Conclusion

*Archaeology* is an important source for the reconstruction of the human past of a region where written records of the ancient period are rarely available. When the written records started appearing even then the importance of Archaeology does not diminish and then these evidences are used for corroboration purpose.

Before and after the partition, the region of present study area and its adjoining areas (including Pakistan) were explored to know the archaeological potentialities. In the early decades of 19th century Lt. Col. Todd (1832); L.P. Tessitori (1916-19) an Italian scholar; Aurel Stein (1942); A. Ghosh (1950-53) and K.F. Dalal (1980) explored this area and reported some ancient sites like Kalibangan, Sothi, Nohar etc. R. C. Thakran (2005-06) also explored some sites and conducted excavations at Dabdi (Bhadra tehsil). Later Shinde (2008) piloted a random survey in search of Harappan sites along the Ghaggar basin. Unfortunately very little work has been published. This provoked the scholar in the archaeological studies of the area.

Present researcher undertook a village to village exploration work in the area under present study i.e. Hanumangarh district in order to collect the data for reconstruction of history of the region. During the course of explorations main emphasis was laid on the location of sites and their cultural assemblages. The antiquity of sites and chronology of cultural remains found on them has been decided on the basis of occurrence of well-known and dated ceramic industries. The estimation of the size of sites has been made on the basis of the area up to which pottery was found scattered. However, most of the sites are found under cultivation or under modern habitation.

As a result of this effort 574 sites were brought to light. Pottery and other associated finds of different cultures were collected from these sites to study the different aspects of the cultures. But in addition to this, effort has been made also to plug the major gap in previous works. Firstly, the earlier researchers have not given much detail about the location and size of the sites discovered by them. Secondly, some of the sites needed thorough investigation and as a consequence of this, a number of sites have yielded new cultural sequences not reported earlier. Possible efforts have been made to fulfill all the objectives of our research design and by incorporating them, the whole data of the thesis have been classified and discussed.
here in different chapters. Here, we are briefly summarising the main results of the various analyses attempted in the preceding chapters of the thesis.

As a result of the survey conducted in the region under review, a general picture of the overall culture sequence of the district, from the protohistoric down to the medieval times has now emerged. It has come to our notice that the frequency of sites in respect to the soil zones had been different during various cultural periods. The Alluvium plain always remained the most attracting place for the site selection because of its fertility factor. But here, there is a small area of alluvium soil and rest of the area pertains to the sandy soil and therefore, due to the low frequency of the alluvium soil (around 15%) in respect to the total area of our study region, the ancient people had to habitat in sandy area also. The other feature in the size and distribution pattern of sites is that sites away from river bed are smaller in comparison of sites along the river banks. Further, the discovery of settlements proved that the central part of the study region had been a stimulant to the growth of settlements both in number and size while its southern part in the constraints to the growth and expansion of settlements.

The earliest settlers, who belonged to the early farming community, inhabited this region in the beginning of third millennium BC. They have been identified as Early Harappans. The comparative study of the available data revealed that these people may have migrated to this region from Sind (Pakistan). The excavations at Kalibangan have presented a good picture of their life-style in the region our study. The Early Harappan settlement at Kalibangan revealed the concept of fortification. People of this culture introduced rectangular and square houses for the first time. The use of kiln fired bricks was attested to by a drain, the size of bricks being the same as that of sun baked bricks (ratio 1:2:3).

Kalibangan excavations have yielded some pottery from the lowest level of period IA which is akin to Hakra ware. The term 'Hakra ware' was coined by M.R. Mughal for early communities in Cholistan desert. Baror (Ganganagar district) has also yielded the same pottery in some quantity and the excavator has categorized it as Pre-Harappan i.e. Hakra ware. The scholars like R.S. Bisht and D.K. Chakarabarti have raised strong objection to the use of this term. Moreover, the ceramic assemblage of our study area also does not have affinities with that of described by Mughal in Cholistan region.
There are four different archaeological phases of the Early Harappan ceramic tradition namely Amari-Nal, Kot Diji, Damb Sadaat and Sothi-Siswal. The Sothi-Siswal ceramic tradition is the regional variant of the Early Harappan period in our study area which has broad similarities with Kot Diji ceramic assemblage. Flanged jars, flat lids for pots and the globular jar with a short vertical rim are important forms in both of the assemblages.

Out of the total Early Harappan sites 69% are between 0-4 hectares and 14% sites are between 5-9 hectares in size which indicates that this culture was largely a rural culture. Only 11% of the total sites are between 10-20 hectares, which shows the growth of the villages towards township. About 80% of total sites are found situated in the Drishadvati river basin. In the Ghaggar/Saraswati basin only 13% of total sites are located and 7% of total sites are positioned in Naival basin that shows this area was free from floods as no major river or big stream posed such problem.

The economy of this rural culture was mainly depended on agriculture. The remarkable discovery of a ploughed field at Kalibangan situated to the south-east of the settlement. A terracotta plough found from Banawali (Haryana) gives an idea about the farming technology during this period in the region.

