the level of attention accorded so far to biodiversity issues in that sector (e.g. in terms of policies/ legislation/ guidelines/ regulations promulgated), according to the level of implementation of such policies/ legislation and and/or success of implementation, as well as the scientific need for protection of a particular ecotype. In some sectors, e.g. land use planning and procedures, ecotourism, etc. for all land-based issues, and by extension of terrestrial biodiversity, the **existing land use policy and land use planning procedures must be completely reviewed and revised** for more transparency and greater equity, and more rational decision-making based on environmental decision-support tools. **National strategy and action plans need to be developed specifically** for (i) protection and conservation of agro-biodiversity and native germplasm, (ii) protection and preservation of

mountain, wetlands and cave habitats and biodiversity, (iii) ecotourism and leisure (including cultural tourism, agritourism, geotourism, educational/scientific tourism, etc).

In certain sectors, strategy and/or action plans and policies have already been developed (e.g. the National Biodiversity Strategy and Action Plan, the National Invasive Alien Species Strategy and Action Plan, the Integrated Coastal Zone Management Plan, the management plans for islets, the Sustainable Agrifood Diversification Strategy Plan, the National Forest Policy, etc.). All these **plans must be implemented fully and in the immediate short term.**

1. **Capacity must be built** in terms of human resources, equipment and tools, technologies, and funding, at different levels. **Environmental education** at primary, secondary and tertiary levels must be reviewed and revised for greater effectiveness. **Promote greater awareness** of the need to protect natural resources and biodiversity in particular.
2. There is a need to **promote greater local Research and Development**, relevant to the specific needs of the country. There must be greater inter- and intra institutional **collaboration and sharing** of data and resources.
3. It is imperative to promote **good governance, transparency, accountability, and ethical and moral values** among leaders, policy/ decision makers, the business community, and individuals, in order to avoid exploitation and mining of environmental goods and services.
4. It is recommended to develop a **MID Charter** for use by all individuals and organisations. Such a charter can have as foundation a **Mauritian Sustainability Index**. The MID vision applies to the entire Republic of Mauritius, and due importance must be accorded to the outer islands and other islets. Hence Maurice Ile Durable (MID) should be converted to **Maurice Iles Durables (MIDs)**.

Working Group 3

Environment: Pollution, Waste &
Environment

5. Executive-Summary

The MID project is a national project and a ‘projet de société’ initiated by the Prime Minister in 2007 and is steered from the Prime Minister’s Office.

This report represents the deliberations, findings and recommendations of Working Group 3, environment 2.

Economic development in Mauritius has impacted on the environment of Mauritius (physical as well as social). The MID project addresses these issues as well as others, which now is commonly known as the 5E’s (Energy, Education, Employment, Equity and Environment) in a holistic and integrated manner.

The following issues were discussed during the meetings:

Theme 1: Pollution

Sub Theme: Air quality, Waste Water, Noise, Water and Marine Pollution, Odour.

Theme 2: Solid Waste

Sub Theme: Storage, Collection and Transportation of Solid Waste, Treatment (composting, aerobic digestion), disposal. Waste prevention, minimisation re-use and recycling, special/hazardous waste.

Theme 3: Environmental Health

Theme 4: Embellishment of the Environment

Air Quality

Air quality in Mauritius was a concern expressed by the participants especially with the coming of new industrial activities, electricity generation, medical waste incineration, etc. Although we have Laws, Regulations and institutions (e.g. Ministry of Environment and Sustainable Development (MOESD), and the National Environmental Laboratory, NEL) mobile air monitoring units (APMU) and laboratories for air quality (No_x, Co_x, So_x, PM₁₀) we still have problems with air quality and air pollution in Mauritius and Rodrigues.

These regulations need to be revisited, strengthened and application of same made more stringent.

The following recommendations were agreed on:

All existing legislations should be applied and enforced and an air quality index should be established in Mauritius and Rodrigues. It is well known that fuel containing lead and high sulphur level are pollutants both to the environment and human beings.

Quality of Fuel must be enhanced and a category 'A' Diesel introduced..

Traffic congestion should be reduced and peak time could be eliminated by decentralization of activities away from the capital, and introduction of flexi-time and home working. The positive steps taken by the Government through construction of new roads, e.g, Ring Road project and fly-overs were recognised.

A special environmental fund should be created to finance environmental and conservation projects. Hence, funding mechanism should be improved and more funds should be made available. Allocation of these funds must also be made transparent.

Furthermore, the burning of sugar cane prior to harvest must be stopped through Regulation. The positive steps taken by the Government to increase the penalty for deliberate fire in sugar cane fields by vandalism was a strong sign of the Government's commitment and willingness to reduce pollution.

Specification of imported coals should be reviewed to improve quality of emission from power stations, especially with regards to sulphur content.

Government should start implementing the energy action plan to encourage and target projects on renewables and green energy such as ethanol, wind, solar energy, geothermals, etc.

Bicycle paths should be created in various paths of Mauritius both for health reasons and reduce pollution from vehicular emissions.

The project for tree plantation should be continued and improved as trees sequester carbon dioxide and release oxygen during photosynthesis thereby purifying the environment.

Waste Water

The issue of waste water (generation, treatment, utilisation and disposal) was discussed. The Ministry of energy and Public Utilities (MEPU) is the enforcing agency for environmental legislation related to inland waters and discharge.

Several gaps were observed in this sector including the inefficient use of waste water for irrigation and the pricing policy. The bottlenecks for the implementation of the sewerage systems were examined.

The following proposals / recommendations were made in respect to above sector.

In the short term, by 2015, it is proposed that:

All existing Regulations with respect to waste water should be enforced to have a more effective, efficient waste water management in line with the MID policy. The implementation of the sewerage master plan should be improved to include factories, new construction and development. The quality standards for treated waste water should be enhanced with compulsory standards of waste water.

Landfill disposal of sludge must be banned until a new environmentally friendly disposal system is adopted. It has been shown elsewhere that landfills are not the most efficient waste disposal system.

Onsite disposal consisting of septic tanks, absorption pits or leaching field must be banned in a phased manner to improve the benefit of regional and national sewage treatment plants as well as ground water quality.

The use of treated water for irrigation of sugar cane should be compulsory to protect fresh water resources for domestic utilisation.

A study should be undertaken to assess further the use of treated water for other crops as treated effluents can be harmful. This study should be included in the water study by MRC as concerns that treated water that is in direct contact with human beings is considered as potentially dangerous.

Education and awareness campaigns should be an on-going process, especially with respect to use of waste water.

