

# *The Harappans, Sarasvatī and the R̥gveda*

Prof. T.P. Verma

The area of cultural distribution of Harappan settlements is estimated to be 2.5 million square kms in the Indo-Pak subcontinent. In the north-west it touches the frontiers of Afghanistan and in the south whole of Gujrat and parts of Maharashtra are included. In the west starting from the borders of Iran upto the western Uttar Pradesh have yielded Harappan sites. It was far more extent than the contemporary civilizations of Egypt on the river Nile and Sumer and Mesopotamia on the Euphratus and Tigris in modern Syria and Iraq. J.P. Joshi holds that "Research after Independence changed the position regarding the extent, culture-contents, regional variations, etc. of the Indus civilization... During the last eight decades, due to the constant efforts of archaeologists, more than 862 pre-Harappan, Harappan and late Harappan sites have been discovered in India and most of these newly discovered sites are in the Sarasvatī basin. Some archaeologists have now come out with such nomenclature as Indus-Sarasvatī Civilization or Sarasvatī-Hakra Civilization."

The core of these so called Indus-Sarasvatī civilization, to use the famous terminology of A.C. Das, was the Sapta-Saindhava area. Sarasvatī played pivotal role in the origin, development and transformation (I avoid to use the term extinction) of this culture. It has been estimated that the river Sarasvatī dried some time about 1750 B.C. and this coincides with the disappearance of the Harappan settlements from the Sarasvatī basin. During the R̥gvedic times Sarasvatī was a mighty river, which starting from the mountain flowed up to the sea. It was the most praised of river in the **R̥gveda** and almost every *maṇḍala* had something to say about this river. This fact itself is a proof to equate the Harppans with the R̥gvedic people.

Before we discuss some aspects of Sarasvatī culture from the R̥gvedic and other literary sources, we propose to see what archaeological discoveries and researches have to say about the Harappan culture. We cannot do better than give the concluding remarks of Joshi (2000.27) which is the latest article on the subject:

"In the general makeup of the Indian culture of succeeding ages the Harappan influence in different spheres of life can be enumerated as below:

Systematic town planning and fortification of citadel, the idea of establishing granaries and surplus economy, systematic standardization of brick sizes, weights and measures, geometric instruments e.g. right angles, linear scale and plumb bob are the principal gifts of the Harappans to the succeeding cultures through the ages.

It was Harappans who gave the idea of welfare of the workers for first time by establishing neat workmen's quarters and now it has become a necessity.

In maritime commerce and trade, Harappans were the first Indians to open new vistas and avenues and came in contact with western Asia for the first time.

The bullock cart drawn through the ages is a legacy of the Harappans so far the present knowledge goes in the sub-continent.

They gave cotton, wheat, *til* and mustard which went a long way in the habits of the people.

In the field of religion their contribution is maximum. Slowly, the Harappan Śiva entered in to the later Vedic pantheon and fusion of the concepts of Rudra and Śiva took place. Similarly, the origins of Yoga from yogic postures of Śiva Paśupati seals can be envisaged. While "*Tapas*" was known to the Aryans it was the Harappans who practised "*Yoga*" i.e. achieving the supreme through successive mental planes. The worship of *Śakti* has also its origin in the Indus Valley Civilization. Similarly, fire worship also came into vogue. These contributions to Hindu culture are of a substantial nature.

In the field of fine arts, dancing is a Harappan legacy and similarly the game of Chess-*Chaupad* has been their contribution in the field of pastime.

As will be evident, the Harappans were neither aggressors nor conquerors. They had very few weapons. They emerged before us as a people whose economy was based on agriculture, trade and commerce who lived in peace and thrived in co-existence and that is their message."

