

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

**HALF-DAY SEMINAR
AGALEGA ILE DURABLE**

*Use of Coconut Oil as a substitute
For diesel for Transportation & Electricity in
Agalega*

**TUESDAY 16 FEBRUARY 2010 AT 09 30 HRS
Four Points by Sheraton, Ebene**

My Colleague Minister, Hon Louis Hervé Aimée
Resident Representative of the UNDP, Mr J Byll-Cataria
Chairman of the MRC, Prof S. Jugessur
Executive Director of the MRC, Dr A Suddhoo
Permanent Secretary of my Ministry, Mr S Ragen
General Manager of OIDC, Mr P. Davay
Directors and Heads of Institutions
Representatives of Ministries
Representatives of Institutions, Private Companies and SME's
Members of the Press
Ladies and Gentlemen

A very good morning to all of you.

I am very pleased to be among you on the occasion of the opening ceremony of the half day seminar on Agalega Ile Durable. The focus of today's workshop will be on a project on the use of coconut oil for production of energy .

Initiative

I understand that that the project was originally initiated under the then OIDC Chairman, now Hon. Hervee Aimée, Minister of Local Government, Rodrigues and Outer Islands . The OIDC drew the attention of the MRC to the fact that, recently in Vanuatu, pure Coconut Oil has been used

successfully as an alternative to petroleum in automotive diesel engines and the preliminary result is both environmentally friendly and good for the local economy.

Being given that Agalega has a vast potential for coconut oil production, it was interesting to explore whether the experiences of the Pacific Islands in relation to coconut biofuels could be replicated in Agalega. Also the rise in world petroleum prices, the devaluation of certain national currencies in recent years which has had cost of imported fossil fuels skyrocket and our commitment to the cause of sustainable ,green development has made the case for exploration of locally produced coconut oil (CNO) as a source of renewable energy stronger.

It is in this context that the Mauritius Research Council carried out a research study to investigate the use of coconut oil as a substitute for diesel for transportation in 2007-2008. The results of this study demonstrated that coconut oil is an excellent alternative to diesel for the running of 4x4 vehicles in Mauritius.

I am pleased to note that two institutions namely, the MRC and the Outer Islands Development Corporation's, have teamed up to work on this eco-friendly project. which makes use of a renewable material, which is available in adequate volume in Agalega.

We have to commend the effort of my colleague to come up with a concrete project and the efforts of the MRC to carry out the necessary associated research. I also welcome the participation of CWA, CEB, MITD in implementing this project which aims (i)at converting one tractor to run on coconut oil(ii) transforming Agalega into an “Ile Durable” as far as energy requirement of the island is concerned.

Sustainable Development

L & G , only yesterday, during my address at the inauguration of the 3rd Edition of the University of Mauritius Research Week, I reiterated that the issue of Green and sustainable development is indeed our single most important challenge. This issue has emerged in the spotlight in the wake of the disastrous impact of climate change on the eco-systems and their present and future development, particularly fo Small Island Developing States like Mauritius.

The Kyoto Protocol of 2005 has had mitigated results as countries may not be able to meet the target of 5.2% reductions of Greenhouse Gas Emission over the period 2008-2012, notwithstanding that the most powerful economy in the world did not sign the protocol. The lack of commitment amplifies the potential for a reversal of economic and social progress that

has been so painstakingly built up over centuries. Even, the recent Copenhagen summit has failed to meet expectations for decisive pledges and concrete action plans that can help reverse a trend towards serious environmental degradation. Strategies at international level have not been promising enough to provide hope that we can rescue our planet from the scourges of hurricanes, heat waves, tsunamis and floods, to name a few calamities that can strike anytime and anywhere.

Our Government has placed environmental protection high on the agenda. This Government has anchored environmental sustainability as a critical policy focus. As announced in 2008/2009 budget, Mauritius has ambition to build an Attractive, Modern, Inclusive, Green, Open economy. In Budget 2010, Government has increased public sector investment to Rs 24bn, prioritizing the concept of Maurice Ile Durable, as a strategy to promote consumption of cleaner energy and development of green infrastructure. Our Energy Strategy (2009-2025) constitutes a blueprint for the development of the energy sector, laying emphasis on the security of supply through the development of renewable energy and the reduction of our dependence on imported fossil fuel. It also focuses on energy efficiency measures.

The strong emphasis on public sector investment reflects Government vision for a modern and dynamic economy, respectful of our environment. Our aim for an eco-friendly and environment enhancing infrastructure must be pursued at all levels .

Indeed the challenge of Global warming is global, but we must engage in local initiatives. We need to identify our own solutions for the dangers that are lurking on the horizon. We have to reckon that our economy is most vulnerable to the impact of climate change that is leading to a rise in the level of the sea and its surface temperature and has potential for the erosion of our beaches as well as the bleaching of our corals. We should not forget to include the impact of climate change on small planters, subsistence agriculture, the fisher community ,our marine resources, the health and well-being of our population of the island of Mauritius and other Islands of the Republic of Mauritius like Agalega. We need to research all avenues to safeguard our environment.

