Traditional clay pottery of Odisha, India

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Pottery making is an important event of past. It has marked the beginning of the revolution in Neolithic period in human society. It all started with mud that indicates the emergence of civilization leading to development of culture. Pottery was introduced from different civilizations and was accepted, developed, changed and adapted. Few of the traditional communities in the world still maintain this tradition as their occupation. The present paper discusses the pottery making process and related activities in rural areas of Bhadrak district of Odisha, India. The field survey was conducted during the year 2015-2017 to access the present status of this unique clay-based craft as well as the condition of the artisans involved in this craft making. The information on pottery technique was obtained through semi-structured questionnaires, complemented by free interviews and informal conversations with 79 artisans. The result revealed that making artifacts from clay is exclusively the hand work of rural Kumbhara community. Most of these artisans are marginal farmers while making such craft is their primary occupation. They collect the raw material, i.e., clay from the nearby field, river bed or shallow land, process it and make varieties of attractive craft items for traditional domestic use as well as in socio-religious rituals. The existing conditions of this folk craft as well as the artisans were analysed. Some remedial measures are suggested to save this endangered craft from oblivion.

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Pottery is defined as 'clay that has been fashioned into a desired shape and then dried to reduce its water content before being fired or baked to fix its form¹. The artisans living in the traditional societies are normally influenced by their environment as well as by their myths, legends, rituals, ceremonies, festivals, social organizations and cultural norms which are reflected in their creations. As a result, each culturally

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characteristics of its own in the field of creative art and craft glorifying the heritage of that locality²⁻⁶. Pottery is one such product of man's imagination and creativity and one of the most useful rural handicrafts of India produced from the clay and water. It is widely used for cooking, storage of foods, liquid, dry goods and in religious rituals. The origin and use of pottery has been linked to the advent of agriculture during Neolithic period, and the pottery technology at that time was crude, fragile and unscientific. Firing of

pottery in the kiln, and invention of the potter's wheel in Mesopotamia between 6000 and 4000 BC, opened a new era in the pottery technology which has reached its peak during Harappan civilization. After the discovery of pottery there was series of revolutionary changes found to occur at various period of time. The changes are found in terms of the technique of production and also with the art forms. Working on

Ruzmin (2006)' concluded that the earliest technology for making food containers of fired clay appeared in East Asia concurrently in three separate regions, southern China, the Japanese islands, and the Russian far East. Baoretto et al. (2009)⁸ and Wu et al. (2012)⁹ have critically reviewed the origin of pottery technology. They stated that the pottery at Xianrendong and Yuchanyan cave of south China is not only earliest in East Asia, but also the world. The pottery at both of these caves is earliest by over a millennium or more to previously available data from the Japanese islands and the Russian far East.

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The artisans engaged in the manufacture of earthenware are variously known as Kumbhara, Kumbhakar or Kumor. The Kumbhara constitute the potter caste throughout India. Etymologically the word *Kumbhakara* is derived from Sanskrit *Kumbha*; it means those who give shape of '*Kumbha*' (pot). Pottery brings economic opportunity and livelihood to many rural folks. Of course, many scholars have provided information on different aspects of Indian potters and potteries ¹⁰⁻²⁶, while any comprehensive and exclusive study on this aspect is yet to be done in Odisha²⁵ and no report from Bhadrak district. The present study aims to collect, record and document this age-old traditional practice in rural areas of

Bhadrak district of Odisha. The study also emphasizes the present and the future status of the different pottery products, their utilization, and the economic status of the particular community engaged in production of this inherent handicraft.

Methodology Study site

Bhadrak district (20°43′–21°13′N and 86°6′–87°E) is located in Northeast Odisha. It spreads over 2505 sq. km having 1.507 million inhabitants (2011 Census). Four other districts namely Balasore, Kendrapara, Jajpur and Koenjhar surround Bhadrak district while a part is bounded by the Bay of Bengal (Fig. 1). The district

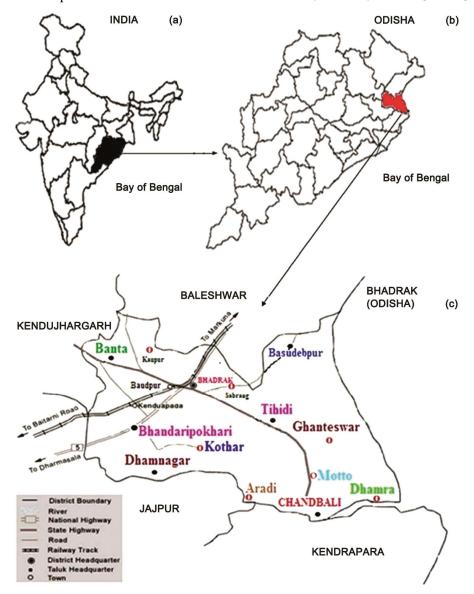


Fig. 1 — (A) Location of Odisha state in the eastern region of India (B) map of the Odisha state showing Bhadrak district and (C) study area showing different blocks of the Bhadrak district.

covers about 1.61% of the total land area of the state and contributes 3.59% of the state's population. Most of its people live in villages and are engaged in agricultural practices as their primary occupation. Being situated in close proximity to Bay of Bengal, the district is characterized by occasional earth tremors, thunder storms in the rains and dust storms in April and May²⁷.

