

**ADDRESS BY HON D. GOKHOOL,
MINISTER OF INDUSTRY, SCIENCE
AND RESEARCH**

HALF DAY SEMINAR

ON

**MRC Unsolicited Research Grant Scheme:
Information Systems for optimized data Management
to increase the efficacy of Biodiversity Conservation
efforts in Mauritius and Rodrigues**

Thursday, 19 February 2009

at 09 30 hrs

MRC – Rose Hill

Prof Soodharsun Jugessur, Chairman of the Mauritius Research Council

Mr Swaminathan Ragen, Permanent Secretary of the Ministry of Industry, Science and Research

Dr Arjoon Suddhoo, Executive Director of the MRC

Mr Jacques Jullienne, Director of Mauritius Wildlife Foundation

Mr Vikash Tatayah, Principal Investigator, and Members of the Research Team

Directors, Heads of Institutions and Organisations

Ladies and gentlemen

Good morning.

It gives me great pleasure to be associated with to-day's half-day seminar on Information Systems for Biodiversity Conservation efforts.

Let me start by congratulating the Mauritius Wildlife Foundation and the MRC for this laudable initiative.

The Project

I understand that the objective of this project is to develop databases with Geographical Information System (GIS) components, in order to increase the quality of the data collected through the inclusion of essential geo-references and making them more user-friendly and

efficient. You will agree with me that such databases constitute vital information systems for both policy –making and legislation as well as the effective management of scarce resources of our planet.

Biodiversity Conservation forms an integral part of the strategic response, both global and local, to slow-down the environmental and ecological degradation to which our planet has been subjected for many years.

With the possibility of modeling more accurately trends in population dynamics, information systems constitute a vital tool for species research and restoration programme.

Awareness

Conservation awareness therefore was an important focus of this project through a pilot education workshop for secondary teachers and pupils. The project has shown that conservation Science can contribute to popularise science and that conservation is not only a matter for scientists and decision makers. The project also demonstrated that science can be fun and that cross-curricular links can be built for higher environmental, social and cultural benefits.

It is also interesting to see that publications addressing training/dissemination needs, leading to improved data collection and management, have been produced. I also understand that some Field Guides were produced: ‘Phenology Monitoring Manual’, ‘Guide de la Faune et de la Flore de l’Ile Cocos (Rodrigues)’ and ‘A Field Guide to the Amphibians and Reptiles of Mauritius’. These Field Guides will definitely be useful for primary scientific training purposes and awareness creation (eg ‘Ile Cocos’ and ‘Reptile’ guides).

This project embraces the philosophy underlying the concept of Ile Durable which Government is determined to promote.

Maintaining biodiversity has become a daunting challenge with increasing population, higher demand for natural resources and encroachment of men on the natural habitat of flora and fauna. Men being at the top of the food chain has since long been greedily exploiting the environment. Alarm bells have been sounded since long about the gradual disappearance of invaluable species. In the land of the Dodo, one should not be oblivious of the need to preserve nature. Last Friday, the Royal Society of Arts and Science celebrated the bicentenary of the birth of Charles Darwin in Mauritius and I believe that this is an occasion for us to reflect on the interdependence among the species.

Development

But, we also need to see such efforts in the light of our development priorities. During the last two decades development has encroached on environmentally sensitive areas such as water catchments and ground water recharge areas, wetlands, erodable hillsides, mountain areas, lakes, fish and wildlife habitats and areas of high biodiversity and social significance and sometimes leading to the rezoning of the environmentally sensitive areas without proper analysis of the environmental implications of such development. These factors have contributed to considerable stress to many of our environmentally sensitive areas which are critical for the maintenance of productive and diverse plant and wildlife populations that make up our biodiversity.

That is why Government is implementing through the Ministry of Environment a study of the ESAs for Mauritius and Rodrigues at a cost of 25 million rupees. The main objective are to identify, demarcate and categorise ESAs in Mauritius and Rodrigues and develop policy and legislation for the protection, conservation and sound management of ESAs.

