

The myth of river Saraswati

G. V. Padhye¹ has opened a Pandora's box by creating a new myth about the Vedic river Saraswati. According to his hypothesis, the river Saraswati is the same as river Ili in the Balkhash region of Kazakhstan. He has based his arguments on rudimentary concepts of philology and linguistics in defence of his hypothesis. Padhye has identified seven rivers of *Sapta-sindhu*, with some rivers and streams flowing into Balkhash lake. Most of his arguments are not only absurd, but also seem to be illogical. For example, by a stretch of his imagination, he opts for simple solutions. According to him, the shar grass grown in the delta of river Ili (Saraswati) gave its alternative name, Sharda. Regarding the *Sapta-sindhu*, all of them are present outside India. *Shubra-vastra* – a saree – is but a paper thin crust of ice which formed on the river surface.

It is an established fact in history that the seven rivers known as *Sapta-sindhu* in the Vedas are identifiable with seven rivers of Indian origin, viz. Indus, Jhelum, Chenab, Ravi, Sutlej, Beas and Saraswati/Yamuna. Ancient Yamuna and Sutlej were flowing together into the Arabian Sea as Saraswati river but due to neotectonic upliftment, both the rivers shifted their courses². The present-day Ghaggar and its tributaries, namely Markanda, Tangri, Patiali Rao, etc. define the course of ancient Yamuna and Sutlej. A. V. Sankaran³ has identified the course of river Saraswati with that of river Ghaggar flowing through Punjab and ending up in the Thar desert of Rajasthan. His hypothesis is based on logical arguments derived from geological and hydrogeological investigations, remote sensing studies by LANDSAT and geo-

physical surveys carried out in Rajasthan. Roy and Jakhar⁴ have also confirmed the findings of Valdiya² and Sankaran³ basing their arguments on geological evidence. Vedic Saraswati flowed in India and it had no connection with river Ili of Kazakhstan.

1. Padhye, G. V., *Curr. Sci.*, 2001, **81**, 1154–1155.
2. Valdiya, K. S., *Resonance*, 1996, **1**, 19–28.
3. Sankaran, A. V., *Curr. Sci.*, 1999, **77**, 1054–1060.
4. Roy, A. B. and Jakhar, S. R., *Curr. Sci.*, 2001, **81**, 1188–1195.

H. S. VIRK

*Department of Physics,
Guru Nanak Dev University,
Amritsar 143 005, India
e-mail: virkhs@yahoo.com*

NEWS

Anniversary of the Bhuj earthquake: Taking stock

It is a year since the 26 January 2001 'Republic Day' earthquake hit Gujarat. It has been described as 'the deadliest intra-plate earthquake' in India's recorded history. The earthquake affected the lives of at least 15 million people, and left their homes and livestock devastated. On this anniversary, it is time to take stock of the status of pre- and post-disaster management of earthquakes in India.

'Are we now better prepared? Have we learnt lessons from past earthquakes? What are going to be our concerted plans for the future? What areas of earthquake research need to be strengthened?' These are some questions frequently asked. These need to be answered by scientists, technologists, policy planners and all arms of the Government (central and state), citizens and the media alike. The next earthquake, whenever and wherever it occurs in India, would be a test of our resolve and planning.

The seismotectonic setting of India comprises two main physiographic divisions. The first is the seismically active Himalayan region, including the adjacent northeast India. The second division is the Stable Continental Region (SCR) of the peninsular shield. Tectonic resurgence of the Mysore plateau and the surrounding regions in cratonic southern India is another subject of interest¹. Of the major regions of earthquake occurrence in India, the most well-known (and numerous) are those of the Himalayan frontal arc. In the peninsular region of India, the earlier Latur earthquake at the centre of the Indian shield region was considered a typical SCR earthquake. Seismicity associated with the Koyna reservoir, Maharashtra is considered as one of the classic examples of earthquakes triggered by the influence of a large reservoir. And, most recently India witnessed the Bhuj earthquake in 2001. The Rann of Kutch region has suffered large and moderate

earthquakes in recent history. These occurred in 1819 in the northern fringes of the Rann (a large earthquake of magnitude 7.5 that created a new tract of elevated land about 90 km long, called the Allah Bund); in 1956, in the southern part of the Rann, affecting the town of Anjar and most recently, the Bhuj earthquake. Both the 1819 and 2001 earthquakes provided ideal opportunities for researchers to study seismogenic processes in a plate-interior setting. The Bhuj earthquake generated substantial liquefaction and hydrological effects. Locals reported that the quake caused, for a short time, activation of desert rivers that had been dry for more than a century.

The Bhuj earthquake has generated wide attention, both national and international. Many research teams have been in the area conducting post-seismic field observations at a feverish pitch. The reason for this could be, 'the uniqueness of its tectonic regime, espe-