These observations of a leading archaeologist are quite instructive for a student of ancient Indian history to conclude the identity of the Vedic and the Harappan culture. There are no evidence of any discontinuity in the Indian society since the Harappan times. Although archaeologists use the terms like "end of Harappan" civilization, but to many historians, it was simply a transformation or change without any break in the continuity in the society. Here Joshi, like other archaeologists, appears to have some reservations. For him the Vedics (or the Aryans) were separate from the Harappans and that the latter preceded the former. S.R. Rao's (1998) view that 'more than one ethnic group including the pre-Vedic Aryans were responsible for evolving the sophisticated urban life and political system of the Indian civilization' is based on the prejudiced presumption that the Vedic civilization was essentially rural which has nothing to do with urban life. But Rgvedic society was a mixture of urban and rural elements as any society of the world in known history. Satya Kam Varma (1967) has successfully highlighted the urban elements in the Rgvedic culture. Joshi's remarks that "these pre-Vedic Aryans could be identified with the kings who fought under Viśvāmitra and represented the *Asuras* of Punjab and Sindh of the Harappan civilization while the *Devas* were the fire worshippers of Kalibangan, Banawali, Lothal, Nageshwar and Vagad. While there was homogeneity amongst both but religious and burial practices gave them identity."

We fail to understand such arguments which is an outcome of a self imposed dilemma. On the one hand one advocates the precedence of the Harappans over the Vedic Aryans but at the same time some Harappan sites are allotted to the *Devas* who were fire worshippers. Viśvāmitra, a Vedic ṛṣi who composed some hymns of the **Rgveda** is branded as an Asura, a non-Aryan, and is placed amongst the pre-Vedic Aryan. Without any prejudice we wish to attribute it to transitional mode of thinking, trying to cast off old line of reasoning in the light of new interpretation of finds. Joshi himself holds that 'In the above context a three fold division could be envisaged i.e. Harappans of the Indus Valley who could perhaps be identified with the early Aryans. The Rgvedians of the Sarasvatī Valley and Lothal, Pañis, the great traders of the *Patal* i.e. Surkotada-Dholavira of the Kachchh region and later Aryans of Haryana and Punjab represented at Dadheri-Bhagwanpura, respectively.' This observation of Joshi indicates the swing of his views about the identification of the Harappans with the Aryans.

For the interpretation of archaeological data in Indian context one is required to break the imaginary barriers with a sufficient background of ancient Indian literary sources, combined with sympathy and belief in myths, traditions, and above all a trust in the ancestors. Myths and tradition, not only of ancient Indians but of the whole ancient civilized world have some iota of historical truth and historical basis. They contain a key to the history of mankind, as well as the history of the world and its creation. A critical and analytical approach without any prejudice, combined with the modern scientific researches and achievements in various fields will unfold the unknown mysteries of our very-very long past history. It only needs to break and shake off the barriers and boundaries created by themselves.

As stated earlier, Sarasvatī had an important role in the life of the Harappans. It has been established on archaeological grounds. At the same time Sarasvatī had a similar important role in the life of the Rgvedic people as well. The ancient Indians had a knowledge about the descent of the river Gaṅgā from the Himalayas which was the result of the efforts of the five generations of the kings of Ayodhyā from Sagara to Bhagīratha. It was believed that we had no knowledge about the origin of other Indian rivers from the Himalayas. But it is not true. The Rgvedic hymns preserve the memory of that hoary antiquity when the Himālaya was born and the mass of the Earth including the present Indian subcontinent was taking shape. Yes, I am pointing to the Continental Drift Theory which now some geologists call 'The Plate Tectonic Theory'. S. Kalyanaraman (1999.14) observes 'the collision of the Deccan Plate with the Tibetan Plate accounts for the landmark of the Bhārata joining with the rest of Asia along the Burmese border across the Gaṅgā valley and the front of the Himalayas and south along the NW frontier and Baluchistan... Sindhu flows along another syncline, a down warp and a tear as the Deccan plate pushes northward. Thus Plate-Tectonic activity has been attributed to the occurrence of the earthquake with the Himachal Pradesh on a 0.85 isoline prone to recurrent earthquakes.'

Wagh (2000) observes that 'Since the Eurasian and Indian plates are made of continental crust (lighter material), the crust is not carried to depth due to the buoyancy effects. The theory therefore believes that whenever two continents (in this case Eurasia and Peninsular India) collide at a destructive margin, a thickening of the crust will take place and a mountain range will form. Thus Himalayas can be seen as the result of Peninsular India colliding with Asia over a Benioft zone.'

