

Ceramic Industries of Dwarka

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Dwarka (22°15'N, 69°E) and Bet Dwarka island (22°30'N, 68°55'E) are situated on the west coast in Jamnagar District of Gujarat State. Offshore excavations were undertaken by the Marine Archaeology Unit of National Institute of Oceanography, Goa, from 1981 to 1989. Before undertaking offshore exploration a systematic excavation on land in the forecourt of the Temple of Dwarkadhish in 1979-80 had yielded ceramic wares of the Early Historical and Protohistoric periods as indicated by the Lustrous Red Ware and other artifacts recovered from stratified deposits which are already described by the excavator (IAR 1979-80). The offshore excavation by Rao yielded a seal, chert blades and protohistoric pottery.

This paper gives a brief description of the ceramic wares from the onshore and offshore excavations from 1981 through 1989.

Thermoluminescence dates of pottery from Bet Dwarka excavation arrived at by the Physical Research Laboratory Ahmedabad are 3520 BP for Period I (Protohistoric) and 1800-2000 BP for Period II (Early Historical).

PERIOD I

The pottery of this period comprises of the Red Ware, Grey Ware, Lustrous Red Ware and Black Ware, all of which are sturdy and made of fine clay. The sherds recovered from the sea bed and intertidal zone are wave rolled and have a pitted surface. They have lost all evidence of surface treatment including paintings.

A. Red ware

Sturdy vessels with a reddish core

and made of a fine and well levigated clay are fired and emit a metallic sound when struck. Except a few miniature vessels large storage jars which are hand-made all the vessels, are wheel-turned, and a majority of them are treated with a red ochre slip or wash.

The main shapes in this ware are storage jars, bowls, goblets, dish and dish-on-stand. Among the jars some have a heavy beaded rim others a wide mouth or a jar with splayed rim and bulbous body. A high-necked jar also occurs in this ware. Bowls have thick sides and a sharp rim. The occurrence of straight sided bowls and those with everted beaded rim is significant as they are assignable to late levels of Late Harappan period. A few incurved bowls, carinated dishes and sherds of perforated jar are survivals of the earlier period just as the chert blades are. Basin with beaded and everted rim and flanged shoulder as well as goblets with a flat base and thick tapering sides are rare occurrences.

B. Grey Ware :

A grey ware of fine fabric occurs in a very small quantity at Bet Dwarka. It is noticed at Rangpur IIB, IIC, Mohenjo-daro and Kalibangan II (Rao 1985, 391). Its grey colour which occasionally deepens into black is attributed to the use of carbonaceous matter. It may also be due to firing under reducing conditions. The texture of the vessels is homogenous and the surface is well burnished. The only type of ware in this category is a bowl.

C. Lustrous Red Ware :

Vessels with a bright red lustrous surface and compact red core are found in

a medium or thin fabric. Though the clay used in the manufacture is not well levigated and shows impurities, the surface was treated with a deep red slip. This is then rubbed into the fabric of the vessel with hard leather in order to obtain a shining red colour. The bowl and jar are prominent types of ware, which is a diagnostic feature of Rangpur IIC - III.

PERIOD II

In this period the pottery comprises of Red Slipped Ware, Red Polished Ware, Coarse Red Ware, Grey Ware and the Amphora Ware.

Imperfect firing in some cases is revealed by smoky core in the section. Some are however well-fired to a high temperature as they give a ringing sound when dropped on a hard surface.

The pottery is mostly wheel-turned and the pots with a bulbous or carinated body are first turned on a wheel and after some drying the body was beaten to the required shape without touching the rim or the neck.

The decorations are confined to shoulder portions and rims of pots. Painted decorations which appear only on the Red Ware are generally bands and sometimes arches on matt slipped or burnished slip surface. Incised impression decorations also appear on the Red Ware.

A. Slipped Red Ware

This ware has its outer surface treated with a red slip which is not burnished.

B. Coarse Red Ware

In this category of ware the surface is not at all treated either by way of slip or burnishing. The clay used, the technique of pottery and method of firing are similar to those of Slipped Ware.

C. Painted Red Ware

In this case generally the painting appears on a matt red surface, but sherds with paintings executed on the burnished surface are lacking.

D. Amphora Ware

This type of ware is thick, gritty and compact in appearance and has a coarse surface. This ware was mainly used for exporting wine and olive oil from the Roman Empire. This is a solitary shoulder part of the amphora from Bet Dwarka. Traces of the handles can be seen.

