

A Lifetime of Moulding Technology and Science Policy in India

A Festschrift
in Honour of
PROFESSOR
ASHOK PARTHASARATHI



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Remarks in Honour of Ashok Parthasarathi

I had the privilege of meeting Ashok Parthasarathi in the early 1970s, when I became the field coordinator of the Science and Technology Policy Instruments (STPI) project that gathered ten developing countries to study the design and implementation of policies to promote science and technology for development (see the tribute by Geoffrey Oldham in this Volume). At that time, Ashok, though in his early 30s, was the science and technology Adviser to Prime Minister Indira Gandhi, and his good offices secured the participation of India in the STPI project. I remained in frequent contact with Ashok during the 1970s and early 1980s, and had the opportunity of benefitting from his wisdom and experience, particularly during the negotiations of the United Nations Conference on Science and Technology for Development held in Vienna in 1979.

One of the most memorable occasions I had to work with Ashok arose out of his involvement with the Pugwash Conferences on Science and World Affairs, which were founded by Bertrand Russell and Albert Einstein. Ashok was a member of the Pugwash International Council and one of the organisers of a symposium on self-reliance and development, held in Dar-es-Salaam, Tanzania, in June 1975.

The 1970s were a period of major changes at the international level, prompted by the decolonisation processes: the rise of the Japanese economy; the beginning of economic reforms in China; the sudden increase in oil prices in 1973 and again in 1979; and the creation of the Organisation of Petroleum Exporting Countries (OPEC), among other forces. These led to a questioning of prevailing ideas of development, a realignment of international power relations, and to the launch of the North-South Dialogue in Paris, which was

supposed to debate and agree on proposals for a New International Economic Order (NIEO).

At that time, there were several attempts to articulate alternative conceptions of development. Ideas such as "redistribution with growth" (Chennery), "circular cumulative causation" (Myrdal), "basic needs" (Singer, Streeten, Jolly), "unequal exchange" (Samir Amin), "small is beautiful" (Schumacher), and "eco development" (Sachs, Strong), among many others, aimed at providing guidance for designing and implementing development strategies. In this context, 'self-reliance' emerged as a powerful concept that explicitly sought to avoid the pitfalls of imitative development. While some viewed self-reliance as a variant of autarchy, more sensible and moderate interpretations emerged to take centre stage in development debates. Ashok was a key figure in formulating the interpretation of self-reliance that prevailed in the end, and which still maintains its relevance.

Ashok co-edited the volume *Pugwash on Self-Reliance* (Chagula et al., 1977) gathering the papers presented at the Dar-es-Salaam symposium. His summary report, *The Role of Self-Reliance in Alternative Strategies for Development*, (Parathasarathi, 1977) stated clearly: "A development strategy imitative of highly industrialised countries appears to be neither possible, necessary or indeed desirable for the majority of developing countries." Resource constraints, consumerism, environmental degradation and alienation were among the main reasons for rejecting such a path, explicitly advocated by development economists like W.W. Rostow in his book, *The Stages of Economic Growth*.

All of us who participated in the Pugwash Dar-es-Salaam symposium agreed on the definition provided by Ashok Parthasarathi (1977: 14): "Self-reliance is to be understood at the national level of each developing country as the will to build up and use a capacity for autonomous decision-making and implementation, on all aspects of the development process including science and technology." Autonomous decision-making in matters of science and technology was also a key issue identified by several Latin American colleagues of Ashok, including Jorge Sabato and Amilcar Herrera, whom he

knew well. I had the opportunity to interact and learn from all of them, particularly within the framework of the STPI project, and my exchanges with Ashok were most helpful to shape my own ideas on how to mobilise science, technology and innovation for development.

In a prescient way, Ashok's Dar-es-Salaam report highlighted the crucial role of indigenous capacities to generate and utilise scientific and technological knowledge, develop domestic technological know-how, identify and import foreign technologies on the best possible terms after effective negotiation with the technology supplier and blend indigenous with imported technologies in the most appropriate ways, taking into account local contexts. These ideas have become even more important as the challenges of the knowledge society have become a pressing reality for all countries in the first decades of the 21st century.

Throughout his long and prolific career, Ashok Parthasarathi has shown an unusual ability to combine outstanding intellectual qualities and leadership, with active policy-making and public service. He has been an inspiration for many of us who have tried to emulate his achievements. It is a great honour to be one of his numerous friends and admirers, and to join a celebration of his life and accomplishments.

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