The present Indian subcontinent geologically and physically, is divisible into three units: i) Peninsular India, ii) Himalayan system and iii) Indo-Gangetic alluvial plain. Of these, the peninsular unit is the oldest one largely consisting of ancient crystalline rocks, which are relatively more stable and metamorphosed. These are very old (more than 600 million years). This is considered as a segment of the earth which was formed during the Archaean period (the oldest period).

Wagh informs that 'According to Wegener in the early palaeozoic era, there existed in the South, a huge continent called the Gondawana Land which comprised of America, Africa, Peninsular India and Australia together. Later on the above land units were subsequently broken and drifted to their present position. The drift began in Jurassic times (some 180 million years ago) and probably is still going on.

'As the drift continued, the coast of NE Africa and the western coast of Peninsular India were faulted. The Peninsular India is flanked on both sides by the seas the Bay of

Bengal and the Arabian sea. Due to faulting of the eastern side of the Peninsular India and the eastward and northeastward movement of Australia, the Bay of Bengal came into existence during the Triassic period (Mesozoic era). In the beginning this Bay extended up to Assam and north Burma, but during the Cretaceous time (Mesozoic period) it was split up in to two parts by the mountain building of Arakan Yoma. This resulted in to the formation of two water bodies the Assam Arm in the west and the Burma Arm in the east. As the two arms of the sea were later on subject to deposition, they began to recede southward until the present Bay of Bengal came into existence. At present mouth of the Gaṅgā and Brahmaputra are extending' (Wagh: 2000. 106-07).

The process of geological formation of the Himalayas and Indo-Gangetic plain was more complicated. The latter is still subject to earth movement on account of movement of the Indian Plate, which is still in motion at the rate of 4 cm/a. An observation of today's world map will show that this is not a simple process. The continent of South America is moving clockwise while the Indian subcontinent is moving anti-clockwise towards the north and northeast. The plate containing Australia is drifting towards south and southeast.

It is obvious that in the beginning of the collision of the Indian Plate with that of Eurasian, the thickening of the marginal crust which later formed the Himalaya, was not so prominent. Slowly it mounted up and caused a depression which is called in the **Rgveda** (IX.136.5) *Pūrva Samudra* and the other in the west was known as *Apara*. The **Rgveda** (IX.33.6) mentions four seas also. Bhargava (1964: 128-31) has pointed out that the region of Sapta Saindhava was enclosed with these four seas from three sides. These were Arvavata (or Pūrva), Parvata (or the Apara), Sārasvata and Sarasvanta.

It is very likely that the Arvavata or Pūrva sea occupied most of the southern part of the Gaṅgā plain. Rivers Sarayū, Sadānirā (Gaṇḍakī) and Kauśikī (Kosi) used to meet this sea soon after descending from the mountain. Gaṅgā was not existing in those ancient days, instead several small streams used to meet the Pūrva sea filling it with the alluvium brought from the Himalayas. Thus the sea receded towards east-south. The legend of channelization of the Gaṅgā by the 60,000 offsprings of Sagara; and Bhagīratha, his fifth descent was successful in opening the mouth of the glacier Gomukha and flowing the fresh water in the plains. Non-mention of Gaṅgā among the three great rivers along with their seven tributaries in **Rgveda** (X.64.8) is a proof in itself that at that time Gaṅgā was non-existent.

The Sārasvata sea was originally a huge collection of water into which the Sarasvatī and other streams fell. The salt lakes of Sambhar, Sargat, Rivasa, Kueavan and Didwana etc. are all its surviving remnants, the remainder having been filled with sand.

The Rgvedic people have described these phenomena in their own terminology which is quite different from what we use these days.