New policies should be formulated so that fines are imposed proportionately to the concentration of pollutants in the effluents. This may require enactment of new laws and regulations. Furthermore, a scientific study is proposed to evaluate the strengths and weaknesses of the polluter-pay principle and recommendation of remedial measures.

The reuse of treated effluents for industrial and other use such as fire, sylviculture, car washing should be encouraged. This may again require Government Regulations.

Equipments and infrastructures of sewerage treatment plants should be regrouped to enable economy of scales. This may require the consensus of all stakeholders for such an activity. Recycling and treatment plants should be compulsory whatever the size of a company or industry.

Noise

Noise was considered as an annoyance for public tranquillity and also as a cause for irritation. Although Laws and Regulations exist, implementation, responsibilities and other issues were raised which need improvement. The Ministry of Health and Quality of Life (MoHQL) is the enforcing agency. Noise emanating from the following:

Sound proof measures should be promoted to contain sound transmission to the environment.

Education, awareness and civic values campaigns should be organised as a on-going process for societal harmony and respect for the neighbour. Communication mechanism for the public at large should be reviewed and made more effective.

Existing regulation on noise monitoring should be reviewed, implemented and reinforced.

The land-use planning act should be reviewed with regards to conflictual localisation of industrial zones and residential zones. Buffer zones between incompatible land uses must therefore be demarcated and respected.

Communication mechanism towards the public that a construction will be done should reviewed and improved.

A Study of the impact of noise on health should be undertaken for all major activities.

Monitoring and control of noise (motorcycles, car exhaust pipes, nightclubs, Ice Cream vans) should be enforced and appropriate penalty imposed.

Road noise barriers should be erected for the welfare and health of residential zones adjacent to such roads.

Marine Pollution

It was observed that for marine pollution, Regulations / Laws were scattered over several ministries/agencies and no coordinated efforts exist.

Setbacks for high water mark should be increased for all new coastal projects as this will protect beaches and other infrastructure in case of tidal waves or tsunamis and also for improvement of recreational activities. Non polluting aquaculture activities to be implemented in all aquaculture projects. Such non-polluting aquaculture activities should also be included in the Aquaculture Bill of the Ministry of Agro-Industry and Food Security (MOAFS).

Sea dredging and excavation policies should be reviewed and reinforced to protect sea water biodiversity as well as its adverse effect on fish caught by fishermen.

Deforestation and destruction of mangroves should be prevented by enforcing regulation and application of the Forest policy.

Certain practices such as use of certain solar creams by tourists have been shown to be detrimental to the marine environment. This should be studied further and remedial measures taken.

Pleasure boats need to be fuelled by better quality fuel. Similarly, certain activities in the sea such as servicing of ships engines should be closely monitored.

Research should be carried out on the development and reuse of brine. The brine is a by-product of desalination plants. Studies should be carried out for a safe disposal/ reuse. An example would be to dispose this in borehole of saline aquifer.

Education and awareness campaigns should be promoted to inculcate the notion that sea and rivers are not dumping bins.

Imposition of desalination plants for all new coastal hotels should be implemented. Although this measure has already been imposed by the cabinet, the working group proposes to reconsider the imposition methodology and guidelines. All new morcellement permits should be accompanied by a rainfall and run-off water channelling and disposal system.

Odour

Odour especially emanating from farming and industrial activities were issues of concern. The Laws/Regulations need to be implemented and enforced. Furthermore, the following recommendations were made;

A prior treatment to control odour from certain activities should be implemented with immediate effect.

The Land Planning Act should be reviewed to locate such activities away from residential areas.

Solid Wastes

The issue of solid wastes retained considerably attention. The enforcing agency of the above issue is the solid waste management division of the Ministry of local government and outer islands and the local authorities. The MOLG is currently in the process of finalising its strategy for the management of solid waste in Mauritius for the next five years. The following is being considered for efficient solid waste management.

Closure of open dumps, construction of sanitary landfills, construction of additional transfer stations, increase in collection coverage and frequency, disposal of specific types of solid hazardous waste in specially designed cells, increased public awareness on solid waste management 3R concept (Reduce, Reutilise, recycle).

The proposed large composting plant which will process about 100,000 farms of MSW (Municipal Solid Waste) was considered. It was stated that two more such composting plants are expected to be in action in the future. The issues of hazardous waste, the Dangerous Chemicals Control Act (2004) were mentioned as well as the project of the POP (Persistent Organic Pollutants) in Mauritius.

Participants identified certain gaps in the solid waste management in Mauritius. This included the inefficient waste collection, lack of machinery, equipment and trained human resources.

Illegal dumping and land which has been converted to waste disposal site should be controlled and existing laws should be applied more firmly. The following recommendations were proposed to make solid waste management more efficient in the MID project: pg. 39, 40:

Since about 70% of organic waste can be recovered at source, it is recommended to give means to people to recover this waste by providing composters to households through economic incentives for local collectivities and small planters, training and sensitization campaigns.

As a strategy for waste reduction at source, composters at household level should be provided free of charge by local government but people should go and collect their own composters. Training, sensitization and communication should be organized and campaigns should focus on creating awareness and provide initiative on how to selectively separate kitchen and small yard waste while big and large yard waste would be rechanneled to recycling centers. Kitchen and yard waste represent 43% of total domestic waste and only 38% can be recovered. Thus composters will be provided as alternative for carbon / NPK to go into soils for plants.

Financial barriers should be removed for implementation of sorting in household wastes through provision of bins and special plastic bags for different waste types. A target of 50 % of the population could be set in three years time.

Companies exist in the sector of solid waste management in Mauritius but they need incentives as the country represents only a small market. NGOs like Mission Verte provide free bins which are container type bins located at strategic places. Their problem remains in the collection of carton and paper. Incentives exist from “bottlers” companies, this should be extended to newspapers and publicity agencies.

Waste can be converted and turned into resource. This market is not present at the moment, For example, recycling centers can be set up where recyclable solid wastes are recovered and are bought from the population and therefore becoming a monetary resource.

Private initiative should be encouraged in the form of incentives for people to stop wasting. For instance, a grant scheme could be set to purchase shredders and composting units. Subsidies or incentives should be given for buyers to favor recycled products instead of other types. Stewardship of industries and companies is to be inculcated through responsible care. Segregated waste collection is already in operation in Rodrigues.

The Cooperation between the Commission of Agriculture and Commission of Environment in Rodrigues for compost making should be encouraged for waste collection transformation and utilization

Companies and enterprises producing wastes should keep them for disposal. Polluter pays principle should be applicable. Any New dumping site in Rodrigues should be state of the art. A project to send recyclable wastes to Mauritius was evoked. Is it an option, and what are the

costs? Further studies are needed. Awareness raising of the 3R's for waste management should be inculcated in the Rodriguan population.

