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EDITORIAL

SCIENCE AND TECHNOLOGY POLICY TRENDS IN THE ASIA-PACIFIC REGION

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INTRODUCTION

Several important trends have recently emerged that have influenced the impact of science and technology on the industrial growth of countries in the Asia-Pacific region. Countries of the region, especially in the Western Pacific rim, have some of the fastest growing economies in the world. Much of the growth has been led by knowledge-based (i.e. technology) rather than asset-based investments. The formation of regional trading blocks (e.g. the European Economic Community, North American Free Trade Association, Association of South East Asian Nations) is an additional relevant factor. The countries of the Asia-Pacific region are very heterogeneous with respect to their stage of development and include large countries with very advanced economies (e.g. Japan and Australia who are also members of the Organisation for Economic Cooporation and Development) and very small least-developed countries (e.g. Maldives). However, an emerging feature is that all countries have recognized the importance of science and technology in the development process and are taking steps to introduce specific policies to enhance their scientific and technological capabilities.

PRIORITIES FOR SCIENCE AND TECHNOLOGY

Given the limited economic resources available in many countries, it is recognized that *strategic planning* in science and technology is necessary for the optimal utilization of scarce resources. With this in mind, many countries have therefore established *planning committees* that function with access to the highest levels of government. Such committees are responsible for developing science and technology policies and suitable strategies for implementing the policies. They are in many cases supported by efficient *science and technology management information* systems that provide information essential for policy development and information on the impact of government policies on science and technology activities in the country.

The importance of developing *human resources* necessary for enhancing science and technology capabilities is widely recognized and many countries have (1) set up new training facilities, (2) set up link programs with advanced countries for specialised training, and (3) accepted that exchange of scientists and scientific information on a regular basis between countries of the region will be beneficial. In

this context the importance of the *quality* as well as the *quantity* of the human resources is recognized.

While the public or government sector necessarily performs much of the science and technology research and development in the less-developed countries, it is recognized that it is important to generate collaboration between private industry and publicly-funded research institutions. In planning and prioritizing research, such interactions often need to be present at the initial stages. It is recognized that technology producers (i.e. scientists and engineers) have, at the present time, different outlooks and expectations from technology users (i.e. industry). A conscious effort is made in many countries, particularly the Phillipines and Thailand among the developing countries, to bridge this *cultural* gap, by promoting linkages where possible. At the user-end of the process, the importance of adequate support i.e. marketing, finance, etc. is recognized and specific institutions have been created for this purpose.

The need for objectively *prioritizing* while funding research and development activities, dictated by a scarcity of resources, is also recognized in many countries, e.g. Bhutan places its emphasis on the fragile ecology of the mountain Kingdom, Bangladesh on gastro-intestinal diseases and on predicting and preventing damage from flooding, Phillipines on biotechnology, etc..

The importance of *sustainable development* with protection of the *environment* is recognized by all countries and is incorporated into their science and technology planning process. In India, special funding is available for developing environment-friendly technologies.

CONCLUSION

It is apparent that all the countries of the Asia-Pacific region have recognized the importance of science and technology development in their countries for improving the quality of life of the people and realized that the application of modern science and technology in agriculture and industries is necessary to remain viable in an increasingly competitive global economic climate.

Changes in the science and technology sector are also under consideration in Sri Lanka and invited reviews by three regional experts on relevant aspects are published in this issue of the Journal.