

Stepping Beyond the Bounds of Protectionism

India is emerging as an important player in today's global economy, particularly in the field of Information Technology (IT). Her base of highly skilled IT professionals attracts to her shores a substantial portion of the service sector from all over the world; today the service sector constitutes no less than half of India's GDP. The other half of the subcontinent's wealth is generated by the manufacturing sector (30% of GDP) and agriculture and rural industry, which contribute 20% to GDP; this whilst two-thirds of the population resides in rural areas. Simple statistical analysis of these figures reveals that 80% of the country's wealth is created by about 30% of its inhabitants. Many recognise that this is no great stage of development; there remains much to be done to arrive at a situation in which 700 million people actively contribute to the wealth of the nation. Action to be undertaken concerns both investments on the side of private parties and changes in government policy.

Investments

Nineteenth and twentieth-century national development demanded investment in engine-driven machines. The replacement of human and draught-animal drudgery with steam power and gas-explosion energy in that era moved through stages associated with words such as industrialisation, mechanisation and automation. In contrast, twenty-first-century development requires investment in the rapid and appropriate generation and dissemination of information. It is well known that about 80% of all information has a spatial component, meaning that most information has one or more indicators referring to a location on earth: geo-information. In this century the production and correct use of geo-information is thus indispensable for the development of any country.

Restrictive Policy

Until recently, Indian government policy was characterised by protectionism with respect to geo-information. Some few government departments enjoyed a complete monopoly, whilst regulations prevented the entry of others. One of the main arguments for keeping geo-information out of the public domain concerned potential security hazards. As a result, the acquisition of geo-information was subject to severe restrictions; in particular the 7,500km-long coastline and the Himalayas were qualified for security reasons. Over the past fifteen years many have argued that the emphasis on security has impeded development opportunities. Furthermore, the high level of protection resulted in low participation on the part of the private sector and academia, which in turn led to disproportionately low growth rate of the geo-information business as compared to growth within other IT sectors. The policy also impeded free flow of geo-information and engendered high initial costs in accomplishing the key to development: planning, designing and constructing of infrastructure. Fortunately, in the course of time politicians came increasingly to recognise that the unpredictability of technological developments taking place around the globe rendered obsolete and anachronistic many features of their existing map policy.

New National Map Policy

This cleared the way on Thursday 19th May 2005, fifty-eight years after Independence, for India's Union Cabinet to approve a New National Map Policy. The policy involves production and dissemination of two kinds of analogue and digital maps. The first, which will be produced and disseminated by Survey of India/ Department of Science and Technology, is open to everyone and called Open Series Maps (OSM). The Ministry of Defence will determine use of the second kind, Defence Series Maps (DSMs). In addition, all serial photographs will become freely available after masking of vulnerable spots.

Many maps of the country are still in analogue format and, unfortunately, desperately out of date. It will be a huge job to arrive at the stage of accurate, detailed and up-to-date maps covering all parts of the subcontinent. It is recognised that the Survey of India cannot do the job alone and will need the partnership of private entrepreneurs. Moreover, the maps, once updated and improved, will represent broad general mapping of India at required scales, and will thus contain only basic information, geometrically correctly arranged. To be of value for a wide variety of applications they will need to be supplemented by other data, opening up the field for anyone, using OSMs as basic information, to make value-added map products and share them with others. Private agencies will be permitted, after registration and accreditation, to conduct surveys in all parts of the country using Public Domain Datum.

Vulnerable Asset

The role of science and technology is today essential in the development of any country. Politicians in developing countries are increasingly aware that science and technology has to be treated not as a stepchild but as a vulnerable asset. India's decision to release geo-information from the chains of restrictive government policy is therefore an extremely wise one, an achievement of truly historical dimensions. Stepping beyond the bounds of protectionism opens doors to a broad variety of private/public-private partnerships and will provide a much-needed boost to India's geo-information business. But by far and away most significant is the huge jump towards enabling 700 million people to actively contribute to the nation's wellbeing, now and in the future.