COMMENTS ON RAVERTY'S "MIHRAN OF SINDH"

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Henry George Raverty was born in England in 1825. His father Peter was a surgeon in the Royal Navy of United Kingdom. He was educated at Falmouth and Penzance and joined East India Company's 3rd Bombay Infantry in 1843. He joined siege of Multan via Sindh in 1848 and the Punjab Campaign of 1849-50, in Gurat. He took part in the First N.W.F expedition against Swat Frontier in 1850.

He was Assistant Commissioner in the Punjab 1852-1859 and then reverted back to Indian Army. He was promoted as major in 1863 and retired in 1864. He then settled in England devoting his time to studies and writings. He died reaching an old age of about 85 years in 1910.

Raverty had great talent for oriental languages and he had mastery over Persian, Arabic, Hindustani (Urdu) and Pushto. Beside these he knew French, Portuguese, Dutch etc. He also had mastery in the South Asian history from the oriental sources, reaching the level of Elliot, who was his senior. In his translation of Tabqat-i-Nasiri, he is very critical of Elliot and Dawson's mistakes in translation of some passages.

The Great Trigonometrically Survey of India was started by Survey of India in 1860s and very soon maps were available, which showed old abandoned channels of rivers in existence or the ones dried centuries ago. Search for the Sarsuti or the Lost river of Great Indian (South-Asian) Desert was on since 1832 and controversial statements were being made by the British workers since then, though some were scientific and others based on historical sources and yet some were imaginary. It was during this fury of arguments that he developed a theory that the Eastern Nara was Mihran, the bed of a mighty river, in which discharged the Indus after capturing waters of seven rivers Kabul, Jehlum, Chenab, Ravi, Bias, Gomal and the Indus itself hence called Haft Darya or seven rivers and then was joined by combined waters of Sutlej and Sarsuti following the same course as the Sutlej in Bahawalpur and the Hakra or Nara in Sindh. According to him this mighty river was flowing up to 18th century. He supported his own arguments by his own interpretations of historical documents. For a moment he did not think that Eastern Nara bed was too narrow to take combined waters of all above rivers. He also did not realise that once the Indus enters the Eastern Nara bed, it cannot get out of it, without silting its bed to a level much higher than adjoining areas and thereby flowing in the Central Sindh.

Knowing it now, that his theories were wrong, it has become obvious that to support his hypothesis, he has been selective in quoting only those works which support his theories.

However the 354 page article has been very useful for historians and historical geographers, who thus have available to them, enormous translation of Persian and Arabic sources from this book, not other-wise readily available in the form of original texts and their English translations and they have been using it for their own researches. In fact there is no sober historian of Sindh, who has not referred to and used his material with continuous blunders in their writing of both history, historical geography and human activities.

The article "Mihran of Sindh" first appeared in the Journal of the Asiatic Society Bengal in 1892. Due to demand for it, the Society reprinted it but soon again, it became unavailable. It has been reprinted recently from Karachi, but unfortunately without the 10 maps in the original text. This has marred the value of the book. The Asiatic Society's article did not have index unfortunately reprint also does not have one. This has reduced its value as reference material. His hypothesis was accepted by many scholars including Dr. U.M. Daudpota and Dr. N.A. Baloch. His theories were systematically discarded by M.I.R. Khan in 1929 and then Pithawalla in 1959.

Accepting Raverty's findings Dr. Daudpotta thought that Janani a beautiful town of Soomras visited by Ibn Battutta was near Sann and Dr. N.A. Baloch considered it on a channel of the Indus leading to Eastern Nara in Sanghar and Mirpurkhas districts. I have used contour maps of Sindh to find depressions of the old courses of the Indus, Hakra and their branches and also arial photographs and have located Janani about two kms west of Warah town, with a village, Deh and an Inspection Bungalow of the same name called Junnanni. This is just an example of distortions created by his theories. In general Raverty's theories on courses of the rivers are not acceptable at all and so are his maps. To give clear picture of Nara-Hakra-Sarsuti bed I wrote an article. "Hakra or Sarsuti controversy, various versions of Scientists, Historians are Folk Iorists" in Jour. Sindhological Studies Winter 1986. It has been reprinted in J. Ancient Sindh in 1994. It gives the complete picture of the Sarsuti-Drishadvati-Gaghar-Hakri river and maps as they stood in 985.

Since 1942 from the findings of Sir Aurel Stein (Geographical Journal Vol. XCIX) it is known that Sarsuti-Hakra-Drishadvati started drying up around 2,000 BC, due to reduced rainfall, but now it is known that during Holocene (10,000 BC to now), there have been periods of moist and dry climate, which for Sindh were:

i)	Before 9,000 BC.	There was very dry climate.
ii)	9,000-8,500 BC.	The climate moved from very dry to beginning of low wet period, coinciding with hunting tribes moving each winter to the foot-hills of Sindh from Karachi to Sibi from the western hilly or cold areas i.e., from Iran, Afghanistan, Baluchistan and even the Central Asia.
iii)	8,500-7,500 BC.	Climate turned medium wet with hunter's trials on domestication of animals and crops.

