SPEECH OF M. H. PANHWAR AT SEMINAR ON RANIKOT.

- Who so ever built Ranikot fort or when they built it, will remain disputed, unless explored by Archaeologist, but it was never occupied and cannot be occupied in future this will remain undisputed. Climatic conditions of Sindh were not known to ancients. They neither had concepts nor had developed instruments to collect climatic data. All this came up in at end of 16th and early 17th century in Europe. Surprisingly Korean had developed rain gauge around 1400 AD, but it was not put to any scientific use. The British collected climatic data for each Taluka head quarters from 1904 onwards. For some cities climatic data were available from 1870s and Department of Meteorology, Government of India had issued a booklet "Climate and Indian Farmer" in 1945. That publication laid down information on frequency of five inches of rainfall in one day in different areas of undivided India. Further work on climate of Sindh by the present author showed that there can be possibility of 5 inches of rainfall twice in even 5 years in Ghorabari-Badin area, once in 5 years in Hyderabad-Mirpurkhas area once in 10 years in Sann-Sakrand-Nawabshah area, once in 20 years in Moro-Dadu-Johi area and once 33 years in Rohri - Jacobabad area. Dadu - Johi - Gaj area had more 5 inches rainfall three times in one day in past 50 years and the area, has seen flooding of Dadu, Johi and Sehwan Talukas in 1956, 1977 and 1994. This type of rainfall caused LBOD to breach in 2003 and flooded vast area. In the latter case it was 5 inch rainfall within a week in three districts, Nawabshah - Sanghar and Mirpurkhas and combined waters caused flood. This is known for past 50 years but none seems to be planning for it.
- 2. Now coming to Ranikot fort, it is close to Sann-Sakrand-Nawabshah and 5 inches rainfall can occur in one day, once in 10 years. The Ranikot Fort having circumference of 20.5 miles and nearly rectangular in shape will have an area of about 25 square miles within its boundaries i.e., 16,000 acres. Its three gates to south, west and north, allow rain-fed streams to bring additional water in side the fort. Maximum contribution is from Mohan Dhoro of Mohan Nai, catchment of which is some 50 years miles, i.e., twice as much as that of the fort itself and this water enters the fort at Mohan gate exactly apposite to Sann gate. The catchment of those rains fed rivers is total of more than 50 square miles, but needs to be verified. This makes total catchment of more than 32,000 acres and if all that rain passes through the main gate in 12 hours it would be 13,000 cosecs, almost one and half times that of Rohri canal at Khairpur and the same as Nara canal. To allow this water to pass, gates should have regulator gates bigger than Rohri canal and same as Nara canal. Such rains are occurring regularly 6-7 times each century and therefore Sann gate will be washed away if rebuilt from time to time. The same will be the case at Mohan gate, but it has not been verified. It seems that it was rebuilt a few times, only to frustrate the owners, within

shortest possible time. Time and rain waited for no man. The fort has remained unoccupied since its construction.

- 3. We have records Nawab Wali Muhammad Leghari, who got main gate repaired with strong steel hinges and when rains came, gates and steel gave away as if the latter was made with wax. This is just an example.
- 4. That fort was never occupied is clear from the fact that there are no old settlements inside the fort, no places of worship, no graveyards, no pottery shreds and in brief no information on any settlement except fort walls repaired and renovated according to weapon of war used over centuries.
- 5. Such fort though strategically important hide out, 36 miles (60 kms) to the west of the river Indus which flowed near Shahdadpur, with half of distance through hills and would be safe from any cavalry attack, as there is no water in the last 18 miles for animals to drink. Fort could not be safe heaven, due to periodic heavy rainfall floods, which destroyed its main gate. There are periodic changes made to protect fort from guns. Originally it was for bow and arrow offence and defence, next cross bow and then against guns and finally against muskets. These changes are systematically visible in periodic repairs.
- 6. Mr. Khursheed Hassan retired Director General Archaeology has written a book on "Forts of Pakistan" and he presented me a copy, yesterday on (February 25). It mentions a dome near the gate, similar to the one in a mosque at Giri near Taxila, built by the later Ghaznavids who ruled west part of Punjab from Lahore. The date can be 11th or 12th century. It is not inferred that peacock and buffalo engraved on it. Lion was emblem of Seljuks (12th 13th century) and buffalo could be symbol of Sindhi buffalo breeders (Jats of Southern Punjab or Meds of Sindh).
- 7. This only establishes antiquity of fort. My opinion is permission should be taken from Shaikh Khursheed Hassan to print 30 pages from his book on Sindh forts as that would also throw light on the other forts of Sindh. Some additions also show floral patterns, most probably added after 10th century. My previous thinking (1981) that fort belonged to Bactrian Greeks or Parthians is changeable on the ground that from 600 BC 400 AD, the rulers could not have been powerful enough to spend on such elaborate fort, as it was period of severe drought world over. There was favourable climate from 500 650 BC, the period of Rai Dynasty of Sindh. Rai rulers were Sudras (lowest caste in Hindu hierarchy), but were fair and just to public and such accepted as Rajputs (sons of kings). During their period a number of monumental stupas were also build and fort could pertain to that period, but this too is guess work. They were in conflict with Sassanians and may have thought of such defence, but nothing is sure.
- 8. My other comments are that in Quetta region, Miri means fortress and has nothing to do with Mirs of Sindh. Fossilised trees of fort and surroundings belong to 53-62 million years ago when Ranikot series of mountains were

- laid. In the fort British geologists Blanford and others lived and explored geology of Western Sindh between 1865 and 1879 and produced two monumental works namely "Geology of Western Sindh" by Blanford 1879 and Duncan and Sladen, Mem. Ind. Geol. Sur. 1871. They are useful even today.
- 9. Hyderabad cannot be considered as Nerunkot as most of city has been built in 20th century and no debris of any kind are found form the ground there. In the 8th century river flowed from Brahmanabad and one branch of it passed east of Tando Allahyar and another through present Fruit Research Institute Mirpurkhas. Hyderabad was at higher level than the other two and water could not be brought there from the river to Hyderabad. Ground water around the city of Hyderabad is brackish within 10 miles (16 kilometers) in each direction. Nerunkot may be at the foot of Ganjo Takar hills close to Khathar as Henry Cousins had suspected.
- 10. There is talk about conservation. Einstein had said; "Best is enemy of good", Conservation to improve old monuments is science in itself. Present renovation of Ranikot fort amounts to destroying it. Original stone is of dark brown colour, set in lime mortar. This stone is very hard and lime turns into stone as it ages. Tourism Development Corporation is restoring it with white Laki lime stone, which is softer and it is being set in cement mortar. Cement has life of about 100-150 years and then it turns into dry dust. Lime has indefinite life. Thus best restoration has become worse archaeologically. Restoration is not every body's job. It is special branch of archaeology.
- 11. G. M. Sayed had invited Col. Rashid, Hassamuddin Rashdi, Rabani, and Joyo Saheb and me and arranged our visit to the fort in February 1965. Then he followed it by involving others. In 1981 Seminar G. M. Sayed should have been invited, but sponsors did not thing it proper. In my speech on that occasion, I had mentioned of G. M. Sayed's initiative and knowledge of forts. Some speakers were not ready to hear his contribution.