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# Past and Present: Human - Environment Interaction in the Bampur Valley

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## Abstract

*Today, it would be impossible to study any settlement without a thorough investigation of its surrounding environment. All human groups influence their environment, both locally and on a wider scale. Domestication of plants and animal is one of the most important examples of human interference. The focal feature of the human environment is the site and the factors influencing the selection of a location that is dependent on features like proximity to water, strategic position and orientation and can be easily identified. This paper, is based on the results of the authors surveys (2002 and 2006) in the Bampur Valley and aims to discuss relationships between humans and the environment in the Valley which has not been systematically evaluated. The paper will focus on both present villages and ancient settlements around the Damir and Bampur Rivers. The above two different areas, which are located in the Bampur Valley, will also be compared with each other in order to examine interactions between people and environment since the above two areas differ environmentally and affected the people's livelihood differently.*

## Introduction

A study of relations between human society and its environment encompass and include all interactions between man and the environment. It tries to understand, how the human community has adapted to or changed its surrounding environment to suit its needs and how much the environment affects people forcing new innovations and techniques. Throughout the ages, man has been dependent on the environment and tried either to modify it to suit his needs or adapted his techniques to fulfil his requirements within the restricted opportunities. History has shown that civilizations have emerged within a suitable environment. Herodotus said that "Egypt was the gift of the Nile". Similarly, the Hilmand River (Raikes, 1983: 62) is thought to have had a fundamental role in the environment and economy of Sistan, and as Tosi states, "if Egypt was the gift of the Nile, Sistan was the gift of the Hilmand" (Tosi, 1969: 282). In this vein, the author would like to state that Bampur was the gift of the Bampur River.



Fig 1: The Bampur Valley, from Google Earth, July 2007

Interestingly, however, the environmental and ecological factors that create and develop an urban society (Lamberg-Karlovsky, 1997: 554) may also lead to its collapse, with the collapse often attributed to disasters in the same environment and ecology (Fuller and Boivin, 2002: 165-166). For instance, the environmental factors, such as availability of natural resources, climate and the behaviour of the river, were the main cause for the emergence and development of the Indus urbanization. In a multi-causal framework, these factors contradictorily may have caused the weakening and collapse of the Harappan Civilization (Thapar, 1993: 12). Similarly, according to the author environmental factors can also be proposed as the cause for the emergence, development and decline of the Third Millennium BC settlements in the Bampur Valley (Fig. 1) (Mortazavi, 2004), testifying to the close relation between the people and environment of the Bampur Valley during the third millennium BC.

### The Bronze Age Sites in the Bampur Valley

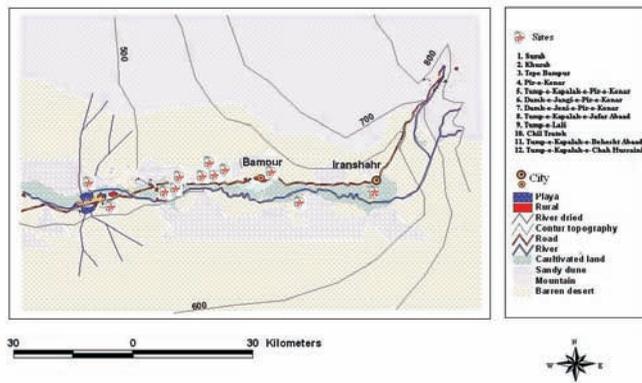
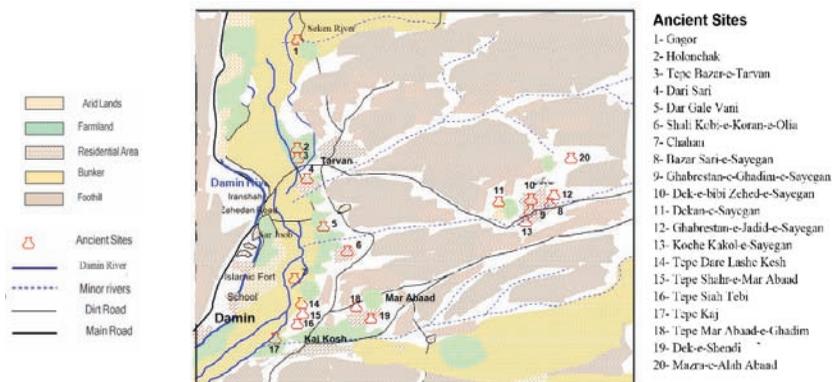


Fig 2. The Bronze Age Sites in the Bampur Valley

As mentioned this paper will study the Bronze Age settlements around the Damin and the Bampur Rivers (Fig 1). The two different areas, which are located in the Bampur Valley, have different environments. During the survey in July 2002, the author was able to survey 12 Bronze Age sites between Iranshahr and Chah Hussaini, around the Bampur River. These sites include Bampur, Khurab, Surab, Pir-e-Konar, Tump-e-Kapalak-e-Pir-e-Konar, Damk-e-Jangi-e-Pir-e-Konar, Damk-e-Jeni-e-Pir-e-Konar, Tump-e-Kapalak-e-Jafar Abaad, Tump-e-Lali-e-Jafar Abaad, Chil Tratok, Tump-e-Kapalak-e-Behesht Abaad, Tump-e-Kapalak-e-Chah Hussaini (Fig. 2) (Mortazavi, 2006: 56).



