

# Archaeological Excavations at Tol-e Sangi in Fars Province, Iran

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## Introduction

Development of the pottery-making technology in Neolithic societies of different regions, or transition from aceramic to Ceramic Neolithic has always been an important topic of research for archaeologists. Needless to say, this innovation was associated with major social developments. Since the 1950s, a lot of discussion has evolved around the origins of Neolithic societies and their development (*e.g.* Vanden Berghe, 1951-1952: 54; 1953-1954; Fukai *et al.*, 1973; Sumner, 1972; 1977; Maeda, 1986; Alizadeh, 2004; 2006; Nishiaki, 2010a,b; Azizi Kharanaghi *et al.*, 2013; Weeks, 2006; 2013; Khanipour *et al.*, 2021). Taking into account the rather long history of the Neolithic period studies in this site, there remain some unanswered questions. The most important of which is the problem of its chronology. The beginning of the Fars Neolithic period in Iran is not certain yet, the fact that how, when and from where the inhabitants of Neolithic populations entered Fars is not fully clear yet as well (Alizadeh, 2004: 75).

Up to about a decade ago, the common wisdom was that the Mushki phase was the earliest one with pottery in the Neolithic of Fars. Pottery samples found from RahmatAbad excavation (Azizi Kharanaghi and Khanipour, 2014; Azizi Kharanaghi *et al.*, 2013; 2014) seem to have been produced before Mushki and they can be regarded as the earliest pottery production samples in Fars. On the top of the pre-pottery deposits at the site of Rahmat Abad, there have been so-called red plain potteries categorized as pre-Mushki style and dated back to 7000 to 6400 BC (Azizi Kharanaghi *et al.*, 2013; 2014). Tol-e Sangi was excavated specifically to explore this important period in the prehistory of Fars.

## Tol-e Sangi

Tol-e Sangi is located about 1 km to the south of Morghab town in Safashahr County on a Polvar river basin (Fig. 1). A large reservoir has been dug in the middle of the site for agricultural purposes (Fig. 2). As a result, over three meters of the middle of the site has been dug up and its deposits have been piled up on the southern part of the site. The surface of the site has been heavily disturbed due to the digging of this reservoir as well as other agricultural activities. The exact extent of archaeological deposits is, therefore, hard to discern. Five trenches were opened in different parts of the site.

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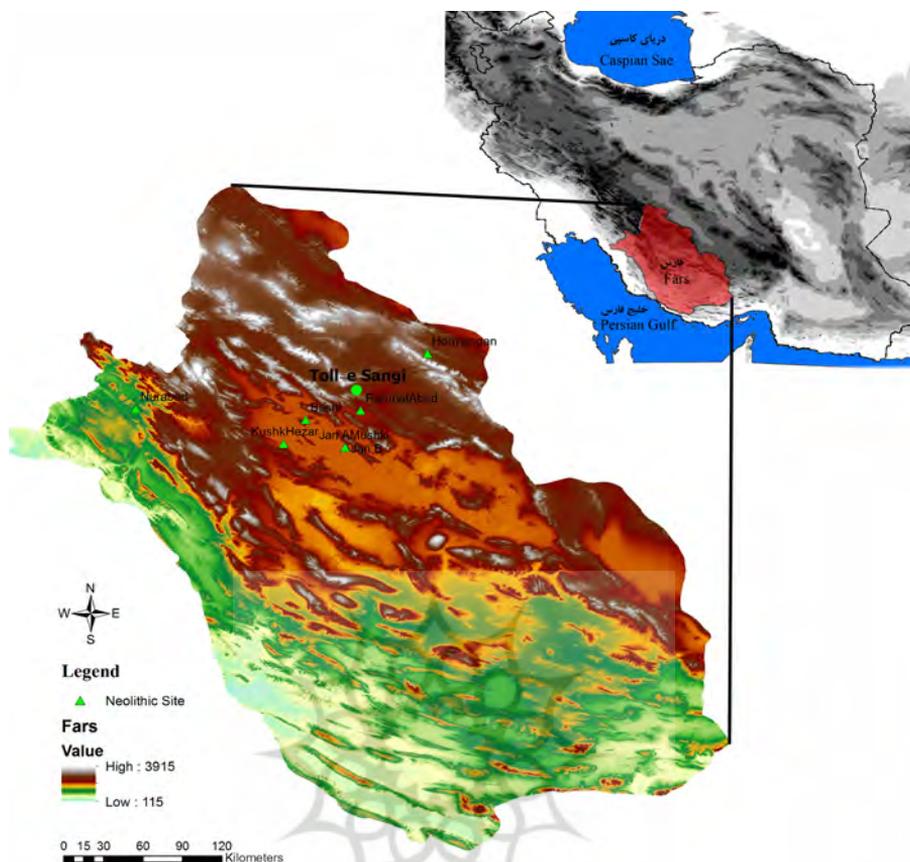