With the progress in the industrial and tourism sectors and our objective for the next few years, we need to encourage more linkages between these sectors and the nature conservation initiatives.

Role of the Ministry

Ladies and Gentlemen

My Ministry is concerned about the impact development on our sustainability and the role science, research and innovation can play on development issues both from the economic and social angles.

The choice of appellation of my Ministry that is, Industry, Science and Research, is a deliberate attempt at infusing the results of science and research into industrial developments. In fact, this is an area, which the Ministry is currently focusing upon.

I want to see science, research and innovation impacting on national growth. This also means greater participation of the private sector in the undertaking and financing of research. Currently, apart from the sugar sector, there is virtually no private sector participation. Altogether, government spends about 0.3% of GDP on research. This is an issue that requires consideration as Mauritius is among the lowest in terms of national investment in research. In other countries like Singapore 40 to

60% of investment into research comes from the private sector. The main reason is that in Mauritius, unlike most countries, there is no real incentive for the private sector to invest in research. Research is a risky business. Sometimes you loose, at other times you may win. In most other countries the private sector benefits from special grants or tax rebates, which encourage research and provide some form of safety nets. Encouraging the private sector to delve more into research will be an important aspect of the policy that is being developed.

However, we want to go beyond science and research because although these are necessary they are not sufficient. What we want, in addition to science and technology, is innovation. It is innovation that will get us further on the road of development. The question of course is how does one innovate? What strategies should be adopted?

There are two very important ingredients that lead to innovation. The first is multi-disciplinary research. None of the problems we face today, be it road traffic congestion or coping with the world financial crisis are uni-disciplinary. They require the convergence of many disciplines. The second requirement for innovation is related to the first and that is teamwork and team spirit. Again none of our problems can be solved by one individual or for that matter one institution.

This is why, ladies and gentlemen, a prime concern of my ministry will be the enhancement of collaboration between all research institutions of this country. This will be a challenging task as each institution has its own mandate.

However, we need to instil a national sense of convergence. To that effect, ladies and gentlemen, my ministry is working in collaboration with relevant stakeholders to define, for the first time, a national Science, Technology and Innovation Policy (STIP). I am pleased to report that the MRC is assisting the Ministry in this task. You may be aware that a number consultative meetings and surveys have already been undertaken with a view to gathering inputs from all stakeholders. I am made to understand that the STIP will be ready in about two month's time.

As you are aware, my Ministry is also involved with the promotion of science and this remains a vital link to my previous responsibility as Minister for Education. You may recall that science is now being piloted as a subject to be taken up to Form V. I would also wish to add that during my time as Minister of Education and Human Resources, we strongly supported the issue of science education with emphasis on fieldwork and hands-on experience. I'm glad to see that this project, although mainly aimed at setting up databases for conservation

purposes, did include a pedagogical component. There is no better way of ensuring the sustainable use and conservation of our rich biodiversity than by inspiring our younger generation and those who cater for their emancipation through sharing of knowledge and experience.

Vision

My Ministry has as vision a globally competitive, environmentally sustainable and socially responsible industrial sector, propelled by Science, Technology and Innovation.

We have set the following objectives:

- To enhance the global competitiveness of the industrial sector
- To foster development of integrated, high-tech and innovative industries
- To sustain quality through recognised standards
- To promote science and research for wealth generation, job creation and sustainable development.

The Ministry of Industry, Science and Research has been established as a clear indication of the importance given to these issues of major importance to the advancement of the country and in its endeavour to meet the aspirations of the people of this great little island state. We need more confidence building in what we do everyday and more sharing for efficacy and effectiveness to ensure a better future.

We aim at creating a strong, diversified, high value-added and competitive industrial sector, while encouraging development of new and high value-added industrial activities. This can be achieved by promoting investment in state-of-art production technologies, the development of emerging sub-sectors and fostering an enterprise culture through entrepreneurship development. Research and Development activities related to Science and Technology can only be beneficial to this objective.