Environmental Health

Environmental health is a concept that deals with all aspects of the natural and build environment that may affect human health. Following the presentation by Dr Caussy on the above subject, lot of interests were created. It was agreed that for all major programme an SEA (Strategic Environmental Assessor) be made mandatory. This should include an Environmental Health Impact Assessment (HIA). It was also observed that HIA has received little attention. HIA should be made mandatory and an integral part of all HIAs and SEAs.

Strategic Environment Assessment (SIA) should be included within the EPA in all sectors in line with the MID vision.

Epidemiological and health data should be available and accessible to the public. This will create more awareness and make Mauritians health and Environment conscious.

Health Impact Assessment (HIA) should be introduced as a tool encompassing steps and procedures for assessing and reducing the negative health impacts of development projects.

Apart from intersectoral collaboration, the control and monitoring of the quality of imported foods especially before they reach the consumers should be improved. The Food Import Unit control at port and airport should be strengthened while laboratories should be fully equipped and be up to standards to do all the tests. Results should be made available to public at large.

The indiscriminate use of pesticides, is dangerous to the environment which include soils as well as water bodies. Health of farmers is also being adversely affected; some cases of death have been reported and medical practitioners are alarmed by the cancer situation. It is therefore proposed to undertake an immediate control and monitoring of highly dangerous "cocktails" of those pesticides being made by farmers.

The respect of proper clothing and safety measures as per the OHSA by farmers and workers of the local Municipalities and District Councils should be reinforced.

The promotion and training of an Integrated Pest Management System should be monitored by the authorities to bring forward and reinforce the use of predators, parasites and bio-control

microbes. The group also advocated the correct fertilization practice for our crops as this will have an effect on the nutritive values of these crops

By 2020, WG3 proposes that:

An “Observatoire de la Santé” should be created to do research and coordinate and centralize all data related to health.

Through the concept of sustainable agricultural practices the long term the dependency on agro-chemicals for the production of food should be decreased. During consultation on Rodrigues recommendation to use botanical pesticides (e.g. neem) to substitute to chemical pesticides. A study on this proposal could also be applied to the whole Republic.

Embellishment of the Environment

The embellishment of the environment was another such them that guaranteed a lot of interest. Good examples of above undertaken by the government are the green school project the eco-village project.

The Committee proposed the following recommendation to embellish the Mauritian Environment:

The terminology of “embellishment of the environment” theme should be changed to “creating the right living environment” as this way, the essence of putting the people first is captured better. Learning and education should be rendered more attractive with more visits, outings and exhibitions organized regularly. Creation of environment clubs should be encouraged at local level such as in community centres, women association, schools, etc. to promote kitchen and roof gardening.

Each Independence Day should become a “Plant a flower / Endemic Plant day”. In the same vein, all environmental events such as the World Environment Day, Earth Day, Clean Up the World Day etc. should be celebrated.

An appeal to stop cutting pine tree or Araucarias as Christmas trees was made. Instead people can consider buying artificial plastic tree for Christmas which can be used and re-used and last for years.

Beautification contests at local authority level could be organized regularly to identify and reward beautiful buildings which could for instance be put on postcards or other promotional frames.

Although legislation exists, “Syndic” in high-rise buildings and apartment should be enforced. A gap analysis should be undertaken to study the failure of the operation of these Syndic. The study should also propose remedial measures.

Environmental stewardship should be encouraged and promoted. For instance, community involvement should be made in a structured manner such as “comité de quartier” could help in building a feeling of ownership in the proper maintenance and uprisings of residential areas.

The National Network for Sustainable Development (NNSD) should be reinforced to review community projects from NGOs and civil society to attract more visibility.

Sources of funding for potential “embellishment” projects should be made available. Also, fundable projects could be published through MID website.

Guidelines for promoters should be developed, compiled and made accessible.

A Master Plan for the main roads and arteries should be implemented for embellishment. This has to be undertaken in collaboration with the Road Development Authority (RDA). Some and parts of some streets should be pedestrian only. In Rodrigues it was proposed to convert the main road passing through Port Mathurin pedestrian only Pavements should be provided on all roads where possible. Appropriate trees, shrubs, flowers along the roads (with regular maintenance) should be planted. Pedestrian should also respect what it is provided by authorities such as pedestrian crossing. Parking on beaches should be banned.

Authorities should conduct surveys and make allowance for sufficient road reserves to allow for bicycle/walking lanes, and proactively enlarge roads where land is still available.

Trees should be planted around major development projects, for example shopping malls. Legislation should be reviewed in that regard to have private promoters to “green” the space.

Possibility of considering one-way streets where possible so that more space is available for planting trees should be studied.

Humps and speed breakers on roads should be eliminated and other systems than roundabouts should be thought about to slow down traffic.

An integrated approach in the design of low-cost housing should be adopted. Housing should integrate a concept associated with the existing natural environment. Maintenance should also be done in the long term.

Projects such as the environmental socio-economic project at la Gaulette and Le Morne under the ICZM / Recomap should be replicated in other region. These projects could start in the short term and remain ongoing.

For Rodrigues it was proposed that building codes for eco-friendly and green buildings need to be introduced. There was a general consensus that Port Mathurin is converted into a Pedestrian Town. Parking provisions for all new buildings need to be enforced.

It was also proposed to review land use planning in Rodrigues and provision of green space in Port Mathurin and possible delocalization of activities from Port Mathurin. Planning should be as per SIDPR or new planning guidelines for Rodrigues to be promulgated.

Mountain Reserves and River Reserves should be protected as per law.

6. Schedule of meetings:

DAY 1 - Thursday the 16th of June 2011

DAY 2- Tuesday the 28th of July 2011

DAY 3- Tuesday the 12th of July 2011

DAY 4 –Tuesday the 26th of July 2011

Working Group 4

Employment

Executive Summary

Context

During the last two years Mauritius has also embarked in various initiatives aimed at the Greening of the Economy. Some of the initiatives relate to the development of the National Programme on Sustainable Consumption and Production, the elaboration of a Long Term Energy Strategy and Action Plan for Mauritius and the setting up of 'Maurice Ile Durable' Fund.

The Government now intends to have a concrete MID Policy, a clear ten year MID Strategy and a detailed MID Action Plan to pave the way for the sustainable development of Mauritius. In order to achieve this objective, the Government has constituted six working groups to work out on the following themes, covering the 5Es of MID: namely Energy, Environment, Education, Employment and Equity. The WG4 on Employment/Economy was set up by the Ministry of Environment and Sustainable Development (MOESD) under the aegis of the Prime Minister's Office (PMO), to address the issue of promoting a Green Economy, through green employment and green growth.

