

The role of Science and Technology in nation building

It is a well established fact that science and technology impacts all aspects of our lives as well as the planet we live on. The science and technology induced changes have for the most part benefited mankind although there is many a case where science and technology based innovations have been used for the detriment of mankind, pursued for either wealth and power or both. It is the responsibility of all concerned to ensure that science and technology is used wisely to benefit mankind.

The reality today is that most benefits accrued from science and technologies have not reached the majority of people, particularly the poor in the developing countries.

Science and Technology has been one of the main driving forces of the economic growth of nations. Most developed countries have generated new technologies with potential to result in dynamic economic performance. This however has not been the case with most of the developing countries and their developmental plans have not given adequate emphasis and importance to science and technology and in particular to research in the science and technology aspects. Countries like India, South Korea and Taiwan in the region have achieved much through science and technology and stand out as having demonstrated the absolute importance of science and technology for economic growth. These countries are examples for the developing countries. The impact of technology on society without doubt is going to be even more marked in the future.

It is then of paramount importance to generate and develop new knowledge in science and technology for application nationally through our own research capability. It is also necessary to concentrate on the rapid transfer and exchange of proven technologies from other nations to reap the benefits of the global trends to stimulate our economic growth.

That science and technology plays a decisive role in the economic growth of nations in a foregone conclusion. It is then pertinent to also consider and rethink about the role of scientists and technologists in stimulating the economic well being of the country. It is well accepted that scientists and technologists must necessarily generate new knowledge by engaging in meaningful and appropriate research and developmental activities. A question needs to be posed to the researchers as to whether their role should be limited to only the narrow confines of creation of new knowledge. If scientists and technologists are to contribute significantly to social and economic changes resulting in the development of the country, their role should expand beyond generation of new knowledge and assume the role of advising the decision makers and finally making the decisions on the science and technology prospects, choices and priorities for the country.

How can scientists and technologists contribute to achieving this multiple role which is a dire necessity for the economic development of the country?

As creators of new knowledge, the researchers must focus their work on nationally and globally important and competitive areas of research which are multidisciplinary in nature. This means that the research must be goal and result oriented. The results of course must be tangible and significant. The advice of scientists and technologists whose findings are of national and global significance will no doubt be much sought after by the authorities. In view of this it is important that the scientists and technologists on their part make a total commitment to add and develop significantly to the knowledge base in science and technology aspects which are of economic importance to the nation.

The Journal of the National Science Foundation is a window to the current efforts of our scientists and technologists towards this goal and I congratulate their noteworthy contributions.

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