Agalega

I'm sure that my colleague Minister will agree that the promotion of sustainable development in Agaléga is an integral part of our overall strategy for sustainable development of the Republic of Mauritius.

Although the atoll is situated at around 1000 km North of Mauritius, Agalega with its population of 300 persons is forms an integral part of our Republic and we are equally concerned with its development. I believe that with this experimental project we are aiming at the right things for Agaléga in the context of the MID project and in line with our objective to promote sustainable development.

L & G ,Coconuts have emerged as a vital material with many applications. The demand for coconut is everywhere, whether for healthy food, cosmetics, pharmaceutical, handicraft, industrial, or other emerging products and by-products. It is amazing to learn that nearly one third of the world's population depends on coconut to some degree for their food and their economy. The expansion in coconut industry being undertaken by other coconut producing countries such as India, Indonesia, Phillipines, Islands of the South Pacific and Vietnam, among others, is proof that the coconut industry will remain a viable and strategic industry. No doubt communities who depend upon coconut for their livelihood consider it s the Tree of Life.

Coconut oil also has applications as a liquid fuel for diesel engines. It was used in the Philippines during the Second World War when diesel was in short supply. In fact, since then, much has been written about fossil fuel dependency of the island nations. Liquid fuel is used extensively in land

transport, inter-island shipping, diesel generators of electricity, refrigeration and in cooking stoves.

The value of fuel imports often exceeds the total value of export earnings. Fuel imports are already expensive on arrival. To these costs, import duties must be added, as well as costs relating to the distribution of fuel beyond the capital cities and the cost of repackaging it into 200L drums. In addition, there are shipment costs to outer islands plus the sales margin at each step of the market chain. The result is an impressive increase in fuel prices in rural areas.

What's more, the rise in world petroleum prices as well as the need to reduce carbon emission has made the case to actively explore renewable sources of energy much stronger..

The practicality of using coconut oil (CNO) as a direct bio-fuel substitute for diesel or as a blended substitute for kerosene has also been widely documented. CNO is a natural bio-fuel that requires no chemical alterations to be made to the oil especially in warm climates. In addition, no modifications need to be made to the diesel engines themselves, only conversions, as will be shown in today's presentation. The further bonus is that the fuel is non-polluting, with zero-net Greenhouse gas emissions.

Hence its use for the running of diesel engines for transportation and electricity generation makes even more sense in remote island areas.

The potential is there and I would encourage the MRC, along with the concerned institutions, to aim at ensuring R&D activities for this important crop to be given its due importance in our economy. This will lead to more industrial ventures, small and medium, and increased income for many of our compatriots, while assuring them of better living standards.

I will seek support from my Colleagues for Government interventions aiming at turning coconut farming and related activities into successful commercial ventures, and why not even a viable Coconut Industry.

I understand that the next step of this project is to investigate the feasibility of using coconut oil in diesel generators to produce electricity and implement, on a pilot basis, the modification and running of a vehicle and a generator on coconut oil in Agalega within the prime objective of transforming Agalega into an “Ile Durable” with regards to its energy requirement.

I hope that these projects will contribute towards Agalega reducing its energy dependence on imported fossil fuel in a significant manner, the threat to quality of underground water by decreasing diesel imports which would entail fewer drums on the island, and the risk of oil spill during transportation of diesel from Mauritius to Agalega.

Helping in offsetting about 33 tons of carbon dioxide (CO₂) emissions by replacing diesel fuel with coconut oil in Agalega is an initiative which should be recognised. I understand that capacity building through training of MITD officers and local inhabitants from Agalega is also part of the project.

I appreciate the intention to replicate the success of this project to other islands of the Republic of Mauritius and eventually in other small islands of the Indian Ocean and African region in the context of regional and sub-regional cooperation.

The other proposals on producing virgin coconut oil and other coconut waste spin-off products being formulated by the MRC should provide the basis for future Research & Development in this sector and bring more benefits to Agalega and other islands of the Republic and consolidate our international image as a Green and Sustainable island state.

You are aware of the 2010 Environment Performance Index which ranks 163 countries on 25 performance indicators covering both environmental public health and ecosystem vitality. This index has the vital function to gauge the closeness of a country to established environmental policy goals. It facilitates cross country comparisons on how best they are performing on environmental policy issues such as management of air pollution, water, biodiversity and Habitat, forestry, agriculture, fisheries and climate change. It is a great honour for all of us that Mauritius was ranked first among Sub-Saharan countries in the 2010 Environmental Performance Index with a high index of 80.6 followed by Djibouti which scored 60.5. Among the 163 countries, involving most developed and NIC's, Mauritius was ranked 6th and 1st in Africa.

I am confident that with the present initiative our score at global level will improve further.

I hope that this seminar will also provide an opportunity for administrators, farmers, processors, manufacturers and other stakeholders in agri-business and non-agro sectors to interact, exchange views, learn more about new technologies, and gather information to improve on the output of their activities.

Let me end on this optimistic note and wish the project well. I thank you for your attention and and I now have the pleasure to declare the Seminar open.

Tuesday, February 16, 2010