Shared Vision/Understanding of Sustainable Development

There was a shared understanding among members of the WG4 who agreed on the concept of sustainable development. Sustainable development was identified as a broader aspiration rather than that of achieving economic growth alone. Sustainability was viewed as being multidimensional since it is important to consider not only the economic aspect of sustainable development but also the social, cultural and environmental dimensions.

It was agreed that the development of Mauritius must be measured not only from the perspective of economic growth, but must also encompass the efficient use of resources, reduction of waste produced either directly or indirectly through by-products, decline in pollution, recycling of resources, access to resources for all, decent work and sustainable work-life balance. The

cultural aspect of sustainable development must also be accounted for. Sustainable development was understood as an objective, a principle and a process aiming at improving the quality of life.

The Vehicle to Achieve the MID Vision

In view of the broad dimension of sustainable development, it was viewed that the implementation of the MID concept could not rest on a single Ministry. The WG4 stressed on the need for an implementation agency, having an in-built consultative mechanism to realise the MID vision. It was thus proposed to set up a **MID Commission**, a **Consultative Group** and a **bi-partisan Parliamentary Committee** that will act as three main entities having specific responsibilities to achieve the MID vision. The MID Commission will be a team which will ensure that policies, strategies and action plans are implemented and are on target. The Consultative Group will involve greater stakeholders' participation and ownership. The Parliamentary Committee will involve ministerial committees which will address the problems of different stakeholders in the way forward for a more sustainable island. The Strategic and Consultative nature of this vehicle was agreed as an important element to achieve the MID vision.

The Guidelines – Twenty Factors (The Multiple Aspects of Sustainable Development Recognised by WG4)

The WG4 proposed that guidelines be enumerated by the consultants or experts for twenty (20) factors that were identified by the working group as being critical in moving towards a green economy. These factors are listed in the following table:

Table 1: List of Proposed Identified Factors

Energy	Pollution	Education	Food Security
Water Resources	Waste	Transport	Employment
Governance	Bio-diversity	Construction	Discrimination (Ethnic, Gender)
Law and Order	Public Health and Safety	Work-Life Balance	Green Inclusive Growth
Land / Sea Use and Planning	Occupational Health and Safety	Income Needs	Stakeholders Participation and Ownership

The four important elements of these factors were highlighted as the policies, process, norms (standards) and redlines. The policies are various propositions to be made in the different broad areas specified in Table 1 above. The process is considered from the initiation to implementation stage of the strategy/policy with the involvement of different stakeholders. Thus, plans, programmes and projects will involve a planning, monitoring and evaluation process. The norms are the governing standards and guiding principles that exist for better monitoring and evaluation. The last aspect is the redline which involves activities or strategies that should not be in our MID initiative because they are not MID compatible and/or because of the irreversible nature of their implications for the following 20 years. The redline reflects the recommendations of urgent and immediate action to be taken based on the consensus reached by the discussions by WG4.

Main Propositions / Recommendations

Proposition 1: Green Economy and Green Jobs

It was noted that it is still a problem to settle on a method for identifying what is green. Such a method would need to accurately gauge the green economy's size and rate of growth, and to identify the jobs associated with it. From the shared vision of sustainable development, it is also important to have more quality-of-life-oriented indices/ sustainable indicators in measuring 'development' relative to the common purely economic indices which may fail to capture sustainable development.

The complexity in the categorisation of green occupations and activities was also discussed. In this respect, it was suggested that there need to be a more in-depth study and analysis on measuring the creation of Green Jobs. The ILO in collaboration with the UNDP and UoM is presently conducting a research project on green jobs, which is a starting point for further in-depth study and analysis. The working group recognised the importance of such studies and supported this particular initiative.

Proposition 2: Global Reporting Initiative (GRI)

The WG4 also discussed the importance and relevance of greening local private and public organisations. The Global Reporting Initiative (GRI) was recognised as being a major tool for making the activities of local companies, and therefore economic activity in the country, more sustainable.

Though companies are required to report annually on the sustainability of their activities, the actual reporting mechanism does not give a real picture of the extent to which sustainable development issues are being addressed within the organisation. The GRI reporting framework is a tool that sets out proper indicators for organisations to develop and improve on. It is noted that to date, no Mauritian company has implemented the GRI reporting framework. The recommendation of the group was that as a gradual step towards the adoption of the

sustainability reporting, firms should be encouraged to adopt level C of the GRI and make moving up the level in the next three years a priority. Other forms of sustainability reporting also exist and could, as an alternative, be adopted.

Proposition 3: Sustainability Index

From a macroeconomic perspective, the need for a tool to evaluate the progress towards sustainable development was discussed by the working group. It was opined that it is essential to have a 'Sustainability Index' for Mauritius. This index would consist of a comprehensive set of indicators that include the environmental, social and economic components of sustainable development. The structure of the index will consist of indicators based on the 5 Es specified in the MID Green Paper and would truly reflect the shared vision of sustainable development.

This index recommended by the group will be useful in setting targets for the achievement of progress in the process.

Proposition 4: Sustainable Consumption and Production (SCP)

Under the current SCP programme, the present strategic priorities are efficient use of resources with a focus on energy, water and sustainable buildings and construction, education and communication for sustainable lifestyles, integrated solid waste management and recycling, sustainable public service practices and increase market supply and demand for sustainable products. Though the current objectives of SCP programme are much in line with the MID initiative, it was agreed that the programme is not very much visible.

In many cases it would seem that financial barriers and lack of commitment were the main cause for not implementing such projects. Recommendations to overcome this shortcoming are further elaborated in terms of financial incentives and taxation.

Financial Incentives and Taxation

The Government has set-up several taxes on polluting activities/ products with a view to discourage these activities/products that are unsustainable and regarded as non-MID. The financial instruments in place to date are the Environment Protection Fee (EPF) on certain activities such as the hotel industry and stone crushing plants; the MID levy of fuels and the levy on PET bottles and plastic bags; and just recently the Carbon Tax is being levied on vehicles. Despite these potential sources of funding, certain sectors involved in green activities, such as the recycling industry, do not benefit from any form of financial incentive. In line with the MID Vision, there is a need to reconsider the allocation of funds levied through environmental taxes so as to provide incentives that will contribute to moving towards a green economy.

Issues Where Consensus Has Not Been Reached

Though consensus was reached on many of the issues discussed, there are some issues where there were divergent opinions from the participants namely: the 24/7 Economy, Duty Free Island, Pricing of Utilities and Existing Labour Legislations.

