The Dalma Settlements of Songhor and Koliyaei Plains, Central Zagros

Mohsen Zeynivand*,1, Hamid Hariryan2 and Mahmoud Heydarian3

1Department of Archaeology, Art University of Isfahan, Isfahan, Iran
2Department of Archaeology, Islamic Azad University, Central Branch, Tehran, Iran
3Department of Archaeology, University of Shahr-e-Kord, Shahr-e-Kord, Iran

(Received: 23 /10 /2012 ; Received in Revised form: 08 /12 /2012 ; Accepted: 20 /01 /2013 )

Although prehistoric periods (especially Chalcolithic) on the western side of the Central Zagros Mountain are fairly known, the Songhor and Koliyaei Plains have not been sufficiently investigated by western or Iranian archaeologists. In the course of the recent investigations during the 2002 and 2009 field seasons, thirty three chalcolithic sites, of which nine sites contain Dalma sherds, were identified. The above nine sites are located close to the water resources and most of them are located in the hill sides where pasture lands are accessible. Small size settlements testify that there have been small sedentary or semi-sedentary villages whose inhabitants could obtain their requirements by animal husbandry. The present paper aims to provide valuable information on this culture and examine its probable interaction with its neighboring regions such as Kangavar, Mahidasht, and south of Kurdistan.

Keywords: Central Zagros; Songhor and Koliyaei; Chalcolithic period; Dalma tradition; Pottery

Introduction

Firstly, the Dalma pottery tradition dated to the second half of the 5th millennium BC was known in some parts of northwestern Iran. This tradition then spread to parts of the Central Zagros and north-west of Central Iranian Plateau and remained in use until the first half of the 4th millennium BC (Hole 2011). Although a few Dalma sites, such as Seh Gabi (Young and Levine 1974), Soha chai (Rahimi Sarmakhi 2007), Kalanan (Saed Moucheshi et al. 2011), and Talvar (Motjerjem 2012) have been excavated thoroughly, the available reports and documents from the excavations and surveys show that the Dalma tradition has not been complex in terms of politics and economics. On the other side, Dalma widespread pottery tradition is considered as a reflection of eccentric divisions of an ethnic group with characteristics such as a unique language, distributed lineage system, and possibly a system of known faith or belief (Henrickson & Vitali 1987). Hence, a cultural homogeneity had existed over the above-mentioned parts of Iranian plateau during the middle Chalcolithic period. However, during recent years, some researchers suggest that cultural diversion had been more possible than an ethnic immigration (Hole 2011; Tonoike 2009: 170). Based on this, it could also be assumed that some of these potteries were brought to the area by nomads who had commercial relationships with rural areas (Tonoike 2009: 171-172).

Dalma traditions, which are known from the excavations at Dalma Tape (Hamlin 1975), were initially thought to be limited to some regions such as the Solduz Valley (Dyson and Young 1960), Seh Gabi, Godin, Siah Bid, Chogha Maran, and Tepe Kuh (Henrickson 1983 & 1985; Levine & young 1986) in the central Zagros Mountains along with parts of Northern Luristan. This tradition is also visible in some areas of Mesopotamia such as Jabal Hamarein and Kirkuk, which were all identified through excavations (See; Henrickson & Vitali 1987). Recently, many researches have argued that the span of this tradition is broader, and some of its significant traits have been discovered from excavations and surveys carried out on the northwestern borders of central Iranian Plateau (Majidzadeh 1981 & 1978; Aali 2008; Kazem Pour Esmati 2009; Khosravi et al 2009, Majidzadeh 2010), Islam Abad Plains (Abdi 2002), Bijar and Ghorveh (Saed Moucheshi 2011), Kamyanar (Nouri 2011), Sar Firouz Abad in Kermanshah (Heydari 2010;
Niknami 2010), Seimarreh Dam basin in southern Pishkuh of Luristan (Moghaddam et al 2008; Mohajeri Nejhad and Suraghi 2010). Additionally, a rich grouping of pottery were collected from 9 sites during archeological excavations at Songhor and the Koliyaei plains (Heydarian 2004; 2009). It should also be stated that this region is very important from an archeological point of view, since it is located in the middle of central Zagros where sites trapped in mount heights difficult to access, causing ignorance of the archaeological sites during 60’s and 70’s. This article attempts to show human activities and cultural interactions during the chalcolithic period.

Study Area

The Songhor region has an area of 2320 Km² and geographical coordinates of 47º 2’ to 47º54’ E and 34º 38’ to 35º 6’ N and is located in the North East of Kermanshah Province. (Khatib Shahidi et al 2012: 32). The region, is situated in south and southeast of Kurdistan province, West of Hamadan province, and north of Kangavar and Saheh cities, is also located 1750 m above the sea level (Fig. 1).