iv)	7,500-4,500 BC.	Neolithic Revolution in Sindh based on rainfall of about 2 ½ times the present with 16-24 inches in the Central Sindh. Rise of Mehrgarh and other settlements from Dhadhar to Manchar lake.
v)	4,500-4,200 BC.	Medium wet period. Reduction in rainfall to 16 inches and construction of gabarbands in the Western Sindh.
vi)	4,100-3,600 BC.	Wet period. Increase in rainfall to about 24 inches. Establishment of Amri in the Indus plains.
vii)	3,500-3,000 BC.	Medium wet period rainfall about 14 inches. Movement of people to Indus Valley at Amri and Kot Dijji.
viii)	3,000-2,600 BC.	Wet period. Rainfall 24 inches in the Central Sindh. Kot-Dijjin Culture spread in the Sarsuti-Drishadvati-Hakra and the Indus river valleys.
ix)	2,500-2,000 BC.	Medium wet period, rainfall about 16 inches in the Central Sindh and Sarsuti-Hakra-Drishadvati and Indus Valleys, but agriculture and crops on preserved moisture left by inundation in autumn over-came problems leading to rise of the Indus Culture. There probably was rudimentary irrigation system too.
x)	2,000-1,300 BC.	Dry period. Rainfall probably less than the present.
xi)	1,300-900 BC.	Hyper-dry.

It was the aridity of 2,000-900 BC, that Hakra-Sarsuti-Drishadvati river dried up around 2,000 BC, or soon afterwards.

(For further details refer; M.H. Panhwar "Changing climate and its impact on history of Sindh, 17,000 BC to 1986").

Raverty goes on to prove that Sarsuti-Hakra was active in Ambala districts and Haryana in the historical times and therefore flourishing cities existed in the area. There is evidence of canals built by Firozshah Tughlaq, Akbar and Shah Jehan respectively in 1355, 1560 and 1635 AD, shown in three maps drawn by Abha Singh (In Irfan Habib, Ed. Researches in History of India Vol. I, Irrigating Haryana: The Pre Modern History of Western Yamuna Canal, OUP 1992, pp. 40-61). This articles and 3 maps with it make it clear that Chitang once a tributary of Ghaggar and ultimately Hakra was a dry river and Ferozshah's canal was to force water from the Yamuna into the Chitang river, which did get some rain water seasonally but not adequate to support the area and towns namely Nahan, Sadaura, Ladwa, Idri, Karnal Safedon, Dhartrat, Jind, Hansi, Hisar and Badhra. Akbar attempted to extend canal to Gohana, Jamalpur and Palam, south of Safedon. The serious period Little Ice Age (1550-1700 AD) reduced the waters level in Jamuna and during Shah Jehan's rule, all above settlements except Gohana and Jamalpur were abandoned.

Raverty's hypotenuses thus becomes inaccurate even historically.

Since the original maps of Raverty are not readily available and those available are damaged and faint, maps as traced by Pithawalla in "Historical Atlas of Sindh", 1937 are appended as a guide-line. My maps supper seed not only those of Raverty's but all other maps hither to drawn on the courses of the Indus and the Hakra-Sarsuti-Drishadvati rivers.

One of disadvantages of Raverty was that he was neither in South Asia, while the Great Trigonometircal Survey was being carried out by Survey of India, nor was he associated with of work done by the Archaeological Departments of India or its Western Circle at Bombay. Being out-side the main stream of historical-geography, he was apt to make mistakes. It seems that he was infuriated the most, by R.D. Oldhams article on courses of Jamuna and Sutlej in Journal Asiatic Society of Bengal 1886 and also because R.D. Oldham had supported the view of C.F. Oldham published in Calcutta Review in 1874, and so, in return Raverty turned out a most controversial article hither to produced on the subject.

However there is adequate historical material in the book to make it useful to the reader, specially if index of pronouns, geographical names and books referred is appended. I am enclosing maps of Raverty so that future readers of the book can have a look at them. They are mostly inaccurate. Present author has drawn maps of courses of Indus from 700-1843.

List of publications of Raverty.

Below is the list of 13 publications of Raverty collected from different sources. There may be some more.

1. An account of District of Peshawar, illustrated 1850.
2. A Pushto grammar 1850.
3. A treasures of Hindustani-English technical terms, 1859.
4. Pushto prose and poetical selections.
5. Pushto-English Dictionary.
6. Afghan poetry, 16th to 19th century, with English translation.
7. A. Esop's Fables in Pushto.
8. Translation of the Tabakat-i-Nasir, of Minhajuddin bin Sirajuddin i.e., a general history of Muhammadan dynasties in Asia, 810-1260 AD, 3 volumes, London 1881 Indian reprint was published in 1975. (This is an excellent translation).
9. Notes on Afghanistan and part of Beluchistan, London, 1880, 1881, 1883, and reprinted in one volume in 1888. Pakistan reprint was published in 1985 from Quetta.
10. Numerous articles on geography, history, and ethnology in the J. A.S.B., 1854-1905.
11. A History of Heart and its Dependencies and Annals of Khurasan from its conquest by the Muhammadans, and three other works on Eastern History.
12. The Mehran of Sindh and its tributaries, Geographical and Historical Study with 10 maps. Journal Asiatic Society of Bengal Vol-61, 1892, pp.155-508.
13. Rohri, Multan and Peshawar, Transcriptions Bom. Geog. Soc., Vol. IX, pp.5-49.

Of these Numbers, 8, 9, 10, 11, 12 and 13 have material on Sindh. Number (8) is an important source specially on Mongol raids on Delhi Sultanate and northern Sindh (Uch and Multan). In number (12) Rohri is described, which he visited on way to Multan during the second Sikh war.

Number (9) has many references to Sindh. It has not been possible to compile list of his articles published under Number (10) above as Journals of Asiatic Society of Bengal are rare in Pakistan.

My article that precedes will remove many mistakes of Raverty's interpretations of courses of Hakra, which he calls Mihran of Sindh.s