- **24/7 Economy**

With regards to the round-the-clock economy, some members believe that this initiative will boost the economy, create jobs and hence increase the income of households that can then afford a higher standard of living. This initiative was also seen as opening up the economy to the adoption of alternative work practices such as flexi time, work from home or shift system. However, there were apprehensions on the part of other participants that a 24/7 economy would be MID-incompatible. The local resources of the country were thought to be insufficient to meet the needs of such an economy in terms of energy and human resource.

- **Duty Free Island**

There were divergent views as whether the Duty Free Island is MID or non MID-compatible. Some participants have deemed this project as being MID-incompatible for a number of reasons. Firstly, duty-free shopping promotes consumerism that is against SCP principles. The requirement of sustaining a duty-free island will imply keeping up with short-lived fashion trends that encourage overproduction and a “throw-away” life style. There were also concerns that even the potential for job creation might be discounted, as it is unlikely that jobs created will be entirely green or socially inclusive. Other participants explained that it is difficult to comment on the compatibility of the Duty-Free Island project as there is not much information about what is exactly the Duty Free Island and what it constitutes of. Until more details of the project are known, not much can be said on its impacts.

- **Pricing of Utilities**

The view shared by a sub- working group was that utilities such as water supply to households tend to be undervalued and its current pricing tends to promote wastage. However, this view was contested given that access to water is a basic human right and therefore there is a need to ensure that water is accessible to everyone, especially low-income households, at an affordable price.

- **Existing Labour Legislations**

Recent changes to the local labour legislations were also questioned in the light of sustainable jobs. It was explained that newly enacted labour legislations are not conducive to the welfare of employees and have stripped away the protection of workers by removing the limit of a maximum of eight working hours a day. Some members also highlighted the fact that the present local labour legislations do not favour social protection and decent work.

Other members argue that changes to our labour laws have been in line with based economic reforms aimed at creating a business friendly environment for attracting investment, stimulating economic growth and generating and sustaining employment. The new labour laws espouse the

model of flexi-security, making provisions for workers to be compensated and supported in cases of job losses through a workfare programme while promoting greater flexibility and positive relationships in the world of work that are essential for competitiveness and job creation.

Working Group 5

Education

EXECUTIVE SUMMARY

Education for Sustainable Development is an emerging but dynamic concept that encompasses a new vision of education that seeks to empower people of all ages to assume responsibility for creating a sustainable future (UNESCO, 2002). Four consultative Workshops were held on the theme Education with representatives from the Governmental sector, the Private sector, the Non-Governmental Organisations, the Trade Union and the Civil Society, were undertaken in order to assess the current state of the education sector in Mauritius and to formulate practical and feasible recommendations on how this sector can be consolidated so as to promote an education for sustainable development.

Our current way of life is not sustainable. Educators are agents for change, and change is needed now. It is worth noting that education is not only delivered in schools and classrooms; both the informal and the formal educational sectors do contribute significantly to the holistic development of a person. The working sessions revealed that currently these two educational sectors do not complement each other enough. Education for sustainability can reach the Mauritian citizens through several media: at schools, at the workplace and in the community. There is a need for a paradigm shift in attitudes and way of life. The working group formulated proposals in order to promote an education for sustainability taking into account these particular needs. The main recommendation was the need to review the formal education sector in terms of retention, curriculum, and opportunities, so as to cater for a holistic development of the child. In order to achieve this, the proposals also addressed the need to consolidate and update the supporting sectors on which the success of the educational sector depends, namely; infrastructural framework, legislation, sensitisation, empowerment and capacity building.

THE NURSERY SECTOR

A child goes through five (5) major stages during his educational journey; the Nursery, the Pre-primary, the Primary, the Secondary and the Post Secondary stages. In each of these educational levels, the emphasis should be on a holistic development of the child. The Nursery level is the months to 3 years old stage. This sector is under the aegis of the Ministry of Women's Rights, Child Development and Family Welfare. The Nursery sector is a very important stage in the development of a child. Currently this sector is provided to a large extent by the private sector to those who can afford this service. The quality of the services in this sector is not standardised at national level.

Professor Heckman's value analysis on early childhood development programmes in the United States, revealed that investing in early childhood development for disadvantaged children provides a great return to society through increased personal achievement and social productivity. The main proposal is for the Government to professionalise and formalise this sector. There is a need to reduce the disparity in the services provided by institutions specialised in this service. There is also a need to train the personnel, both teaching and non-teaching staff, so that there are adequate number of professionals who can address the needs of children, SEN (2006). The Government, the Private sector and NGOs could work together to address poverty issues so that children from the vulnerable groups of the society could also benefit from the service in this sector. There is a need for national policies, so that the services at the Nursery level are free for all children. *In addition, at this very level, parents should be sensitised and encouraged to adopt a healthy lifestyle for their child.*

Main Recommendations

- ✓ Provide Nursery services to all children
- ✓ Formalise the sector so as to reduce disparity in the services provided by various institutions.
- ✓ Professionalise the sector so as to provide for special education needs
- ✓ Parents should adopt a healthy lifestyle for the benefit of their children.
- ✓ Need to provide for nursery services in Rodrigues as presently such facilities do not exist.

THE PRE-PRIMARY SECTOR

The Pre-primary sector caters for the 3 to 5 years old. This particular sector has made significant progress since the creation of the Early Childhood Care and Education Authority (ECCEA) and with the promulgation of the national curriculum by the Ministry of Education & Human Resources (MoEHR). In the year 2007, the Education and Human Resources Strategy Plan (EHRSP, 2008-2020) reported that some 15.3% of 3-year-olds and 12.7% of 4-year-olds were not enrolled in pre-primary schools, and there was little doubt that these children came from the poorest and most disadvantaged families. Latest figures (2011) revealed that currently 95.6% of students are enrolled in pre-primary schools. *There have been some 1000 children from pockets of poverty who have been enrolled under a special program under the National Empowerment Foundation (NEF) in pre-primary schools for year 2011.* However, there is still some out of school children (4.4%), whose needs should be addressed. The private sector provides around 76% of the services in this sector and this is a paid service. Most of these out of school children come from poorer parents. The proposals were that there should be equal opportunities to all children; poverty issues should be

addressed by the Government in collaboration with the Private sector under the CSR programme to cater for the children from the vulnerable groups of the society. Both the teaching and non-teaching staff should be provided with appropriate training so that they are able to support the children, especially those with special needs and the Government should standardise the services provided in this sector to ensure that the quality of the services are comparable among the service providers.