Morphologically, Songhor is situated in a mountainous area. In the northern and central parts, the ruggedness is west to north-west and east to south-east, and the southern and southwestern parts follow the main direction of the Zagros, that is north-west to south-east. The most significant plains of this area are Songhor and the Gavroud Plains. The Songhor Plain is located in the center of the region with an area of about 265 Km² extent and Gavroud in the northern part of the region, which covers an area of about 985 Km².

It seems important to state that Gavroud and Jamishan are permanent vital rivers in this geographical region. Gavroud and its smaller branches finally join Sirvan and then flow across Iran’s borders. Other streams join the basin of the Seymareh (the basin of upper Karkheh).

History of Research

Unlike many parts of the central Zagros, Songhor and the Koliyaei Plains have not received enough attention from Non-Iranian and Western Archaeologists for a long time. However, many years later, Heydarian conducted some archeological surveys for the first time at Songhor, resulting in the identification of 83 archeological sites Belonging to different prehistoric (Chalcolithic, Bronze and Iron Ages), Historical periods (Parthian and Sassanian), and the Islamic period (early and medieval).
Dalma Settlements

Through the above-mentioned investigations conducted on Songhor and Koliyaei regions (Heydarian 2004; 2009), Thirty-three chalcolithic sites of which nine sites contain Dalma potsherds were identified. From the above nine site discovered Dalma ceramics. The number of sites is an indication of population growth and, consequently, a development of settlements compared to preceding periods. It should be mentioned that only 3 sites (Khodaei, Sheikh-Jalil and Ab-Naz) include late Neolithic and early Chalcolithic remains.

The pattern of the establishment of Dalmatian sites in the region could be classified into two groups which are mostly based on the environmental factors such as natural and geographical status (ecological status), topographic factors (altitude and slope), distance from water resources, and their chronological sequences.

The first group includes six sites (SK. 042, 049, 063, 081, 190 and 199) having similar characteristics based on the previously-mentioned variables. For example, the altitude of these sites falls between 1800 to 2000 meters above the sea level. All are located in piedmonts providing easy access to pastures. Additionally, it is worth mentioning that most of them are located close to springs and creek sand is less than half a Hectare (size/scale). All sites are multi-period ones except for Tepe Varz (sk. 190) whose surface findings can only be attributed to the middle Chalcolithic period (Dalma pottery tradition). From a topographic point of view, all these six sites are located in northern and eastern parts of Gavroud plain and their slopes are toward south aspects which provide appropriate sunlight and denotes having the possibility of selecting a place for living if climatic variables are taken into account.

The second group consists of three sites namely Kalaavil (SK. 212), QolQole (SK. 209), and Nad Ali Beig (SK. 218) which are located at the altitude of 1650 to 1700 meters above the sea level. These three sites are placed in the middle of the plain, near the permanent rivers, among farm lands suitable for irrigational agriculture. Slopes of this land are very gentle and are located at the flattest parts of the plain. These sites expand about 1 Hectare and in few cases, even more (for example Nad Ali Beig is about 1.4 Hectares). Only Dalma potsherds were collected from these sites and there have been no signs of chronological sequences in these settlements; however, they are yet to be studied by conducting more survey sand stratigraphic soundage.

Pottery

Pottery found from the surveyed sites are mostly in simple red, painted or incised ones (Figs. 2-3). They are all hand-made but their cores are smoked and dark because of not being baked properly. Typologically, the shapes and motifs of these potteries are strikingly similar to those observed in DalmaTepe(Hamlin 1975), Seh Gabi (Levine & Young 1986; young & Levine 1974), Siah Bid (Henrickson 1983; 1985) and some northern sites in Pishkuh of Luristan (Goff 1971).

Among the samples, we found monochrome and bichrome painted pottery (Fig. 4; drawing Nos. 1, 3, 5; Fig. 5; drawing Nos.13 to 17, 21, 23, 25 to 28; Fig. 6; drawing No. 33) which are frequently porous (light) with coarse straw temper and have matt surface with dark red slip which sometimes turns to creamy color. The motifs on the outer surface of almost all vessels consist of geometric patterns. The vessels usually have wide openings orthogonal/straight openings, and semi-spherical bodies. Based on forms and motifs, these vessels (with black, red, and brown geometric patterns) are in accordance with monochrome painted Dalma potteries from lower layers of Seh Gabi B (young & Levine, 1974,
Fig. 2: Samples of potteries over sites of Songhor and Koliyaei plains (After: Heydarian 2009).