In the **Rgveda** (I.32.1) the *Ṛṣi* says 'I will describe those feats of Indra which he had performed first by breaking the hearts of the mountains and killing the *Ahi* = *Vṛtra* and starting the flow of water streams.' Here *Vṛtra* means one which covers, surrounds or blocks. Later (I.32.12) it describes 'He (Indra) released the waters the Seven Rivers (*Sapta Sindhūn*) conquered the cows and *Soma* by breaking the doors in which *Vṛtra* had confined his wives, i.e. water streams.' Sampurnanand (V.S. 2001.33) enumerates these seven rivers as: Sindhu, Vipāśā, Śatudrī, Vitastā, Asiknī, Paruṣṇī and Sarasvatī, and says that the name of the region 'Sapta Saindhavaḥ' is on account of these rivers. The famous *Nadī Sūkta* (RV X.75) is in praise

of river Sindhu in which rivers are enumerated from Gaṅgā in the East to Kubhā, Gomtī and Krumu in Afghanistan, which are the tributaries of Indus. We will discuss the reverence of the Rgvedic people towards Sarasvatī, a little later. Here we concentrate on the deeds of Indra.

It is said (RV II.12.2): 'O people! it is Indra who firmly established the unfirm earth, who pacified the angry mountains, expanded the firmament, confirmed the heavens.' Again, (II.17.5) 'He confirmed the old and moving mountains, moved down the waters, confirmed the earth which supports the world and stayed the firmament and heavens by his prowess.'

Obviously these *mantras* contain the memories of those days 'when the Himālaya mountain was rising, earthquakes were common and volcanic eruptions were frequently taking place', observes Sampurnanand. The latitudinal and longitudinal position of this Sapta Saindhava region was not the same as it is today. Even the situation of the North Pole was also different, not to speak of the shape of the subcontinent. The incident of the release of the water through streams as rivers by piercing the mountains by Indra is related in many other hymns also (RV V.32.1, I.54.10, etc.).

In this context the description of the Eastern and Western seas (RV X.136.5) becomes significant. The **Rgveda** (IX.33.6) mentions four seas also. This was the land where Vedic people lived. The **Rgveda** (IV.1.13) says, 'Our forefathers, men, have lived here only (*atra*), practicing *Yajña* and have pleased the gods, released the milk giving cows (rivers) from where, they were captivated in the rocks.' Here '*asmākam atra pitaro manuṣyā*' becomes quite significant in the light of the seven rivers being released from the captivity of the mounting Himalayas, which were younger those days. The *Ṛṣi* elsewhere says 'Here my forefathers composed hymns in the past. O World! We are the sons of immortality born in this divine country' (RV X.13.1).

Sarasvatī was the most favoured river of the Rgvedic seers. Although three rivers (Sarasvatī, Sarayū and Sindhu) were praised with their seven tributary streams each (X.64.8-9), Sarasvatī was the pivot of the vedic life. Here it is significant that Gaṅgā is not mentioned among these three great rivers. Perhaps the incident of the descent of the Gaṅgā took place later during the time of kings Sagara to Bhagiratha who ruled from Ayodhyā on the river Sarayū. The water of these three mother rivers is compared with milk and honey. But only Sarasvatī is called best among mothers, best among rivers and best among goddesses (RV II.41.16). The water of Sarasvatī was so swift that it used to smash the mountains with its strong current (RV VI.61.2). Its water was unlimited, straight, brilliant and roaring (RV VI.61.10). The Sarasvatī is said to be great among the greatest, fast among the fastest and, it has been prayed that neither it should stop its milklike water nor torture people with its mighty current (VI.61.13-14). It is described having seven sisters (tributary rivers) (RV VI.61.10). It has been praised as '*Sarasvatī saptathī sindhu mātā*' (RV VII.36.6) i.e. one among the seven rivers and mother of rivers. It may be interpreted as first among the seven rivers to come out of the Himalayas, but as the history shows it has become the first, and the only among the seven to vanish.

Sarasvatī has also been described as the daughter of *Pāvīravī*, beautiful wife of the brave (*vīra patnī*) (RV VI.49.7). The meaning of *Pāvīravī* is not clear, but in the Brāhmaṇas it has been used as an epithet of Indra, and thus can be interpreted as the daughter of Indra. This becomes significant in the light of the earlier quoted hymn (I.32.12) where Indra has been credited to have released the waters of the Seven rivers. In some hymns of the Rgveda

Indra has been invited along with Sarasvatī in the *yajña* (RV VI.52.6 and VII.39.5). Like Indra, Sarasvatī also has been described as the killer of *Vṛtra* and she did it with the help of Indra (RV VI.61.3 and 7).