Main Recommendations

- ✓ Formulate Policies should be promulgated to provide equal opportunities to all students
- ✓ Provide basic free schooling to children specially focussing on vulnerable groups
- ✓ Address poverty issues to encourage parents to send their children to school
- ✓ Train the workforce to ensure quality services
- ✓ Standardise this sector to reduce disparity among service providers both in Mauritius and in Rodrigues
- ✓ Need to carry out a needs analysis to identify the needs of the pre-primary sector in Rodrigues

THE PRIMARY & SECONDARY SECTORS

Access to education in the Primary and the Secondary sectors have since long been given due priority in the country. Free education and free transport to students have been a major encouragement to all students. However, the pass rate of 65% reflects that some students are having problems at these levels. Even after reaching up to Form III in the secondary level, a number of students still fail to achieve the basic reading and writing skills. The reason evoked was that the current education system places too much focus on formal education. In addition the assessment of education at these levels is considered as being too rigid. At the secondary level, it is noted that subjects such as Design & Technology are offered in boys' schools only, while Home Economics is offered in girls' schools only. Private tuition is a common phenomenon in both the primary and the secondary sectors, and it was noted in the EHRSP (2008-2020) that some 85% parents resort to private tuition. Private tuition results in children not having enough quality time to spend on extra-curriculum activities that are very important for their development. The current curriculum in both primary and secondary levels should be structured in order to enhance creativity and innovative skills to children. A student can be equally good in both science subjects and sports or drama or music, but does not receive enough encouragements to concentrate on both, as no such avenues exist at higher education level since currently local universities do not offer courses to cater for these types of skills.

This situation results in students giving more importance to formal education. Though the EHRSP (2008-2020) has formulated a number of policies to address the holistic development of a child, many of these policies have not yet been implemented. The proposals from the participants are mainly to consolidate those already identified by the EHRSP (2008-2020); firstly there is a need to review evaluation system at primary level to take on board multiple skills, artistic abilities, musical skills, there should be a wider choice of subjects to students in both the primary and the secondary sectors; after the CPE level there should be multipathways curricula (science/music, science/drama, science/culture) which should be maintained after secondary level; private tuition needs to be either abolished or at least regulated; automatic promotion should be reviewed to ensure acquisition of basic reading and writing skills; the non-formal education should be incorporated in the formal education through learning activities; use of information technology should be maximised in the education sector for this is a strong medium through which the creativity and innovative skills of the child can be promoted; and subjects linked to sustainable development should be included in all curricula starting as from the Primary level of education.

Main Recommendations

- ✓ Review the assessment at Primary level so as to take on board multiple skills, artistic abilities and musical skills.
- ✓ Review the CPE exams so as to make it less competitive
- ✓ Provide a wider choice of subjects at both primary and secondary levels
- ✓ Abolish/Regulate private tuition
- ✓ Address out of school children and absenteeism in Mauritius and more so in Rodrigues
- ✓ Review automatic promotion both in Mauritius and in Rodrigues
- ✓ Incorporate non-formal education within the Formal education sector to cater for the holistic development of the child
- ✓ Provide for multiple pathways (Science/Music, Science/Drama, Science/Culture) and include modules on Sustainable Development as from the Primary level
- ✓ Encourage national examination at Form III level, the first one will start this year, the aim being to guide students towards better choice of subjects in Form IV
- ✓ Maximise use of IT in school curricula and promote IT facilities in Rodrigues
- ✓ Promote the Rodriguan culture within the school curriculum in order to promote situated and indigenous learning
- ✓ Provide for special education needs both in Mauritius and Rodrigues
- ✓ Establish Eco-Schools

- ✓ Reproductive and sexual health education to be made mandatory at all levels.

THE POST SECONDARY SECTOR

The Post Secondary level constitutes both the Tertiary Institutions and the Technical Institutions. A number of initiatives have been undertaken to increase access to tertiary level with a view of creating an innovative society. The enrolment in tertiary level has increased from 25% up to 45% over the last five (5) years. In the technical sector the demands are high but the number of training centres is not sufficient. This particular sector is likely to play a very important role in the economic development of the country. Participants identified a number of measures in this sector; All degree courses should have at least a module linked to SD; Creation of local universities to offer new types of degrees such as Science/Sports, Science/Music; Science/Culture; Increase the number of technical training centres; Local Universities to provide for Foundation courses to cater for recent changes in the regulations for eligibility from SC to HSC; lifelong learning should be promoted at University level and undergraduate courses should promote sustainable development and have a compulsory component on volunteerism.

Main Recommendations

- ✓ Provide for new models of post secondary educational institutions
- ✓ Local universities to provide for foundation courses to cater for new regulations from SC to HSC
- ✓ Increase the number of technical training centres
- ✓ Promote lifelong learning as part of ESD both in Mauritius and in Rodrigues
- ✓ Local universities to provide for more programmes on sustainable development and at least one module of sustainable development in each programme of study.
- ✓ Undergraduate courses should include a component of volunteerism
- ✓ Government should provide more scholarship opportunities in a wider range of subjects to promote creativity and innovation.
- ✓ Promote tertiary courses in the field of Agriculture, Animal production and Fisheries to cater for the needs of Rodrigues and to promote entrepreneurship
- ✓ Promote research in Rodrigues through the setting up of a university and research centre

THE INSTITUTIONAL FRAMEWORK

The formal educational sector is supported by a number of peripherals which contribute significantly to the success of the sector. The right institutional framework is a necessity so as to bring about effective sensitisation and empowerment of citizens. Currently the Ministry of Environment and Sustainable Development in collaboration with the Ministry of Education and Human Resources, is actively involved in sensitising the students and the public towards environmental protection and sustainable development. The promotion of an education for sustainable development as a way of life requires that the institutional set up be further consolidated. It is therefore proposed to have a dedicated unit under the aegis of the Steering Committee on MID that will promote the MID project at school, at the workplace and within the community. There is a need to constitute a pool of specialists in the relevant areas to promote sustainable development who will be roving officers within the governmental departments to promote the concept of sustainable development. In order to sensitise the public towards adopting a healthy lifestyle, there is a need to create a unit within the Ministry of Health and Quality of Life (MoHQL) dedicated to the sensitisation on non communicable diseases. The existing Food Import Unit at the MoHQL should be consolidated to exert better control on the import of food stuffs and quality of food products available on the market. There is also a need for a Regulatory Body which will control misleading publicity which may confuse the population in their attempt to make healthy food choice and products good for their health. The concept of Ecological footprints should be promoted so as to create awareness of the impacts of producing food products and packaging of the food products on the market. This will be a tool to sensitise the citizens towards making more informed decision related to their consumption habits.