Fig. 3: Samples of potteries over sites of Songhor and Koliyaei plains (After: Heydarian 2009).
Another type of pottery, is the one with mottled motifs (Fig. 5 drawing Nos. 19, 20, 22, 24; Fig. 6 drawing No. 30). This pottery is different from the other two groups (monochrome and bichrome Dalma samples) and has dense motifs with distinctive mottles and simple geometric shapes without concrete patterns. They have generally been burnished after painting and their shapes are generally similar to those of monochrome Dalma vessels. These samples are comparable with potteries from Seh Gabi (Henrickson 1983, p. 267, fig. 59: 38. 1-4; p. 270, fig. 60: 42.1) and Dalma Tepe (Hamlin 1975, fig. 4: D).

Another type is pressed Dalma pottery. The surfaces of these shards are decorated by means of various methods. The motifs of these potteries include nail-incised (Fig. 6; drawing No. 32), fingertip-pressed motifs (Fig. 4:6, 8, 11, 12; Fig. 6: 29), and motifs formed by pinching (Fig. 4; drawing No. 2; Fig. 4; drawing No. 32). In term of shape, the vessels resemble painted Dalma potsherds, but have a surface with thick dark red or brown coat.
Some of this pottery have simply been covered with a thin layer of pottery mud by hand. The samples of these types of potteries could be compared with the similar instances in DalmaTepe (Hamlin 1975, p.125, fig. 8:c), Seh Gabi (Levine & Young 1986, p.24, fig. 2), Pishkhu of Luristan (Goff 1971, p.138, fig. 3: 32, 33, 35, 36,45), and Siah Bid (Levine & Young 1986, p.31, fig.13).

**Conclusion**

All we know about the development of Dalma culture and its tradition of pottery making are limited to northwest of Iran, which includes the regions of the Central Zagros such as Mahidasht and the Kangavar Plains; but, over the last two years, archeological research has determined a wider region for this tradition. Hence, publishing relevant research in this field will hopefully promote our information and provide opportunities to understand the methods of inter-regional interactions.

Songhor and the Koliyaei Plains have always been considered as a suitable landscape for human settlement, and it's because of their access to proper ecological resources such as pastures, proper farmlands, abundant water resources, and

---

*Fig. 5: Designs of some pottery samples of sites of Songhor and Koliyaei plains (After: Heydarian 2009).*
advantageous natural defensive walls. Most of the prehistoric sites of the Songhor Plain (especially with Dalma archaeological deposits) are located in the most appropriate places, rich of ecological conditions, so that they are still settled by people.

All sites are situated at the banks of the permanent-running Gavroud River and its origins or next to some springs and canals, which is an indication of the dependence of human life and his settlement on the most necessary ecological factor, i.e. water. All of these prehistoric sites have been formed in an under-100-meter distance from the springs and water ways which implies the dependence of settlements on water. Because some settlements in the region are located at an altitude of over 1800 m above sea level, and that they have severely cold conditions during Autumn and Winter, and also other factors previously mentioned, it is likely that some of the settlements (in the first group) have been associated with semi-nomadic societies with animal husbandry subsistence bases.

Lack of question-oriented and systemic research has weakened our knowledge about prehistoric cultures; besides, there is not enough information available on this subject. Moreover, no excavation or stratigraphy had been done at any prehistoric sites in Songhor and the Koliyaei Plains. Hence, excavation and stratigraphic studies at Tepe Khodayi (sk. 049), Sheikh Jalil (sk. 063), Tepe Varz (sk. 190), QolQole (sk. 209), and other similar sites are essential to understand the prehistoric cultures (especially Dalma-related sites) over this region as an intermediate area.

Acknowledgements

We would like to appreciate Amir Saed Mocheshi and Sajjad Alibaigi for reading over the paper. Also, the authors are grateful to Ardeshir Javanmardzadeh and Ramin Yashmi for reviewing and editing the translation.
References


Khosravi, Shokuh; Hamid Khatib Shahidi & Sajjad Ali Beigi.

Levine, Louis D & T. C. Young Jr.

Majidzadeh, Yousef.


Moghaddam, Abbas; Ardashir Javannardzade; Shahram Abdolvand and Hamid Ghorbani.

Mohajeri Nejhad, Abdolreza & Nematollah Soraghi.

Motarjem, Abbas.

Mousavi Kohpar, Seyed Mehdi & Mahmood Heydarian.

Niknami, Kamal-Aldin.

Nouri, Nader.

Rahimi Sarakhni, Roqayeh.

Saed Moucheshi, Amir.

Saed Moucheshi, Amir; K. Niknami; M. Mashkur; H. Fazeli Nashli and B. Firouzmandi Shirejin.

Tonoike, Yukiko.
2009 Beyond Style: Petrographic Analysis of Dalma Ceramics in two Regions of Iran. New Haven: Yale University, Department of Anthropology.

Jr. Young, T.C & Levine, L.D.