

# Empowering change through innovation



<http://www.mosti.gov.my>

**Datin Madinah Mohamad, Ministry of Science, Technology and Innovation, Malaysia**

The Government seeks to transform Malaysia with the help of science and technology in the hope to achieve high-income status by 2020. The old economic approach that has sustained Malaysia through the end of the 20th century and into the new millennium can no longer do so.

The introduction of the New Economic Model (NEM) is timely as it proposed a shift to a more comparative advantage away from the model of cost efficiency alone. The NEM brings with it hope in Malaysia's quest to become a united and advanced nation with high-income status, which is both inclusive and sustainable. Towards this end, Malaysia is giving greater emphasis on innovation. It has been proved that the countries that successfully exploited the high value of innovation have now the top 10 most competitive economies in the world.

How do we measure up? Recently, the International Institute for Management Development's World Competitiveness Yearbook 2010 ranked Malaysia at the 10th place compared with 18th in 2010, while Malaysia was ranked 24th and 28th place in the 2009 Global Competitiveness Report and Global Innovation Index, respectively. This mirrors an urgent need to advance our agenda for change if we are to achieve our high-income aspiration by 2020.

Innovation must become the driving force. The Prime Minister's 2010 Budget Speech highlighted the need to transform Malaysia through a comprehensive innovation process that covers all areas. Science and technology, particularly through research and development, offer us the greatest opportunity to turn ideas and creativity into highly competitive business. Although success in R&D investment is not guaranteed, the Government, through Ministry of Science, Technology and Innovation (MOSTI), has made some serious investments in R&D and the knowledge-based industries. These include the provision of funds, innovation support for start-ups and standards accreditation; facilitation of R&D products for commercialisation, transfer of new technology and prototype development; guidance for intellectual property applications; and human capital development. In addition, MOSTI also backs individual inventors and innovators by providing easy access to Government support services.

MOSTI's programmes and projects have not only benefited the researchers, scientists and industrialists but have also touched the hearts of people at the grassroots level. For example, the TAPMOSTI@COMMUNITY is a ministry programme which aims to generate income and lift the

quality of life for the poor in rural areas. Empowering people through innovation requires direct policy intervention and full commitment in its implementation.

The National Innovation Policy which is currently being drafted by MOSTI in collaboration with other stakeholders is hoped to lead the way and become a blueprint in driving total innovation both in the technological and non-technological sectors.

With the formulation of the National Innovation Policy coupled with the Strategic Plan for Science, Technology and Innovation, we hope to improve our capabilities for innovation through nurturing, attracting and retaining talent; enabling and improving local technological capabilities and harnessing access to finance for innovation. In this regard, MOSTI will continue to create awareness on the importance of making innovation a part of mainstream development.

The proposal to set up a national innovation centre will strengthen an eco-system conducive for entrepreneurship in innovative and technologically advanced areas. This in turn will accelerate commercial exploitation of R&D outputs.

The declaration of 2010 as the Year of Innovation and Creativity (MI2010) with the theme Celebrating Creativity by the Prime Minister, will go a long way to promote innovation as a way of life for all Malaysians. MOSTI as the lead agency in spearheading MI2010, in collaboration with several ministries and agencies, institutes of higher learning as well as non-governmental organisations, has planned various programmes nationwide to realise the objectives of this campaign.

We believe that interaction and greater collaboration among government, industry and knowledge-generating institutions are the central elements for innovation to flourish. With it, science, technology and innovation will be at the core of development efforts to achieve positive outcomes in National Key Result Areas, particularly in improving the lives of the poor.

Innovation is the heartbeat of development. It is the key driver that determines economic growth and economic change. In today's globalised world, it is inconceivable that gains can be made without innovation. It is more imperative now to imbue society with an innovative culture, for if we fail to innovate, it is feared that we will perish.

Source: <http://thestar.com.my>



# SELCO innovations

## Case studies

<http://www.selco-india.com>

### SELCO Solar Light (P) Ltd., India

The Innovation Department was conceptualized as an offshoot of SELCO India. It is the experimental arm of the company formulating innovative ideas in technology, finance and operational management and working with external networks of partners (NGOs/Technical/Financial/Academic Institutions). Integrating the skills of these various players brings SELCO India closer to new customer segments, identification of energy related problems, creating innovative solutions (technology or finance) offering innovative solutions to an untapped and often neglected market.

The core of SELCO and its Innovation Department is to provide customized solutions based on end user needs. By establishing partnerships and innovating we recognize the need to inter-connect products and services and of adding value through a network to subscribe to a customized end user needs based model.

The following case studies describe various innovation activities of SELCO.

#### Lighting for silk farmers

**Who:** Silk farmers

**Why:** Dependent on kerosene lamps to feed silkworms

**What:**

**Finance:** Unable to pay the upfront cost of the system, SELCO along with its partner S3IDF worked with a local cooperative bank to provide collateral security for the farmer to avail loan.

**Technical:** Providing a single home light system with two light points to enable portability of light for the farmer in different rooms.

**Impact:**

- Saving on purchase of kerosene
- Lower mortality rate of silk worms

#### DC powered appliances

**Who:** Households or small businesses

**Why:** An alternative to the traditional grinder which is tedious to use for daily cooking

**What:** Solar powered DC grinder

**Impact:** Ease of grinding, shorter cooking preparation time: for small businesses one is able to cook more food in less time.

#### Innovative financing

From April 2006 to March 2009, SELCO has been working on five different innovative financial models through the implementation of about 9 projects across Karnataka and Gujarat states of India. Some of the projects include:

- Solar powered sewing machines, Surendranagar, Gujarat
- Solar lights for cashew nut labourers, Puttur, Karnataka
- Solar lights for silk worm farmers, Bellary, Karnataka
- Solar LED lanterns for coal mine workers, Kutch, Gujarat
- Solar lights for street vendors, Dharwad, Karnataka

Through The Renewable Energy and Energy Efficiency Partnership (REEEP), SELCO was able to experiment with implementing different financial models to encourage the dissemination of solar technology. The financial models include:

- Interest subsidy
- Margin money financing
- Working capital costs
- Transaction costs

#### Other projects

The Innovations Department has also been focusing on some of following innovations to be completed shortly.

#### Technology

- Solar powered signal lights
- Integrated energy food carts
- Biomass based dryers
- Improved cook stoves

#### Financing

- Developing financial schemes for migrant labourers
- Creating affordable technologies for very poor segments

#### Process

- Creating supply chains for people living in remote areas