Main Recommendations

- ✓ Setting up of a specialised unit on Sustainable Development under the Steering Committee of MID to promote the MID project at school, at the workplace and within the community
- ✓ Constitution of a pool of specialists in relevant areas pertaining to Sustainable Development
- ✓ Creation of a Non-Communicable Disease Secretariat
- ✓ Creation of a Food Unit to control quality of food products
- ✓ Promote ecological footprints
- ✓ Creation of a Regulatory Body to regulate import and` marketing of food products

LEGISLATION

The Government has promulgated a number of legislation towards the protection of the environment. It was noted that the public in general are not well aware of these legislation, and the provisions in the legislation. The proposals were to reinforce the workforce in various departments and to empower them through capacity building in order to ensure enforcement of the legislation. The government should take measures to sensitise the general public about the relevant legislation and the provisions in the legislation in simple terms.

Main Recommendations

- ✓ The contents of existing legislation on protection of the environment to reach the general public
- ✓ Reinforce the inspectorate and enforcement officers for a more sustained enforcement of legislation
- ✓ Enact new legislation in order to implement the concept of sustainable development
- ✓ Legislation to be accompanied by intensive dissemination programmes at all levels to bring about behavioural changes to ensure compatibility with the MID vision

PUBLIC PRIVATE PARTNERSHIP

The CSR programme is a collaboration between the Government and the Private sector and this should be reinforced and channelled in the appropriate directions in order to address the welfare of the society and minimise the impacts of development on the environment. It is proposed that the government considers injecting 3% of the taxes from the sales of tobacco and alcohol products in a special fund to be used for health promotion/education programmes at different levels. The private sector could be encouraged to support the Government in the health sector by sponsoring a ward. The CSR programme could be used to address issues such as poverty alleviation, and research linked to promoting sustainable development.

Main Recommendations

- ✓ Taxes on tobacco to provide for financial support towards health promotion
- ✓ Sponsor a Ward
- ✓ Poverty Alleviation
- ✓ Encourage Research in SD

AWARENESS & SENSITISATION

The MoHQL in collaboration with the MoEHR has undertaken a number of initiatives to promote health issues, healthy lifestyle and nutrition. These awareness/sensitisation programmes are very costly and do not always meet their objectives. It was proposed to have a dedicated unit, a Directorate of Health Promotion to promote a behavioural change, to promote well being and to sensitise the general public on public health issues, to undertake sustained surveys on public health issues, to promote breast feeding and to produce documentaries in collaboration with the Mauritius College of the Air (MCA) and the Mauritius Institute of Education (MIE) on environmental and health that could be used within the school curriculum.

Main Recommendations

- ✓ Sustained Global Youth Tobacco Surveys
- ✓ MCA/MIE to produce more documentaries on sustainable development
- ✓ Creation of a Directorate of Health Promotion
- ✓ Define policies to bring about behaviour modification in the population
- ✓ Institutions to adopt flexible working hours to promote leisure
- ✓ Set up awareness campaigns on 'Well being/Alternative Therapies'
- ✓ Breast Feeding to be encouraged

EMPOWERMENT

In general it was noted that there is a lack of individual social responsibility. The main reason is lack of understanding and awareness of how irresponsible individual actions impact negatively on the society and the living environment. Policies should be promoted so as to inform and empower the citizens about the needs to adopt sustainable development as a way of life. It was proposed to set up clubs for parents to sensitise and empower them to take informed decisions for their family, to support mothers during the post natal period so that they may take good care of their child, to optimise use of ICT through the mobile technology to reach a wider audience with issues linked to sustainability, to promote social networking at community level 'Mieux se Connaître' to promote good neighbourhood, to encourage decision making at the government institutions for the welfare of the citizens and to empower the citizens about the importance and know-how of healthy living.

Main Recommendations

- ✓ Club for Parents – 'Ecole Des Parents'

- ✓ Provide a structured support service for young Mothers during post-natal period at home.
- ✓ Optimise use of ICT to empower citizens
- ✓ Promote social networking - Mieux Se Connaître
- ✓ Allow for decision making at Institution level
- ✓ Develop strategies to empower citizens about healthy living
- ✓ Empower parents on how to cater for children aged below 3 years
- ✓ Educate the consumer to reduce consumer debts and abuse of commercial products

CAPACITY BUILDING

Capacity building is a must in order to promote a sound education for sustainable development. Currently it was noted that training is taken care at all levels, except that the training programmes are not well structured. It is proposed to carry out needs analysis in each department and define a training strategy that will form the workforce to acquire skills such as working in teams, collaborative works, making informed decisions, adapting to crisis situations, and developing a conscious attitude at work and also within the community. The government should also formulate policies to address home-to-home counselling on home budgeting, child raising, and to set up a forum so that parents could network among themselves.

Main Recommendations

- ✓ Setting up of National Training Strategy Programme both for Mauritius and Rodrigues
- ✓ Home-to-Home Counselling
- ✓ Setting up of a forum for Parental Networking

WAY FORWARD TOWARDS AN ESD

In order to achieve the MID vision on Education the following steps should be taken at national level within the 10 year period of the MID project.

- ☑ During the first three years (2012-2015) the focus should be on **Consolidating Access to Education and Integrating the Non-Formal and Informal education** in the formal education sector.
- ☑ Policies that would need major financial and human resources are considered as medium term (2012-2017) policies; **Re-orient the education system and Set up a specialised**

institution to promote issues of sustainability in school, at the work place and in the community. **Capacity Building** is another issue which should be given due consideration in order to empower the citizens into citizens who are responsible for their actions, who can adapt to the changing world and citizens who can make informed decisions.

- ☑ **Awareness and Sensitisation (2012-2022)** are key to educating citizens at all levels -- school, at the work place and within the community -- and this should be a constant and sustained strategy, and will thus span over the entire 10 years of the MID.

Working Group 6

Equity

V. Executive-Summary

Mauritius is regarded worldwide as an example of economic success, political stability and peaceful cohabitation, but there is still room for improvement with regards to the living and working conditions in the country. The MID committee has made provision for equity as a sine qua non condition for real success to happen in the country. We must not forget that development needs to be human-centred and this can only be a reality when the playing field is leveled for everyone. It is a legitimate aspiration for every citizen to have a fair chance of participating in every aspect of development. Socio economic and cultural background should not hinder one's participation in the construction of tomorrow. Thus, the outcome of the reflections of the subcommittee on equity is of utmost importance in the MID architecture.