This mighty Sarasvatī, so important and vital in the life of the Vedic people has now dried. Although the first research on it was published by Oldham as early as in 1893 its importance was realized when a team explored the bed of lost Sarasvatī in November-December 1985 under the banner of Itihasa Sankalan Samiti led by Late Dr. V.S. Vakankar. Beside Oldham some other scholars like Wadia (1938), Ali (1942), Stein (1942), Krishnan (1960), Wilhelmy (1969), Allchin *et al.* (1967) and S. Kalyanraman (1999) published their work on Sarasvatī. More work is in progress under the Sarasvatī Nadi Shodha Prakalpa at Chennai.

A glance at the river map of the Indo-Pakistan subcontinent at once catches the attention that a large tract of land lying west of river Yamunā and east of Indus, Hakra-Nara in Pakistan and, North of river Luni in Rajasthan up to the Himālaya, covering the states of Haryana, Punjab, Rajasthan and Gujarat, is devoid of any water system. But it was not so during ancient times. LANDSAT imagery has confirmed that the Vedic Sarasvatī used to flow with its tributaries in this area. This confirms the literary descriptions given above.

Ghosh *et al.* (1978) had suggested after interpreting the aerial photographs and LANDSAT imagery that Sarasvatī formerly used to flow through a more easterly course in the Rajasthan part of the desert where the river Luni was one of its tributaries. Subsequently, the river shifted its bed to the west several times and finally cut its contact with Luni. The water of Sarasvatī was discharged in to the Rann of Kachchh through Hakra/Nara, now in Pakistan. Ghosh *et al.* (1995) now hold that 'when the river severed itself from the Luni and shifted westward, it did not occupy the Raini-Wahinda-Nara-Hakra course in Pakistan but began to flow through another channel running through present extreme desert terrain of the Jaisalmer district in India. The Raini-Wahinda-Nara-Hakra course was occupied by the Sarasvatī later'.

S. Kalyanaraman, Director, Sarasvatī Nadi Shodha Prakalpa of Akhil Bharatiya Itihas Sankalan Yojana, has done much research and have prepared more than 35000 files on Sarasvatī. Besides him, V.M. Puri, geologist with the Geological Survey of India, has over thirty years inventoried 1,500 glaciers in the Himalayas as part of the World Glacier Inventory, Geneva. He, with B.C. Verma published their research "*Glaciological and Geological Source of Vedic Sarasvatī in the Himalayas*" (1998). We propose to take the researches of these scholars together.

Kalyanaraman observes, 'geological studies have shown the secular sequence of desiccation of the Sarasvatī river; (1) the streams were flowing through Markanda river; (2) the streams migrated towards the Dṛṣadvatī river, (3) Dṛṣadvatī river migrated eastwards linked up with Chambal which captivated the Tonns river stream flowing into Sarasvatī river at Paonta Sahib (HP); (4) Satadru river stream which had joined Sarasvatī river at Shatrana migrated westwards with a 90 degree turn at Rugar and ultimately became a tributary of Sindhu river. Glaciological studies have also showed the existence of quartzite at metamorphic rocks in Paonta Doon valley and near Ad Badri in Sivalik ranges attesting to the existence of mighty Vedic Sarasvatī river which had brought in these signature rocks.'

As we have seen the Rgvedic seers give credit to Indra to clear the obstructions in the

rising Himalayan glaciers which blocked the way of the streams. There might have been many glaciers which fed the Seven Rivers (*Sapta Sindhūn*) including Sarasvatī. At present two such sources have survived today in the Himalayas which have been identified as feeding the ancient Sarasvatī. Sarasvatī is said to have originated at the Bandarpunch massif in the Garhwal Himalayas which is at present the source of the independent Tonns river, one of the Sarasvatī's source streams. The other source of river Sarasvatī was in the Tibet near the Mansarovar lake which is called Kapālshikhar. From here the river Mong Nang Tsongpo still flows in Tibet and assumes the name Sarasvatī as it enters in India.