We have initiated action with regard to the greening of the textile industry. We need to devote some more time to thinking of opportunities and policies for promoting more sustainable businesses and enhancing the competitive edge of our export-driven economy. There is a need for integrated, harmonious and synergetic efforts to promote the greening of business and the environment as a business opportunity. We need to ensure stakeholder involvement at all levels and right from the beginning of each process.

MRC

In this respect ,Ladies and Gentlemen, MRC, as apex body falling under the aegis of my Ministry, has a key role to play in fostering ,together with other research-based organisations ,corporate sector and the civil society, in infusing a new momentum for integrating STI in our national developmental priorities, with the vision of shaping the Mauritius of tomorrow through research, technology and innovation.

It must focus on promoting and pioneering research for sustainable development to enhance the quality of life of the people of Mauritius. This must be tangible and visible and measurable both quantitatively, in profitability and productivity terms as well as qualitatively ,in terms of improvements in the quality of life of our citizens.

Mauritius is undergoing a fundamental economic and social transition, which should shape the future and prepare the country to operate in a more and more globally competitive environment. This transition demands that traditional sectors be revisited and consolidated while new emerging sectors be explored in order to diversify the economic portfolio and increase our resilience to global shocks.

The Mauritius Research Council has a key role to play towards the transformation of our economic base and social fabric.

We must aim at providing solutions to existing issues while setting the scene for new ways of wealth generation and job creation, through research, technology and innovation.

I understand that MRC has adopted the following priority areas onto which resources will be focused:

- Development of ocean technology and marine resources
- Energy efficiency and renewable energy
- Waste management and waste recycling
- Biomedical and biopharmaceutical research based on indigenous resources
- Science and Technology (S&T) Education

The two last priorities are linked to the present project being disseminated today. The interest to have as much information on the vitality of our indigenous resources will allow the development of policies for their judicious use in a sustainable manner. But, we should not limit our search for biomaterials only from the terrestrial ecological niches, but should also learn of the possibilities lying in our vast ocean territory.

Ladies and gentlemen

The MRC has on its agenda the objective to encourage commercial utilisation of research and development results in the national interest. The Land-based Oceanic Industry (LBOI) Project is a very good example of how applied research and proven technology can allow us to venture into new areas of economic activity. There is an ocean of opportunities awaiting us. We need to further develop our innovation capacity to ensure more industrial successes.

Another good example of inter-institutional, multidisciplinary approach to applied research projects is the seaweed project where some of our major research institutions are working on various aspects for exploring the potential uses of our seaweed resources

Biodiversity/Sustainable Development

I can see this project, and all the various activities for nature conservation and management, as part of the more global issue of enhancing the attractiveness of Mauritius as a business hub. People who come here for business activities need to see and feel that as an Island State we truly care for Nature's gifts to us and they should also be able to enjoy the sight and fragrance of our rich biodiversity and cultural diversity.

We must resuscitate, at least part of the idyllic picture that Mark Twain had painted for Mauritius as being the custodian of the IPR of heave...God created Mauritius first and then copied Heaven thereafter.

Our natural resources are limited and any effort towards optimising their use will benefit us in the long term. I understand that the project allowed a focus on the highest or more urgent priorities and the approach adopted by the Mauritian Wildlife Foundation was to quantify or qualify rarity, extent and rate of decline, threats and ultimate conservation benefits as rigorously as possible to determine priority actions. The major issue is how to use the available information and resources to provide the best assessment of the conservation priorities for sound management practices.

Ladies and Gentlemen

Once again, I would wish to convey my appreciation to the Mauritius Wildlife Foundation for this project and for the support that the MRC provides for such projects that are in line with our policies and international and regional commitments.

With these few words, Ladies and Gentlemen, may I thank you for your attention and declare the Seminar open.