Fig. 1. Map Showing the Location of Tol-e Sangi

Trenches 1 and 2 reached the bedrock in less than 2m, indicating that there was a low outcrop in the east of the site which the occupation was built on it. Excavations at Trench 3 on the west wall of the reservoir exposed some five meters of archaeological deposits (Fig. 3), including Aceramic and Ceramic Neolithic periods. The discovery of stone and mud-brick architecture, painted floors, and, heating installations related to cooking all point to permanent settlement at the site. These factors make Tol-e Sangi one of the important-site for the late Aceramic and the initial Ceramic Neolithic in Iran.

### Findings

The small finds include stone artifacts, figurines, bone tools, beads, shells, clay and stone tokens. The potteries are generally red, some with burnish or slip. Apart from some sherds which have geometric designs over them, the majority of the potteries are plain (Fig. 4). They are all handmade and chaff-tempered. A comparison between the pottery from Tol-e Sangi and those from Ralmatabad suggests that the samples from Tol-e Sangi date back to the first half of the seventh millennium BC, thus could be considered the earliest pottery from Fars. This pottery had already been described



Fig. 2. General View of the Tole Sangi

as Formative Mushki. The Majority of lithic finds from this season include blades, bladelets, borers, geometric, cores, and debitage (Fig. 5). A considerable number of Obsidians has been found as well. The discovery of cores and debitage indicates that stone tools were made at the site. In addition to lithic, we also found bone tools (Fig. 6) such as awls, with heavy polish on surface in addition one side is sharpened and the other end bearing a hole. It is noteworthy that there are traces of red ochre on some of the grinding stone and pounders. Given the fact red color was used in plastering the floors, two functions for the stone pounders could be seen, one associated with preparation of food stuff (Fig. 7) and the other, for preparing red ochre for plastering the floors.

We also found a number of human and animal figurines. While animal figurines are rather naturalistic, the human figurines are exclusively abstract. One of the human figures is painted red (Fig. 8). Last but not the least, are shells and beads, both presumably used as personal ornaments. In the course of excavations we also found a number of clay and stone objects of spherical, round, conical and disc-shaped. Obviously, there has been many different interpretations of the function of these artifacts, e.g., personal ornaments, gaming apparatus, and accounting devices. We believe that the latter function is most likely. Other finds include pestles and pounding stones. Such stones are often associated with the beginning of agriculture and preparation of food by humans. They are an inseparable part of the prehistoric archaeology as assemblage associated with subsistence and food preparation activities. A close study of these artifacts would inform us with insights into spatial use, social organization and the role of women in ancient societies. The raw material used in making stone artifacts from this site has been limestone that undergoes the least amount of erosion during grinding grain or other preparation activities. Pestles are usually made from circular stones which lower part is irregular to fix then in the ground. Pounding tools are usually river cobbles used for pounding or grinding the grain that have left their trace on their surface.



Fig. 3. General View of the Trench 3



Fig. 4. Pottery of Tol-e Sangi

### Conclusion

Due to the evidence from recent excavation at Tol-e Sangi, Aceramic and Ceramic Neolithic periods have been revealed with potteries dated back to 7000 BC as the earliest known pottery style in Fars. The absence of any gaps between aceramic and ceramic periods suggest that the pre-pottery periods dated about the end of 8<sup>th</sup> millennium BC. Unfortunately, a large scale digging for reservoir disturbed Neolithic pottery deposits, but in the middle of reservoir about 2 meters of aceramic period deposit are preserved. Finding architectural structures, archaic pottery, and small finds in association with other features depict the importance of Tol-e Sangi as a key site for transitioning from pre-pottery to pottery Neolithic.



Fig. 5. Stone Tools



Fig. 6. A Bone Awl



Fig. 7. Grinding Stone

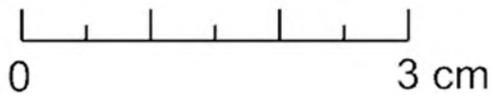


Fig. 8. Human Figure

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