Data Collection

The present survey was carried out during December 2015 to November 2017 in seven blocks (i.e., Basudevpur, Bhadrak, Bhandaripokhari, Bonth, Chandbali, Dhamnagar and Tihidi) of the Bhadrak district, Odisha, India, where 79 informants from different villages were interviewed. The information on pottery technique was obtained through semistructured questionnaires, complemented by free interviews and informal conversations²⁸⁻³⁰. The key informants in the study were elderly traditional clay pot makers, and the selection process was based on the experience and current practices in pottery. The interviews were carried out individually as well as in groups with members of the local population in the colloquial language for each of the village visited. Information was collected from all aspects of pottery technology (selection of clay, collection of material, processing, manufacturing sequence and techniques). During the field survey- aims, methods, anticipated benefits of the study were adequately informed to the informants and due consent has been taken from the local people in this regard. Consequently, a direct study of clay items was carried out, their local names and use if any was collected. Multifarious products from clay were grouped according to their use in domestic as well as socio-cultural rituals. The data gathered were analyzed, interpreted and translated in relation to the objective of the study.

Results and discussion

Raw material and manufacturing sequence

The raw materials, clay, for making pottery were procured from natural resources i.e., from river bed, shallow land or uncultivated fields and stored. The clay chunks were beaten with the help of a wooden mallet to convert them into clay powder. During this process pebbles, fine gravels, roots and other impedimental materials were removed. Clay powder is mixed with required amount of sand (3:1) ratio, water and kneaded until soft clay dough is acquired. Kneading by hands and feet is important process to increase the elasticity of the clay. Clay dough is

stored in a moist free place. The techniques primarily used to give a definite form are hand moulding and wheel throwing. Hand moulding is the earliest method used for creating many forms from clay. Earthenware can be constructed by hand from coils of clay, combining flat slabs of clay or pinching solid balls of clay or some combinations of these, which are then dried and fired. Making pottery on the wheel seems to be the most recognizable technique. The circular motion of the wheel helps to create a round form at a speed. Wheel is rotated in briskly to give it a circular momentum. Clay dough is placed at the center of the turning wheel and water is sprinkled to make the clay wet. As the wheel rotates manually, the craftsman starts to shape the clay into a desired form and the finished product is cut and separated from the wheel with the help of a thread (Fig. 2a-j). The shaped articles are dried in direct sunlight and then fired in a kiln (Fig. 2k). These were then covered with dry wood, cow dung cake, dried rice straw and husk.

Description of objects and uses

The potters prepare different types of vessels, pots, and domestic objects according to the demand. People use these for cooking food, storing water, religious, ceremonial and smoking purposes. The price of the articles depends upon its size and season. The names of earthen objects with their description and use is depicted in Table 1 (Fig. 3a-l; Fig. 4 a-i) are as follows:

Pottery is one of the most enduring materials known to mankind and had a significant impact on prehistoric people's lifestyle and subsistence^{31,32}. It is widely accepted that the pottery was a hunter-gatherer innovation that first emerged in East Asia between 20,000 and 12,000 calibrated years before present⁹, towards the end of the Late Pleistocene epoch³³. It is the oldest traditional handicraft and used in virtually all cultures^{7-9, 34-36}. Significant amount of broken as well as intact clay and terracotta materials has been found in the Harappan period settlements where large number of burials has been excavated including the pot burial²². Pottery recovered through excavations from different states of India like Madhya Pradesh, Maharashtra, Rajasthan, Bihar, West Bengal, Haryana and Odisha provide information on pottery and highlight on many aspects of the variable cultural periods from Neolithic to early historic period ³⁷⁻⁴⁰. The people of rural India still make pottery items as means of their living and as per the requirement of the society ^{21, 22}.

Table 1 — Earthen objects with their description and uses in Bhadrak district of Odisha

Name of the earthen objects Description and uses

Shrines The earthen horses are worshiped along with village deities.

Handi A spacious pitcher is used for storing as well as religious purposes.

Surahee An earthen vessel with lid is used for storing water.

Kalasi An earthen vessel is used for storing water.

Palama A flat bowl-shaped saucer is used for cooking purpose.

Chula A small earthen portable oven with a mouth and three upper stands is used for cooking purpose.

Pana and chuna dani A flat earthen vessel is used in betel shop for storing betel and lime.

Ash remover The ash of the earthen oven is removed by a flat earthen remover with a long handle.

Jhuna dani An earthen container with handle is used during worship for emission of scented smoke.

Dipa An earthen lamp is used for religious purposes for lightning.

Kumpi A close vessel with a small opening on the top is used for saving money (Coins) particularly by the children.

Small kalasha An earthen pitcher is used for religious purposes.

Chuli mouth An open ring is used in the front of the earthen oven (colloquially called chuli).