*Fig 3. The Bampur Valley, Sites discovered around the Damin River*

In January 2006, a new systematic survey was conducted by the author on the Damin River and 20 sites were found in an area of about 46 sq km. Of the total 20 sites, 19 were dated to the Third Millennium BC; and include: Tepe Gagor, Tepe Bazar-e-Tarvan, Dari Sari, Dar Gale Vani, Shali Kobi-e-Koran-e-Olia, Chahan, Bazar Sari-e-Sayegan, Ghabrestan-e-Ghadim-e-Sayegan, Dek-e-bibi Zehed-e-Sayegan, Dekan-e-Sayegan, Ghabrestan-e-Jadid-e-Sayegan, Koche Kakol-e-Sayegan, Tepe Dare Lashe Kesh, Tepe Shahr-e-Mar Abaad, Tepe Siah Tebi, Tepe Kaj, Tepe Mar Abaad-e-Ghadim, Dek-e-Shendi and Mazra-e-Alah Abaad (Fig. 3). Based on the ceramics, the 20<sup>th</sup> site Holonchak was occupied only during the Islamic Period (Mortazavi, 2007). In both the surveys, sites were identified and defined on the basis of the findings of structures, features or ceramic scatter of 10 sherds or more per square meter.

### **Human and Environment interaction:**

The Bampur valley interestingly has two completely different environments or ecological niches which were favoured for human settlements; the highlands located between Karvandar Mountain and Iranshahr; and the lowlands between Iranshahr and Jaz Murian Basin. The 2006 survey indicates that all the ancient sites were located close to the Damin River or along its tributaries. It seems that the river gets absorbed into its porous bed and re-appears irregularly like springs and Qanats (Fig. 4). This peculiar character of the Damin River restricts the agricultural yield around the river, while the rocky foothills surrounding the Damin River further limit the agricultural activity in the region supporting



*Fig 4.: Springs and Qanats, main irrigation system in the Bampur Valley*



*Fig 5.: Tepe Gagor, many sites were destroyed for housing or agricultural activities*

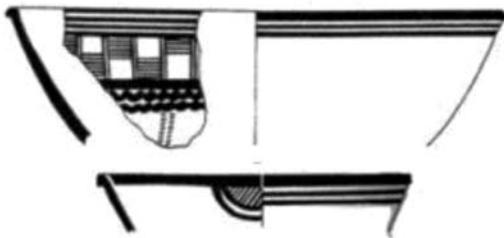
only small settlements both in the case of ancient sites and modern villages. It is interesting to note that the location of the modern settlements are not very far from the ancient site and in most cases people of this area have built on the ancient remains or have utilized the land for agricultural purpose restricting any detail study of the past settlement patterns and archaeological excavations (Fig. 5) (Mortazavi, 2007: 26). Lack of water and cultivable land has thus forced people to follow the local ancient livelihood based on animal husbandry and horticulture. Although there is a lack of archaeological investigation in the region as mentioned above, the size of the ancient settlements and the environmental factors indicate that people in this region had been engaged with animal husbandry and horticulture even during the Third Millennium BC.

The lowland area between Iranshahr and Jaz Murian Basin, along the Bampur River is favourable for agriculture especially in the middle and upper reaches of the Bampur River, particularly around Iranshahr. Like the Damin the Bampur River is also absorbed into the porous detritus deposits, and re-appears at irregular intervals in the form of springs lower down the valley towards Bampur (Fisher, 1968: 109). When Stein visited the area, the Bampur River flowed from Iranshahr to Chah Hussaini in the west before flowing underground (Stein, 1937: 105). However during the survey in July 2002, the riverbed was completely dry and the region west around Iranshahr was undergoing drought conditions. Since Qanats are frequently used to tap this underground water source, particularly as the surface flow has curious and erratic features (Fisher, 1968: 109); it is likely that today the cultivated area around Iranshahr and Bampur mostly depends on the Qanats rather than the regular flow of the river. When Stein visited the Bampur Valley, he noted that the cultivated area extended 3 km north of Iranshahr right up to Bampur and beyond without any break and the width of the cultivated area along the right bank of the river gradually increased to a maximum of about 2.5 km at the fort of Bampur, and went another 22.5 km near Iranshahr (Stein, 1937: 105). It is interesting to note that during the 2002 survey many sites were discovered far from the modern settlements and the sizes of the sites around the Bampur River (Lowland) are much bigger than those around the Damin River (Highland). The modern villages and cities also follow a similar pattern in both the areas. The lowlands of the Bampur River are favourable for agriculture and although the river is not free flowing, Qanats and wells are used to tap the underground water for irrigation.