Trade was also a part of their economy but at very limited scale. Bull figurines and terracotta toy-cart frames give an idea of transportation. Excavations at Kalibangan, Sothi, Dabdi and Dabliwas Chugta/Kamana have yielded many objects made of gold, silver, agate, lapis lazuli and Rohri chert while source of their raw material was not there. The presence of these objects in this area gives an idea of trade relations with the places where their raw material was available. These relations played an important role in the cultural intercourse between Early Harappan domains. It is said that around 2700 BCE, the settlement of Kalibangan was abandoned because of an earthquake and this is the earliest evidence of an earthquake, recorded in any archaeological excavation.

The cultural phase that follows the Early Harappan in the study area is represented by the mature phase of Harappan culture which is known as an urbanized phase of ancient India during protohistoric times. Only 15 sites have yielded the remains of this culture. Out of these only three sites (19.5%) namely Kalibangan, Soti Badi-VI and Karanpura-II have yielded classical Harappan evidence while 69% sites are without typical Harappan traits which may have continued with Early Harappan tradition. R.S.
Bisht explaining this phenomenon more precisely expresses that qualitative and quantitative presence of the classical Harappan elements was dependent on the socio-economic or political status of a given site. The total floor area occupied during this urbanized phase was 123 hec and the average size of settlement is 8.20 hec. Kalibangan is the only excavated site in the study area for providing dynamic details about this phase.

After the mature phase of the Harappan culture, the region has been represented by a deurbanized phase of Harappa culture which is the late phase of Harappan culture. During this phase there was an immense decrease in the settlements certainly due to unfavorable conditions which compelled them to migrate in the east in Sutlej-Yamuna divide, particularly in the parts of Haryana and western Uttar Pradesh. Only 7 settlements have been found relating to this phase and total floor area occupied was 28 hec. No sufficient remains of this phase are found on the surface of these sites. No site of this phase has been subjected for excavation so far and therefore, we are not in a position to discuss the transformation from the mature phase of Harappan period to the late Harappan phase in the region. Karanpura-II and Naival sites have Harappan and late Harappan occupations but due to lack of excavations, it is not proved that they have similar scenario as is found at Mitathal.

Only two sites have been found yielding the evidence of late Harappan and PGW, namely Naival and Ramsaranarayan-I. In the absence of excavations, it is not possible to say that these sites have the same evidence as recovered from Bhagwanpura, Dadheri, Kathpalon and Manda which revealed the overlapping of both cultures.

The fourth group who colonized the region after the late Harappans is represented by Painted Grey Ware using people. During the course of explorations only 8 settlements of Painted Grey Ware culture were found and all these settlements are located in the dry bed of Ghaggar. During the PGW period 88% settlements (7 sites) are located in less than 5 hec area. Only 1 site (12%) developed as big village category. The total floor area occupied during this period was 28 hec and average size of settlements was 4 hec. In adjoining area of Rajasthan, a number of PGW sites are found from the Ghaggar-Hakra basin in the north, and the eastern and northeastern parts of the state. In the Ghaggar valley there is a break between the late Harappan and PGW period settlements while in the other zone the evidence from Noh and Jodhpura reveals continuity from the
Ganeshwar-Jodhpura OCP to an unpainted black-and-red ware and then to the PGW levels.

Coming to the Historical period an enriched situation in general is attested. However, there is distinctive growth in the number of occupations. The development pattern of settlements shows that the research area under present study was thickly populated during this period. Out of 466 sites, 319 sites (56%) are below 5 hec in size which indicate that most of the settlements were rural; 74 sites (16%) are below 9 hec which fall in big village category; 49 (11%) settlements are of town category and 20 (4%) sites are categorized as city settlements. Only 4 (1%) settlements fall in large city category which developed as semi-urban and urban in the next phase of history. In the historical period most of the sites fall in the sandy area that shows the alluvium soil is not the essential factor for settlement due to new life style for which the people needed more space for their settlements as well as agriculture and domestic activities and therefore 63% population existed in the sandy zone. The current results show that settlements situated in alluvium plain, are bigger in size. The total floor area occupied during this period was 2069.9 hec but the average size of settlement is only 4.44 hec. The pattern of sites development shows that most of the settlements are very small in size which indicates short time occupation or camp site settlement. The arrival and migration of population is probably affected by the dryness of the rivers during the Early Harappan to Medieval period and later on by the warfare activities. The coins, terracotta and semi-precious stone beads, stone weight and querns, copper and iron objects etc. recovered from explorations and excavations give an idea about the advance economic life of this period.

The subsequent phase of colonization in the region is distinguished by the Medieval period. During the course of explorations 187 settlements yielded the evidence of Medieval period. Most of the bigger settlements in respect to size are found in the old river flood area. Out of total number of settlements 97 (56%) are below than 5 hec that shows short or rural occupations which supported the urbanized settlements categorized as towns (45 sites) and large city settlements (4 sites).

It is customary to draw a sequel to any research undertaken. In view of this one can see that district Hanumangarh had been inhabited by a large number of people from early Harappan phase. During subsequent phase, one observes that about a
quarter numbers of settlements deeply shows that urban centers had not maintained their rural colonies as well for crop production and livestock keeping. This indeed, reveals a more complex organizational strategy. Probably sustained horizontal excavations can reveal many significant features of the management techniques of mature Harappan society. The late Harappans show a sudden amalgamation and a flimsy occupation in this region. Painted Grey Ware arrives almost at once without any gap of time. This group, however, consolidates here and survives only in the river basins or in the bed of Saraswati. Finally the Historical and Medieval period again shows a proliferation of settlements almost all over the region.