

EDITORIAL

Research and development needs as identified in S&T policy and planning documents in Sri Lanka

The history of Science and Technology Policy development in Sri Lanka has been a long one. It was in the early nineteen fifties that the Ceylon Association for the Advancement of Science (predecessor to the Sri Lanka Association for the Advancement of Science) gave the impetus for this activity. In 1994, much to the satisfaction of the scientists and technologists this subject was assigned to a separate ministry.

Thereafter, the National Science Council functioning under the Ministry of Industries and Scientific Affairs initiated the development of a science and technology statement in 1978.

The 15th of May 1991 was an important day in the history of science and development in Sri Lanka when in pursuance of provisions in the Article 33(f) of the then Constitution of Democratic Socialist Republic of Sri Lanka, a Task Force was appointed by His Excellency Ranasinghe Premadasa, President to launch a coordinated and sustained effort to promote science and technology in Sri Lanka, and to devise appropriate plans, implementation strategies and programmes for the purpose.

This Task Force was directed to examine the needs for science and technology in Sri Lanka in the light of the economic policies of the government including its strategies for industrialisation, for poverty alleviation and for market-driven and trade-led growth.

The Task Force was also required to make recommendations on the following:

- (a) A science and technology policy for the 1990s;
- (b) Appropriate strategies for giving effect to such policy, and
- (c) Legislative, institutional and other reforms that need to be effected to support the recommended implementation strategies.

The Task Force was also directed to take into account six policy goals, which had been already identified by the Ministry of Industries, Science and Technology. These included:

- (a) Development of scientific knowledge in Sri Lanka to international standards;
- (b) Application of technology to stimulate economic growth and to improve quality of life;
- (c) Develop technologies in priority areas;
- (d) Develop vernacular knowledge fields and systems;
- (e) Strengthen scientific and technical cooperation with other countries and
- (f) Popularise science and technology amongst the people.

The Task Force, in its report has recommended a ten-point Science and Technology (S&T) Policy for the 1990s which included the following: (1) to use S&T as an integral part of the effort to achieve rapid economic development, improved quality of life, and poverty alleviation and to involve scientists and technologists in the formation of policies and in decision making at the highest levels; (2) to foster scientific and technological activity in all its aspects and widest possible scope to maintain a vigorous drive towards developing self-reliance in scientific and technological capability and to allocate a reasonable proportion of the Gross National Product (GNP) for S&T activities; (3) to support the development of indigenous technology wherever feasible while vigorously promoting the import, adaptation and assimilation of technology for rapid industrial growth; (4) to ensure that our institutions of higher education and research and technical education produce scientists, technologists, and technicians of the highest calibre and competence and thereby build up adequate numbers of them in Sri Lanka providing incentives for attracting and retaining such persons; (5) to provide equal and adequate opportunities for all to acquire a basic education in S&T and its practical applications; (6) to cultivate among the

people of Sri Lanka, an appreciation of value of science, scientific method and technology as an essential aspect of modern science; (7) to disseminate the benefits of S&T activity as widely as possible within the country, to all sections of the people; (8) to encourage and strengthen cooperation in S&T both within Sri Lanka as well as with other countries and to provide access to global scientific and technological knowledge and activity; (9) to develop the capability to continuously plan, evaluate and review strategies, legislation and institutional framework for S&T and to support this with an information technology capability; (10) to identify priority areas of S&T likely to be of benefit to Sri Lanka and to specifically focus and promote research and development in such areas.

Eighteen years later in 2009, the National Science and Technology Commission (NASTEC) developed a new National Science and Technology Policy (NSTP) based on 10 policy objectives in the following specific areas:

- (1) Science, Technology and Innovative culture;
- (2) Capability in S&T for national development;
- (3) Human resource base;
- (4) Research and Development;
- (5) Technology Transfer
- (6) Natural Resources and the Environment;
- (7) Indigenous Knowledge
- (8) Innovations and Intellectual Property Rights
- (9) Quality and Performance of Science and Technology Institutions;
- (10) Science and Technology and Human Security

The NSTP was accepted by the Cabinet of Ministers in 2009. Under each policy objective, several strategies have been identified along with the challenges and proposed initiatives.

The NASTEC has subsequently developed a five-year integrated institutional action plan to achieve the implementation of NSTP.

This is an umbrella policy on S&T. Several policies on specific areas have also been developed and needs to be developed in the future identifying research requirements of these specific areas.

The next document which was developed with inputs from a large number of scientists and technologists was the Five-Year (2011-2015) Science, Technology and Innovation Strategy for Sri Lanka, based on the NSTP.

On 3rd May 2016, the Cabinet of Ministers also approved a new document titled ‘National Research and Development Investment Framework (NRDF)’. This document aligns S&T activities in the country towards its national development agenda with respect to ten focus areas. These were as follows: water, food, agriculture and nutrition; health; shelter; environment; energy; minerals resources; textile and apparel, ICT and knowledge services; basic sciences; emerging technologies and indigenous knowledge. Under each of these focus areas, the NRDF has also identified issues/problems, R&D needs and interventions.

Over a period of nearly three decades, much hard work has gone into the development of these valuable documents with contributions coming mainly from the scientists and technologists of the country. Adequate details about these documents have been included here for the scientists to have an overall view about the history of science and technology planning and policy development. They have all dealt with research and development identifying very specific research needs in the country. However, during the last one and half decades, it has been observed that these identified research needs have not been addressed adequately by our researchers. The country will be extremely grateful to our researchers if they pay more attention to the recommendations of these documents and consider focusing their research on areas which have been already identified. The country needs the research expertise of young scientists, in particular.

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