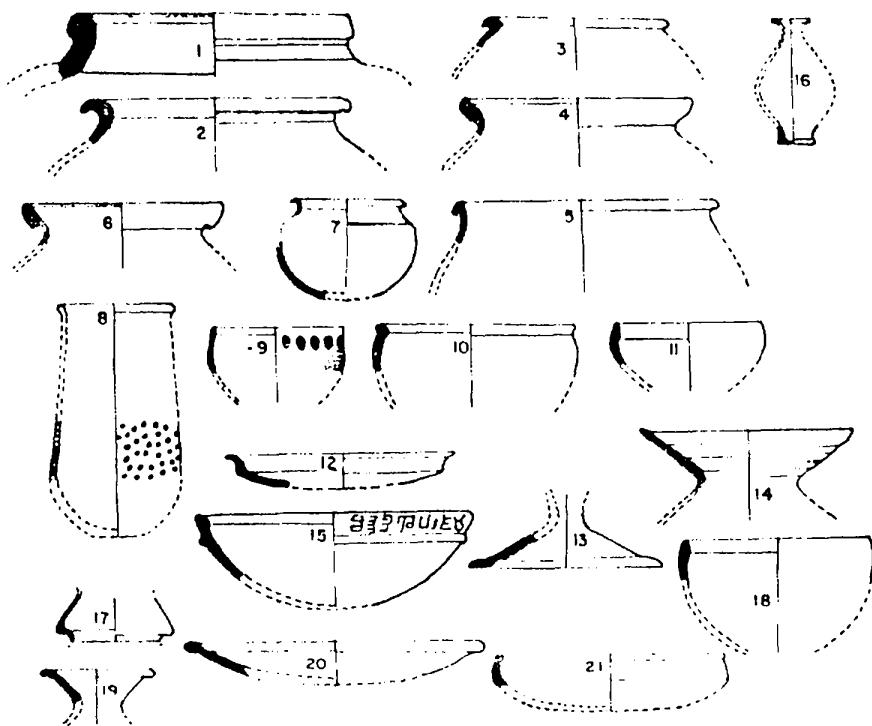
Pottery Description

PERIOD - I

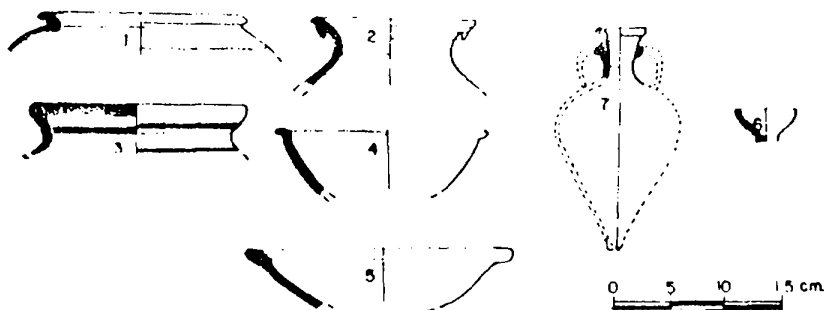
Red Ware

1. Thick storage jar with a raised neck, beaded rim and bulbous body, a raised band on the neck, well fired, coarse fabric. BDK II-88 (Compare with RGP IIB, type 133).
2. Jar with a bulbous body and sharp projected rim, well fired and coarse fabric. BDK II-85 (Compare with RGP IIA, type 3).
3. Jar with a wide mouth and splayed beaded rim, well fired and fine fabric. BDK VI-88 (Compare with RGP III, type 130).
4. Medium thickness jar with a splayed beaded rim, grooved interior and flat topped, well fired and medium fabric. BDK VI-85 (Compare with RGP IIC, type 24).
5. Jar with a beaked rim and raised neck, well fired and medium fabric. BDK II-85 (Compare with RGP IIB, type 12).

Period I



Period II



6. Jar with a raised neck and broad beaded undercut rim, red slip, well fired and medium fabric. BDK II-85.
7. Jar with a flaring mouth, carinated shoulder with a groove and round base, well fired and fine fabric. BDK II-88 (Compare with RGP IIA, type 2).
8. Body part of a perforated jar with a medium thickness, well fired medium fabric. BDK I-85.

9. Bowl with a sharp and everted rim, blunt carinated shoulder, red slip and painted in chocolate colour with roundels, well fired and fine fabric. BDK VIB-87 (Compare with RGP IIC, type 10).

10. Bowl with a projected beaded rim and slightly convex sides, well fired and medium fabric. BDK VI-87 (Compare with RGP IIB, type 23).

11. Bowl with an incurved bevelled rim and grooved exterior, well fired and fine fabric. BDK II-88 (Compare with RGP III, type 86).

12. Shallow dish with a projected rim and prominent carinated shoulder, ill fired and coarse fabric. BDK II-85 (Compare with RGP IIA, type 67).

13. Base of a dish-on-stand with a beaded edge, well fired and medium fabric. BDK VI-85 (Compare with RGP IIB, type 37).

14. Dish of a dish-on-stand with a sharp rim and corrugated interior. Broken stand part is visible, well fired and medium fabric. BDK II-85 (Compare with RGP IIA, type 77).

15. Basin with a beaded rim, flanged sholder, well fired and coarse fabric. BDK II-85.

16. Goblet with a flat base and thick tapering sides, well fired and medium fabric. BDK II-88 (Compare with RGP IIA, type 83).

17. Body portion of a miniature vessel, carinated shoulder, ill fired and medium fabric. BDK VI-85.

Grey Ware

18. Convex sided bowl of medium thickness with a slightly thick rim, well fired and fine fabric. BDK VI-85 (Compare with RGP IIA, type 50).

Lustrous Red Ware

19. High necked jar with a beaded rim. Centre of the section is smoky and lustrous red surface. Ill fired and

medium fabric. DWK-3.

20. Shallow dish with a beaded rim, lustrous red surface, a groove on interior, thick section. Ill fired and coarse fabric. DWK-3.

PERIOD - II

Slipped Red Ware

1. Storage jar with a flared rim and bulbous body, short neck, red slip, ill fired and coarse fabric. BDK I-88.

2. High-necked jar of medium thickness with out-turned and deep undercut rim, concave neck, red slip, well fired and medium fabric. BDK II-85.

Painted Red Ware :

3. High-necked jar with a beaded rim having black bands on both the sides and some vertical lines also on the shoulder, well fired and coarse fabric. BDK VI-85.

Coarse Red Ware

4. Bowl with a nail-headed rim ill fired and medium fabric. BDK II-85.

5. Convex-sided bowl with a sharp rim and footed base, inside a depression on the base. II-85.

6. Deep dish with a beaded rim, well fired and medium fabric. BDK II-85.

Amphora Ware

7. Amphora with straight sides and beaded rim, broken handle, well fired and medium fabric. BDK II-85.

References

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3. Indian Archaeology 1979-80. A Review pp 24-29, Archaeological Survey of India, New Delhi 1983.