Discussions amongst members of Working Group 6 on Equity (representatives of socio-economic groups, ministries and NGOs) were very fruitful and constructive. All the stakeholders contributed actively to the working sessions, identifying areas where inequitable situations exist and proposing a series of recommendations to fight against these. The debates were organised around the following key themes: Poverty and Exclusion; Socially-disadvantaged groups; Education; The family, human values and leisure; Work; and Governance and NGOs. This section provides a synthesis of the complete report, presenting the actual situation, highlighting the gaps identified, the challenges ahead and the main recommendations proposed by the working group.

Poverty and Exclusion

The Working Group expressed concerns about the persistent poverty problem, both in Mauritius and in Rodrigues, in spite of all the measures taken and the resources devoted towards poverty-alleviation. Amongst the main gaps identified were: the difficulty to identify the 'real poor' given that there is no objective criterion established; the inability of the present framework to cater effectively for those in need; the duplication of poverty-alleviation programmes; the pauperisation of the middle class and; the palliative solutions generally proposed by politicians to fit within an electoral time frame.

As such, WG6 considered the challenges ahead, and the issues to be addressed. There was a general consensus that there is a need to create more wealth by boosting sustainable economic development and to ensure that the poverty alleviation mechanisms that have been set up deliver the goods, even in the globalised economic context, and the fierce competition, constitutes major hindrances to achieve these goals.

The key recommendations proposed are: the need to distinguish between absolute and relative poverty; the application of the social register presently being developed; the professionalization of the service delivery towards those in need and the adoption of a holistic approach to break the cycle of poverty and to fight against exclusion.

Socially Disadvantaged Groups

WG6 devoted a lot of attention to the consideration to be given to groups finding themselves in difficult situations and suffering more than others as a result of ascribed factors, changing circumstances, or contingencies of life. As such, the present situation of women, of the stigmatised groups (former prisoners, drug users, those suffering from HIV/ AIDS and persons with different sexual orientation) and of the differently-abled persons were considered, amongst others.

What emerged out of the discussion was that in spite of the significant efforts made, wide disparities still prevail in terms of opportunities available for men and women in different spheres of life. Also, the support presently being provided is not perceived as being effective in helping those in need. On the other side, the stigmatised groups are increasingly being marginalised and are called to suffer in silence, and the physically challenged still have to struggle on a daily basis.

The main recommendations that came out of the debates on the socially disadvantaged groups are: the need to proclaim the Equal Opportunities Act; the setting up of integrated housing projects, the inclusion of anti-discriminatory statements and measures in professional codes of ethics and laws; the setting up of a comprehensive master-plan for the differently-abled.

Education

WG6 considered positively the massive expenditure of the Government towards education, and the achievements in terms of enrolment rate. However, a number of gaps were identified, such as the high rate of absenteeism in ZEP schools, the present curriculum that is too tilted towards academic subjects, and the unequal chances of success.

It was clear, therefore that there are a number of measures to be implemented so as to bring the notion of equity at the classroom level. The main recommendations reached by the Working Group are as follows: the need to ensure that the education system is in line with the market requirements and the economic development; working out an alternative to the CPE; reviewing the system of automatic promotion; the evaluation of the teaching staff and an upgrading of the status of teachers.

Families, Human Values and Leisure

The importance of healthy living at the individual, family, community and national level can never be under-estimated. WG6 focused on violence and abuse against children, in spite of the legal and institutional framework established, and also considered the situation with regards to the elderly, who are now considered as a burden for many families. The group also highlighted the difficulties being encountered in the nation-building process.

A number of proposals were made so as to remedy to the present situation, such as the need to reinstate the notion of national identity so as to create a sense of patriotism and solidarity, the importance of encouraging next to kin to support families with children having difficulties, the education of adults in parenting-skills, the optimum use of the competencies, time and knowledge of our elders, and the need to establish a framework allowing for more work flexibility.

Work

Based on the discussions, there was genuine concern with regards to what is perceived as worsening work situation, and the exploitative conditions prevailing in some sectors of the

economy, under the capitalist model. Some provisions of the new labour legislation 2008 were also perceived as being at the detriment of the workers. In the Rodriguan context, the lack of job opportunities is even leading to a massive movement of the active population to Mauritius.

As such, a more humane approach to growth is being recommended. Also, the working group shared the view that work need to be included as a right entrenched in the constitution of the country. It also proposed that all sectors of activity be covered by remuneration regulations, and that certain provisions of the new labour legislations of 2008 be reviewed. With regards to Rodrigues, a comprehensive study so as to analyse the magnitude, as well as the impact of the movement of people to Mauritius is recommended.

Governance and NGOs

Working group 6 was to the opinion that good governance and good practice at every level of society. The group also agreed civil society has to be empowered to participate in decision making at all levels. This will ensure that corruption is minimized. Laws exist but they are sometimes not being implemented. The committee goes on to agree that there is a need for more environmental justice. Among the main gaps identified by the working group is the correlation between the failure of our institution and equal justice. The idea of better monitoring and evaluation in the public sector was even raised. They furthermore feel that power is concentrated in the hands of ministries and other executives. The Legal aid system, which can ensure access to justice for all, is not functioning properly as legal fees for barristers and lawyers are high that people cannot afford it and sometimes they fall outside the criteria of legal aid.

It was recommended that we should have a more participative approach in the decision making process. A mechanism which ensures constant participation of civil society needs to be set up, and in this context, there is a need for access to information as this is one of the prerequisites to an effective participation of civil society in the decision making process. Adequate resources need to be allocated to enable institutions, such as the Human rights commission, to function properly. The role of the police in investigations has to be reviewed. The introduction of class action in the legal system is recommended.

Also, the Working Group came to the conclusion that, as it stands now, NGOs and other civil society organisation are not properly empowered. As such, the present legal framework has to be reviewed and proper policies be designed. A project-based mode of operation also needs to be adopted. There is wastage of fund as a lack of coordination prevails among institutions in Mauritius. Thus it has been felt that there is a need for establishing linkages amongst ministries and departments for more coherence, follow-up and monitoring of decisions taken. The group agreed that national projects should be evaluated from three different angle to know the economic, social and environmental implications of each policy decision taken by Government so as to ensure Government accountability. Relevant information and documents need to be made public. According to the members, transparency with regards to political institutions and their finance is also a must. In fact, political parties need to be registered and asked to submit their audited returns for income and expenditures. Moreover, the committee noted that it was important to ensure that public funds are not being wasted. Fringe-benefits granted in the public sector need to be reviewed as they may not be conducive to the delivery of a public-oriented service but rather to behaviour which aims first and foremost to protect their own interest. Performance and productivity in the public sector need to be improved. The use of appropriate tools for same is to be encouraged.