Need for a socially consistent science and technology policy

Narendar Pani[1] has tried to evaluate the development of science and technology (S&T) in India under the aegis of the Scientific Policy Resolution (SPR) of 1958. The preamble of the Resolution dwells on the values and significance of scientific progress. Its aims were 'to promote, foster, cultivate and sustain science and scientific research' in all its aspects and 'to secure for the people of the country all the benefits that can accrue from the acquisition and application of scientific knowledge'. The drafting of this resolution is attributed mainly to Homi Jehangir Bhaba and Jawaharlal Nehru[2]. Pani[1] has identified the pitfalls of SPR as follows: 'The drive to making the Indian economy globally competitive, particularly after 1991, has however been driven primarily by a search for capital. The reform process has focused on enabling foreign capital to enter previously debarred areas, the mechanisms for the entry of portfolio investment have been transformed to make them more globally attractive, capital markets have been streamlined to enable large Indian companies to raise capital more efficiently, and efforts have been made to generate and use state resources to provide capital for large infrastructure projects. In this entire process the technological challenge has been largely under-emphasized.'

The three objectives of SPR were defined[3]: (i) to ensure 'an adequate supply, within the country, of research scientists of the highest quality'; (ii) to encourage 'with all possible speed, the training of scientific and technical personnel', and (iii) 'to secure for the people of the country all the benefits that can accrue from the acquisition and application of scientific knowledge'. The basic needs of the masses like education, health, housing, transport and communication have hardly been touched. While S&T is marching ahead in sophisticated areas, poverty of the masses, problems of illiteracy and unemployment are dragging the country backward. Considering this scenario, one of India's top scientists remarked[4]: 'The best in the country is often about as good as anywhere else in the world, but the worst is poor; tall peaks tower over a low average'.

Pani[1] proposes an alternative model of SPR for Indian economy looking outside the mainstream neo-classical paradigm by referring to the Joseph Schumpeterian model[5]. He suggests three departures from the previous SPR to make it more effective. I agree with his conclusion: 'While the specifics of a new Science and Technology Policy are open to debate, as it indeed should be, it is quite evident that the underlying logic of earlier S&T policies is becoming increasingly inconsistent with the demands of the emerging Indian economy and society.'

1. Pani, N., *Curr. Sci*., 2016, **110**(9), 1624–1629.
2. Vasantha, A., The scientific policy resolution: a landmark in Indian science; http://pib.nic.in/feature/feyr2000/fjan2000/f110120002.html
3. Government of India's Scientific Policy Resolution, New Delhi 1958, 1964, p. 2.
4. Narasimha, R., *Technol. Soc*., 2008, **30**, 330–338.
5. Schumpeter, J. A., *Capitalism, Socialism and Democracy*, Harper, New York, 1943.

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Sikkim claims India's first mixed-criteria UNESCO World Heritage Site

During its 40th session, the World Heritage Committee of the United Nations Educational, Scientific and Cultural Organization (UNESCO) sanctioned the Khangchendzonga National Park (KNP) as India's 35th World Heritage Site. This inscription comes after a decade of planning that began in March 2006, and protects nearly 178,500 ha of Himalayan habitat in Sikkim. KNP joins India's rapidly expanding network of 27 cultural and 7 natural heritage sites; however, it is the first and only Indian site to meet the mixed – both cultural and natural – heritage criteria.

KNP was inscribed as Sikkim's first State Park in August 1977, two years after the former Buddhist kingdom's integration into the Indian Union. Two decades later, the Government of Sikkim under Chief Minister Pawan Chamling expanded upon these provisions, and extended the park borders to protect high-altitude ecosystems adjoining the Kanchenjunga Conservation Area (Nepal) and the Qomolangma National Nature Preserve (Tibetan Autonomous Region of China). In 2000, KNP joined the United Nations Biosphere Programme, and currently protects over 35% of Sikkim's total area through adaptive management programmes[1].

But, this latest milestone did not come easily. At first, non-government organizations presented an unpersuasive proposal for KNP's inscription. Drafting partners at The Nature Conservation Foundation and Ashoka Trust for Research in Ecology and the Environment solely emphasized the natural features of the Park under World Heritage Criteria VII (reference no. 2106; 15 March 2006). Criteria VII provisions 'sites that contain superlative natural phenomena or areas of exceptional natural beauty and aesthetic