Tulasi Chaura An earthen podium on which Holy basil plant is planted.

Jahala A large earthen vessel with wide mouth is used for domestic animal feeding as well as for moistening of paddy.

Large pot with lid A large earthen pot with an opening is used for storing rice grain.

Kua Nanda Earthen rings are placed one above the other in definite groves to make the shallow wells.

Chilam A cylindrical pipe with a large opening in the front and a small opening in the back is used for smoking.

Tabala and Mrudanga Earthen instruments are used for musical purposes.

Chudi Earthen bangles are used particularly by married woman.



Fig. 2 — (a-j). Process of clay pottery making by the artisan (k). Sun drying (l). Firing in kiln



Fig. 3 — Various products of clay pottery. (a) Earthen horse (b) Handi (c) Surahee with a lid (d) Kalasi (e) Palama (f) Chula (g) Pana and chuna dani (h) Ash remover from earthen chuli (i) Jhuna dani (j) Dipa (k) Kumpi (l) Small kalash

In the present study, it became evident that the potters of Bhadrak district of Odisha practise this ancient craft making following the age-old process inherited from their ancestors. Each potter or Kumbhar has the skill to design a child's toy as well as sculpt giant figurines. They collect the raw material i.e., clay and sand available in the nearby river beds. shallow land or uncultivated fields. Availability and proper selection of raw material is one of the important aspects in pottery that considerably influence the production 41, 42. The fuels for kiln they use are cow dung cake, rice straw, husk and little plant material collecting from the surrounding. Similar practice is followed in other parts of the country⁴³⁻⁴⁵. The variety of pottery articles produced by the potters of Bhadrak district is comparable with the studies of Duray (2008)²¹, Gupta (2008)²², Sikdar & Chaudhuri (2015)²³, Hussain & Naik (2015)⁴³ and Thakuria (2017)⁴⁶. The potter community of the said district prepares blackish grey coloured items in close klin with long fire chambers at the base. The colour of the items of course depends on the choice and liking

of the local populace and prospective buyers. It is in contrast to the method in western parts of Odisha where the potters follow open firing technique, use more amount of wood in firing the klin and make red or reddish yellow coloured items^{25, 43}. The artisans of Bhadrak district make very few decorative items of pottery except like Tulasi Chaura, adorned with geometrical lines and few small figurations. No artificial colour is used because the people of the area do not like coloured pottery for the ritual and religious practices (Fig. 4m-o). It is also observed that when the male and female artisans are engaged in the production of pottery items, male members play major role in the process. It is noteworthy to mention that male members exclusively engaged in wheel operation which needs more physical labour, expertise, skill and tenacity to make different pottery items⁴⁷. Of course, the female assist the male members in all possible stages of pottery making. It is unlike in some pottery community in other parts of the country where both the genders contribute and share equally in making pottery items⁴⁸.



Fig. 4 — Various products of pottery, marketing and use in socio-religious rituals (a) Chuli mouth (b) Tulasi chaura (c) Jahala (d) Large pot with lid (e) Kua Nanda (f) Chilam (g-i) Musical instruments (j) Coloured bangles and other pottery items (k-l) Marketing of pottery products (m-o) Use of pottery items in socio-religious rituals.

Now pottery art have suffered a setback due to modernization that brought in plastic, aluminum, iron and ore products used for various household chores. Unfortunately, pottery in many parts of India especially Odisha is yet to fulfill with the modern needs of people like interior decoration, as cookery and serving wares etc. It is however noteworthy to comment that traditional pottery art has survived and

still relevant to people's need in spite of modernization. The study revealed that, potters earn a meagre rupee 150-200/- per day as return due to lack of proper exposure, sponsorship and marketing of their products (Fig. 4j-l). Another important aspect of this indigenous craft is that, the illiterate artisans involved in this craft making are in unorganized rural sector and have no cooperative society for proper

marketing and also not aware of the laws concerning modern trade and commerce to protect their design and technology. As a result of which, their traditional knowledge, skill and practice of creating such attractive craft items with intricate design and novelty is now vulnerable. Even though, there are some training programmes going on to train rural artisans on pottery by Central as well as State government (Khadi and Village Industry Board) in Odisha, due to lack of awareness the artisans of the said district are unable to avail such facilities to modernize their pottery technique. well as the utility of the clay-based pottery items in daily lives of the people of Bhadrak district, Odisha. It also focuses on the condition of the artisans including their creative skill in making those products. Hence, it is imperative to focus on conservation of this traditional craft and craftsman by providing them modern training with technology, financial assistance to develop their infrastructure as well as proper marketing of their products which could save this unique but dying craft from oblivion.

Conclusion

The results of the study indicate the importance as well as the utility of the clay-based pottery items in daily lives of the people of Bhadrak district, Odisha. It also focuses on the condition of the artisans including their creative skill in making those products. Hence, it is imperative to focus on conservation of this traditional craft and craftsman by providing them modern training with technology, financial assistance to develop their infrastructure as well as proper marketing of their products which could save this unique but dying craft from oblivion.

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