What is New about the 'New Map Policy'?

Changing Policies in Map Availability

Geologists in India, especially those working outside governmental organizations, are seriously handicapped by the denial of access to the Survey of India topographic maps of over 60% of India's territory, raising the bogey of defence of India. This denial is of recent origin, surprisingly imposed after independence. Under the previous colonial administration maps were easily available and could be purchased across the counter from any map sales office at a very nominal price

The East India Company which came to India as traders, by fair means or foul, secured full control of our land and lorded over it. Whatever be their role in the impoverishment of the country, they did three great things for which they should be remembered with gratitude; first, they established the Survey of India for mapping and surveying the land; second, laid the foundation for the Geological Survey of India for carrying out a detailed study of its geology and mineral resources and third, created the Indian Meteorological Department for understanding and forecasting weather. These were among the first few institutions of their type which started functioning in any part of the world and employed some of the best scientists that were available to man the organizations. The heroic work which the first surveyors, Lambton and Everest, carried out in the Trigonometrical Survey of India has been narrated in an earlier note. The work of the great pioneers like Oldham, Blanford, Medlicott and others in unraveling the complicated geology of this great land of ours is too well known to need emphasis. The Indian Meteorological Department too was formerly a part of the Geological Survey and was responsible for the publication of the annual record of rainfall over India for the first hundred years, a monumental work which has remained as source book of reference for all meteorological studies in India ever since. It was Oldham, again, who laid the foundation for seismological studies in India and the three great organizations, headed by real pioneers, lent lustre to their contributions to knowledge.

The maps provided by the Survey of India were some of the best published in any part of the world and were our most valued possessions, available to everyone across the counter for just one rupee a degree sheet. The Survey of India, very obligingly, would fold and bind the map in hard covers and give it to us. The rural economy that was India was grateful for this service rendered for the development of the country as a Nation.

These conditions persisted without change until the dawn of independence when the famous speech delivered by Pandit Nehru on the midnight of 15 August 1947 reverberated in our minds and we looked forward to a new era of awakening and prosperity. To our amazement, however, the government became suddenly obsessed with the defence of India and at one stroke dealt a death blow to the prevailing practice of unrestricted sale of

topographic maps, the essential tools for geological mapping. Knowledge, suddenly and for no reason at all, was denied to legitimate users and a red strip 'for official use only' was stamped on every sheet. With such restriction on the basic tool of geological science – field geology and mapping – the foremost activity of geological surveys has, and continues to be, seriously retarded.

Any amount of representations to Governments in power had no effect in making a change in this negative policy. The scare of defence of India so strongly influenced the top echelons of government, that all efforts made at the highest level were not able to make a dent in their armoury. The latest effort by a committee of influential academicians pleaded for a change in policy and release of maps for civilian use but with no effect whatsoever on the authorities concerned.

Recent Announcement of a New Policy

Meanwhile India made significant progress in other fields and had successfully launched satellites into space, the latest being Cartosat-1, intended primarily for cartographic mapping. The news that the much-awaited announcement of a New Map Policy was greeted with all eagerness. The New Map Policy, however, finally announced in May 2005 had nothing new to offer. Instead of de-restricting the maps and make them easily available for sale, the new policy simply made the process more complicated. It stated that in future there are going to be two series of maps, one for defence and the other, a special open series maps (OSM) for civilian use. What these special maps contain and what essential details they include is not known. The press note issued in May indicated that the release is conditional and that the Science and Technology Ministry will have to take a one-time permission from the Defence Ministry before releasing a map in the open series. What does this mean really? Is it not virtually restoring to the Defence Ministry its veto powers which it had been exercising all these years. It is more than four months since the New Policy was announced and we have yet to have a glimpse of the new series maps. The result is that the public continues to be denied the use of maps for which it has been agitating for over fifty years. Frankly, there is no need for printing a new series of maps. A simple remedy would have been to remove all road blocks and release maps without imposing any restrictions. The days of fear of details on maps being of value for anti-Indian purposes are gone with the availability of 'spies in the skies' providing maps in much greater detail than that on any normal survey map.

By this indifference to the needs of the scientific community, the process of digitization and dissemination which the Geographical Information System industry is preparing itself is indefinitely postponed and the new programme of rural development, for which thousands of crores are going to be spent, is without even the semblance of a blue print of action being ready. Topographic information contained in the Survey of India maps is an essential part of any development programme worth the name. Funds will no doubt become available

because of the clamour from politicians and bureaucrats alike, but plans are not ready as to what works should be undertaken and at what cost. Money will be frittered away without achieving any of the desired goals.

Utility of Open Series Maps of Doubtful Validity

We are very much skeptical about the utility of the Open Series Maps (OSM), if the Ministry of Defence (MOD) were to be allowed to remove all important details from the maps. Moreover, the new series of maps are bound to be different from those which are already in use creating a great deal of confusion in the minds of the user agencies. From whatever angle we examine, the exercise of bringing out a whole series of new maps, omitting important topographic details will prove to be an exercise in futility. Already rumbles are heard that the Ministry of Defence is not happy even at the limited amount of data to be disclosed to the general public and has not given its approval to the guidelines formulated by the Survey of India. The result of these internal differences at ministerial level is that the publication of the new series of maps is further delayed and we may not be able to have a look at these maps, let alone be allowed to use them, for a long time to come.