The glacier in the Bandarpunch massif in the western Garhwal is called Har-ki-Doon. From here river Tonns originated, now it is called the Tonns branch of Yamunā. But Tonns along with Yamuna were once the tributary sources of the Vedic river Sarasvatī. Puri and Verma (1998) give following description of it:

Drainage analysis basin identification, glaciological and terrace studies suggest that Vedic Sarasvatī originated from a group of glaciers in the Tonns fifth order basin at Naitwar (Netwar) in the Garhwal Himalayas. In early stages, it occupied the present day drainage of Tonns river up to Paonta Doon and took a westerly swing after receiving nourishment from Aglar, Yamunā and Giri. West of Paonta, it followed a westerly and south westerly course along Bata valley and entered plains at Ad Badri. It continued to follow almost south westerly course and traversed through Haryana, Rajasthan and Gujarat for nearly 1000kms and joined the Arabian sea.

Sutelej of today was then a tributary of Vedic Sarasvatī. It is quite likely that Vedic Sarasvatī might have come into existence during Upper Pleistocene period. Most important event that contributed to the desiccation of Vedic Sarasvatī was re-activation of Yamunā tear fault across Siwalik belt between Kalesar and Paonta some time around 2,450 B.C. (related to the earthquake evidence in an archaeological site on the banks of Sarasvatī river; Kalibangan). As a result of this phenomenon, river Drishadvati came into existence which joined Vedic Sarasvatī near Suratgarh in Rajasthan. With emergence of Bata-Markanda divide complete reversal in the flow of Vedic Sarasvatī occurred in Bata valley whereby it abandoned its previous course through Ad Badri-Markanda and occupied the conduit followed by Drishadvati. Meanwhile, the Vedic Sarasvatī catchment was reduced by 94.5% and got restricted to that of present day Markanda. Subsequent to river Dṛṣadvati's migration from south-west to south-east, Palaeo-Yamunā emerged that joined the Chambal river. Later, the Shatudrī (Sutelej) also started shifting its course westwards and consequently got completely detached from Vedic Sarasvatī.

As a result of the above-mentioned events, Vedic Sarasvatī got completely deprived of its perennial source of nourishment from Himalaya. It now depends upon monsoon precipitation for its survival. With the advent of drought conditions caused by either the emergence of a dry phase in climate or failure of monsoons for a number of years rather decades, Vedic Sarasvatī got completely disoriented and acquired the status of present day oblivion.

Beside the above causes, upheaval movements and tectonic activities also contributed in the disappearance of the river Sarasvatī. But, perhaps the river Sarasvatī may be a party in

its desiccation. Gradually, being robbed of its perennial sources in the Himalayas by its tributaries, the flow of this once mighty river slowed down resulting in alluviation. In the process of alluviation the rivers or streams deposit the loose, fragmented material in their bed on its flood plain. Thus the valley is uplifted to sluggish the current, consequently in drying up the river itself. Thus the rivers' flow with the cause of their death. In the case of river Sarasvatī this is attested by the presence of water in the dried channel of Sarasvatī at a depth of 30 to 40 metres below the ground leve. S. Kalyanraman (1999) informs us '... an environment isotope study was undertaken in collaboration with the Groundwater Department, Rajasthan in Jaisalmer district.... The ground water samples exhibit negligible tritium content indicating absence of modern recharge. Radio-Carbon data suggest the groundwater is a few thousand years old (uncorrected age 4950-4400 B) with a velocity of about 20 nva.'

During the period of **Mahābhārata** the desiccation of the Sarasvatī had already started. In the Vedic times the river which was Sara-svati (swift-moving) became Saras-vatī (a river with lakes). The **Mahābhārata** informs us that the holy river Sarasvatī went underground at Vinaśana. Then it reappears at three places downstream which were known as Chamasodbheda, Śirodbheda and Nagodbheda (N.L. Dey, 1999). The **Mahābhārata** also informs that before Vinaśana there was a *tīrtha* called Udapāna where Sarasvatī was underground. Beside Vanaparva, Anuśāsanaparva also relates the disappearance of Sarasvatī.

