

## EDITORIAL

# Deriving benefits from Science & Technology

Economic growth of a country, social well-being of her people and sustainability of a healthy environment are common goals of national policies. The increasing challenging and competitive global environment makes it essential for countries to invest in science and technology to drive and raise their national capacity to acquire and utilize technology and foster innovation.

There are several key issues and problems that must be addressed for Sri Lanka to derive benefits from science and technology (S & T). Foremost among these is the necessity of strong political will to promote and utilize science and technology. The lack of a national science culture needs to be addressed. Equal and adequate opportunities must be provided for all persons to acquire a basic education in science and its practical applications. This will lead to an appreciation of the value of S&T as well as research as an essential aspect of modern society.

It is necessary to build up, sustain and progressively increase the resource base of scientists and technologists. This can be achieved by taking measures to improve their working and living conditions and providing incentives for contribution to national development through S&T innovations.

Science and technology must be recognised as playing a key role in economic development. It is a dimension that cuts across all sectors of development. It is therefore of great importance to have scientists and technologists involved in the planning, reviewing and monitoring of policies, strategies and action plans for national development at the highest levels.

The development of self reliance in scientific and technological capability of Sri Lanka is another very important issue. Towards this end, it is necessary to progressively increase investment in science and technology at least up to 1.5% of the GDP along with the initiation and strengthening of Research & Development (R & D) in high priority areas. The autonomy and flexibility of S & T institutions must be ensured.

Establishing partnerships among R & D institutions, higher educational institutions and industry both in the public and private sector will lead to high quality and more relevant innovations. These partnerships should extend beyond our shores to strengthen co-operation in S&T between Sri Lanka and other countries. The results of such partnerships would lead to building capacity in new and emerging technologies, developing joint ventures, and exchange programmes for scientists and technologists.

While developing self reliance in S&T capability, it is also necessary to acquire and adapt scientific knowledge and strategic foreign technologies for value creation and modernization of all sectors to enhance competitiveness. Commercialisation of R&D findings is of immense importance to the economy of a country. Hence, there is a dire need for extensive downstream development of R&D initiatives to expedite this process. This includes establishment of incubators for creation of enterprises based on new technologies.

As a pre-requisite for commercialisation of research findings, the improvement of standards and quality of products is essential. Science & technology plays a major role in this process which includes testing, measurement and quality assurance carried out for conformity with international procedures and standards. The establishment of infrastructure and capability necessary to achieve these objectives is essential.

The need to develop and increase human resources with knowledge and skills in science and technology must be recognised as a fundamental requirement to S & T based development. As in many developing countries, the link between S & T and economic development is still very weak in Sri Lanka. The public research institutions, the major R & D performers in S & T, in most cases are not perceived as significant contributors to economic benefit to the nation. They are not linked strongly enough to industries who are the major end users of their research findings. This situation must change rapidly with the scientists and technologists taking on the lead role to maximise the S & T input to the economy of the country.

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