Massive Rural Development Needs Maps on Larger Scale

Meanwhile legislation has been enacted in Parliament guaranteeing employment, at least to one member in some rural households. The approval is given, in advance of any blueprint of action being ready, at least for a few selected villages. The manpower required and the cost has not been worked out. Without a plan of action and a streamlined procedure of management and monitoring of the work, the huge amounts allotted are likely to go down the drain in the absence of any sort of accountability.

Government has launched a rural development programme. This programme should not end up with making a few roads. Tanks have to be desilted and their catchment areas developed by channeling rainfall to form contour ditches and farm ponds thereby enriching groundwater resources. The practice of conveying water in pipes instead of open channels can stop the colossal wastage of water through misuse, flood irrigation and resultant evapotranspiration. Extensive afforestation by means of providing tree cover over land is badly needed and practicing horticulture can bring marginal land into production. The advantages of using the minimum quantity of water needed for plant growth by adopting sprinkler and drip irrigation methods have to be popularized through demonstration in model farms. There is need for changing cropping patterns in drought prone areas by promoting traditional rainfed crops like *ragi, jowar* and groundnut and prohibiting the growing of rice, sugarcane and other water-guzzling crops. With wise management, the little amount of water available can be made to go a long way to make the farmers in these regions self-reliant and able to fight the almost perrennial drought conditions with courage.

The elite scientific community is disinterested and does not appear to be bothered as it

is engrossed in building an international image. Surprisingly it has shown least interest in the development of land, water, and mineral resources which form the wealth of the Nation.

Many developmental projects are centred around regions coming within 50 km of the coastline and the restriction of digitized topographic data will postpone all development works indefinitely. If the old shortsighted policy of restricting maps on a scale of 1:50,000 is allowed to be continued, it will mean allowing the youth of the country to remain ignorant of what maps are and how they can be utilized for development. Their education will be defective and incomplete to that extent.

A large part of the country is drought prone despite receiving a fair amount of rainfall compared to many other parts of the world. The rainfall is, however, seasonal in character. A great deal of thought is therefore needed to conserve water, to catch it where it falls and store it both at surface, in the form of ponds and tanks, and underground in the form of aquifers. In order to make a success of this programme village-scale maps with contour intervals of 1 m apart are required. Although cadastral maps can provide all the data required for development, we see no attempt at providing such maps.

Liberal Policy of Issuing Cadastral Maps on a Larger Scale — An Urgent Need

All this boils down to the availability of maps, their distribution without imposing any restrictions and educating the youth of the country in making intelligent use of land and water resources. Pockets of prosperity which have developed through the enterprise of a few intelligent farmers should be an eye-opener as it is only by adopting and extending such methods that we can make barren land green and every farmer educated, self-reliant and an active member of society.

It has been demonstrated again and again, in other parts of the world as also in this country that improvements in geologic map information has a net positive value to society that can enable planners to make superior land-use decisions. By denying access to maps we are delaying the development of the country as a whole.

The Geological Survey of India, true to its record of service, should come forward with the issuance of a series of maps at Taluk level. The basic geological information could be provided in a lighter shade to form the background. All drainage lines should be prominently printed. Land fit for cultivation and land fit for afforestation and for growing horticultural crops should be specifically indicated. Soil types should be distinguished. The maps should grow as development proceeds. Social benefit will get indefinitely postponed by restricting topographic and geological information. Geological maps are necessary for making decisions and providing the Nation's infrastructure, reducing negative impact on the environment and mitigate the destructive effects of natural hazards

The 'New Map Policy' has no built-in mechanism to make their availability easier to user agencies. Research on water problems and developing newer ideas of transport and water conservation are dependant on unrestricted availability of maps. The NRMS (The

National Resource Management System) has been recently created by ISRO and is expected to fulfill the aims by coming forward with cadastral maps. They will then be able to educate the rural folk in the wise utilization of resources lying within their village limits. The New Map Policy by its built in style of bureaucratic control has nothing to recommend and will only delay access to maps which can play a major role in all activities of rural development, especially in matters relating to water use and optimum management.

The epithet 'common man' is the most abused word. It is present in all Government commentaries saying over and over again that everything is being done for the sake of the common man. But when it comes to sharing information there is dead silence. Correspondence with government departments is a futile exercise – a dialogue with the deaf. How can we welcome the New Policy in these circumstances? Who is to remind the MOD of giving its one time clearance? The New Map Policy has nothing new and the education institutions and research community continue to suffer as before.

The Department of Science and Technology in whose charge is the organization of the Survey of India in a recent note has stated that hopefully it may take six more months for the release of these maps. Knowing fully well the speed at which the government moves in matters relating to redressal of public grievances the period of six months may extend to couple of years, thereby making the existing policy of restricting topographic maps for civilian use a permanent feature. Real progress is possible if only development is attempted at the base level and the provision of a variety of maps becomes a vital necessity.

The need is urgent. It should not take geological time to set right a grievous wrong and fulfill a national need. We will not achieve anything by restricting the free flow of knowledge.

When high resolution satellite imageries of our coastal tracts and urban centres are commercially available on the web itself, it is anachronistic for our defence authorities to deny free access to toposheets in the country. Either they are too naive and ill-informed, which is very unlikely, but perhaps more appropriately, driven by the sheer force of habit in bureaucratic denial of public's right to information and transparency A radical change in such a mind-set is urgently called for. The scientific community is as concerned about the security of the nation as anyone else but cannot support restrictions based on unfounded and ill-conceived logic that does not stand closer scrutiny.

B.P. RADHAKRISHNA

19 September 2005

Email: *gsocind@bgl.vsnl.net.in*