There can be no disagreement about the disappearance of the Harappan civilization on account of drying up of the mighty river Sarasvatī. The Rgvedic seers had also realized the importance of water in human life because in a majority of hymns water (*Āpah*) is mentioned. There is no prayer in praise of Indra where water is not associated. Varuṇa is related with water. The dislocation/disappearance of the Harappans is mainly associated with the disappearance of the river Sarasvatī combined with the climatic changes of the area. Kalyanaraman notes 'without its snow-bound origins, the Sarasvatī became shadow of its former self. Its people migrated upstream and settled in today's Haryana and western Uttar Pradesh. There seems to be archaeological evidence to this movement. The total absence of Late Harappan settlements in area of the Sarasvatī is in sharp contrast to the dramatic increase in habitations in the plains of Haryana and Western Uttar Pradesh. There is also a remarkable scarcity of Harappan sites around what are today's Yamunā and Satluj. This is again in sharp contrast to the archaeological goldmines turning up in the drying channels of Punjab, Rajasthan and Sindh in Pakistan'. He further notes 'with the Sarasvatī gone, its place in mythology was taken over by the Gaṅgā. To this date, it is the Gaṅgā that is predominant to India's Hindu consciousness.'

Thus archaeology finds support from literature, i.e. **Rgveda** with Sarasvatī as pivot of Harappan lifestyle at the same time, the Rgvedic culture gets archaeological support in the form of Harappan civilization. Both had a perfect mixture of urban and rural settlements because no urban culture can exist without rural basis.

### **Bibliography**

1. Ali, S.M., 1966. *The Geography of the Puranas*. New Delhi.
2. Bhargava, M.L., 1964. *the Geography of Rgvedic India*. Lucknow.
3. Dey, N.L., 1979. *Geographical Dictionary of Ancient and Medieval India*, New Delhi.

4. Ghose, B., Amal Kar and Zahid Husain, 1978. 'Comparative role of the Aravali and the Himalayan river systems in the fluvial sedimentation of the Rajasthan desert.' Paper presented at the Symposium on the Tertiary and Quaternary Climatic and Environmental changes. Tenth International Congress of Anthropological and Ethnological Sciences, December, 1978.
5. Ghose, Bimal, Amal Kar and Zahid Husain, 1995. The Lost Courses of the Sarasvati River in the Great Indian Desert: New Evidence from LANDSAT Imagery. *Itihas Darpan*, New Delhi.
6. Joshi, J.P., 2000. *Man and Environment*, 25 No. 1. 2000, p. 15.
7. Kalyanraman, S. 1999. *The River Sarasvatī: Legend, Myth and Reality*. Mumbai, 1998.
8. Lal, B. & Gupta, S.P. (Ed.) (1984) *Frontiers of Indus Civilization*, New Delhi.
9. Oldham, D.R., 1893. The Sarasvatī and the Lost River of the Indian Desert, *JARS (NS)*, 34, London.
10. Possehl, G.L., 1979. *Ancient Cities of the Indus*. New Delhi.
11. Puri, V.M. & Verma B.C. 1998. Glaciological and Geological Source of Vedic Sarasvati in the Himalayas. *Itihas Darpan*, IV (2), 7-36.
12. Sampurnanand (2001 VS). *Āryon kā Ādi Deśa*. Varanasi.
13. Sharma, Ramvilas, 1994. *Paschimi Ashiā aur Ṛgveda*. Hindi Madhyam Karyanvaya Nideshalaya. Dilli Vishvavidyalaya, New Delhi.
14. Singh, Bhagvan, 1987. *Harappā Sabhyatā aura Vedika Sāhitya*, New Delhi.
15. Sushila Khare, 1967. *Sarasvatī*, Varanasi.
16. Wagh, D.M., 2000. (Compiled by D.S. Desai). *Historical Geography of India*, Pune.
17. Tripathi, Maya Prasad, 1969. *Development of Geographic Knowledge in Ancient India*, Varanasi.

\* \* \*