SCIENCE AND TECHNOLOGY NEEDS FOR SOCIO ECONOMIC GROWTH OF A SMALL THIRD WORLD COUNTRY.

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It has been clearly identified that in the global economic competition where the potential of agricultural raw materials as foreign exchange earners is low and dwindling, the only route to socio economic growth is through export oriented industry (Karunatillake-1988, Sirisena-1988, Dharmawardena-October 1990).

The main factors essential for success in competitive international markets, can be achieved only by using most up to date technology (Dharmawardena - October 1988, December 1988).

In the past, Technology arose through economic need (Rosenberg and Birdzell - 1990). Technology was developed through trial and error (Nawaz Sharif - 1986). Science development in the past was purely an effort to understand nature and had no relevance to economics.. This isolated scientists from the public (Rosenberg and Birdzell-1990). Early technology developed independent of science and scientific explanation of a technology often followed its utilization (Nawaz Sharif-1986).

Later science overtook and linked up with technology, and waysand means were devised to speedily convert most scientific discoveries into industrial processes, creating the familiar route to industrial technology (Rosenberg and Birdzell-1990, Nawaz Sharif-1986).

This science based route to technology is very successfully developed in countries that took part in the industrial revolutions and a few countries such as Japan which started very recently, but picked up fast (Dharmawardena - March 1991).

The west took nearly two centuries to achieve success along the above route with no competition. Third World countries which tried to telescope and emulate the west along the same route have failed. (Ramtanu-1986). They could not achieve economic prosperity through indigenous science to industry path (Dharmawardena - November 1990, March - 1986).

Today the advanced countries have well developed infrastructures to follow this highly knowledge intensive path and poor countries cannot compete at the rate technology develops there and trickles down to the Third World countries (Sagasti - 1978). Basic science plays three roles in today's world as the creator of new knowledge, the creator of tommorrow's technology and the supporter of today's technology. In the Third World it is essential for its third role and the practice of other roles subsidises the development of tomorrow's technology in advanced countries (Dharmawardena-1991).

It has become clear that economic development needs the aquisition of technology and adapting them for export oriented industries. Efforts to develop indigenous technology should be maintained as this is likely to be useful after a country gains strength in economic and technology.

In addition a Science and Technology Policy should encompass incentives for accumulatling adequate numbers of high calibre personal through high quality education training, retaining the best of talent and getting them to contribute their optima to the nation.