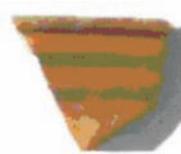
**Conclusion:**

In conclusion, it has been observed that the Bronze Age sites and modern villages around the Damir River are much smaller than those around the Bampur River as a result of the different environments in these two areas. Though both the communities along the Damir and the Bampur Rivers in the past and today were equipped with similar innovations and technical resources, the environment and the ecology played a restrictive role in the development of the region and the two regions behaved differently. It is quite possible that both the regions were occupied by the same community/cultural groups practicing different occupations depending upon the favourability and restrictions of the environment and the ecology. Many ceramic samples discovered from the both areas show close cultural commonality between the above areas, however their environments were completely different. The two areas which are located in the Bampur Valley functioned as intermediary between important sites in the Indus Valley, Oman, Shahr-i-Sokhta and the Iranian Plateau. These common functions interrelated these neighbouring areas; however, they experienced different human behaviours because of their different environment and occupations.

Two samples of chlorite vessels found from Bampur and one sample from Damir demonstrate that there was a direct trade link between Shahr-i-Sokhta in Sistan and the Bampur region of Baluchistan. (Kohl, 1977: 113). Chlorite vessels have provided further evidence of long distance trade (Lamberg-Karlovsky and Schmandt-Besserat, 1977: 123) and samples of chlorite from Bampur and Damir correspond well with the “intercultural style” (Kohl, 1977: 113) and were probably sourced from the metamorphic zone near Zahedan. Kohl (1977) assumed that the sources of the chlorites that were found at Shahr-i-Sokhta could be discovered in the metamorphic zone near Zahedan. He also assumed that craftsmen at Tepe Bampur received chlorites from the same zone (Kohl, 1977: 113).



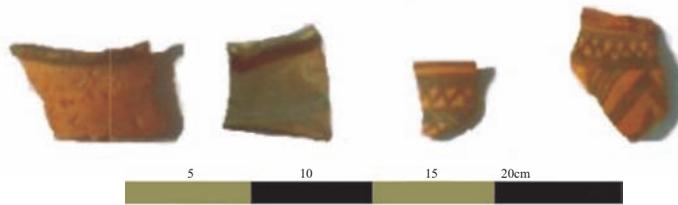
*Fig 6: Period IV, Tepe Bampur  
(After: De Cardi 1970: 296)  
Scale: Approximately 1/4*



*Fig 7: Period IV, Damir, discovered from survey 2002 (After: Mortazavi 2004: 306).*



Although Tosi (1974) identified Periods III-VI of the Bampur chronology at Damir, the 2002 survey found samples restricted to periods IV-VI of Bampur, further extending the sequence of the site. The main reason for this difference was the destruction of the mound in 1969 (Tosi 1974: 41) as concealed materials were identified in the debris. Decorated pottery of Period IV phase 3 with two black bands below the beaded rim has been discovered from Khurab by De Cardi (Fig 6.) (De Cardi 1970: 296). These types of decoration and beaded rim have also been observed in Damir in the 2002 survey (Fig 7) (Mortazavi 2004: 306).



**Fig 8:** *Period V, no.1: Tepe Bampur; no.2: Damin , discovered from survey 2002 (After: Mortazavi 2004: 286).*

Characteristic ceramic of the Period V, phase 1 style is a single chevron set between one or more horizontal lines (De Cardi 1970: 301), which was seen both at Tepe Bampur (Fig 8: no. 1) and Damin (Fig 8: no. 2). A small, thick-walled globular pot (Fig 9) (De Cardi 1970: 311) a type of jar. found at Damin (Fig 10), is another example of similarity between the two areas in period



**Fig 9:** *Period VI, Tepe Bampur (After: De Cardi 1970: 311)*

*Scale:  
Approximately 1/4*



**Fig 10:** *Period VI, Damin*

It is also important to note that both the regions in the Bampur Valley functioned as intermediaries between east and west; and north and south during the Bronze Age. In fact, the Bampur Valley connected the Sistan Basin and northern Iran through Damin and Karwandar to the Indus Plains (Mortazavi 2006: 55-56). Tosi believed that the Damin Valley was a corridor connecting the Bampur Valley with the Sistan Basin. Even today, one branch of the Zahedan-Khash-Irانشahr highway passes through this valley and he suggested that this valley performed the same function in the third millennium BC and linked the Sistan Basin in the north to the Bampur Valley in the south during the second half of the third millennium BC (Tosi, 1970: 10). Although environment of both areas in the Bampur Valley, including areas around the Damin and Bampur Rivers, were different, they were in close contact with each other. In spite of their different environment, ceramic studies of both areas show commonality between the two areas (Mortazavi 2004: 160-178; Mortazavi 2007: 108-251).

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