

# DHOKRA



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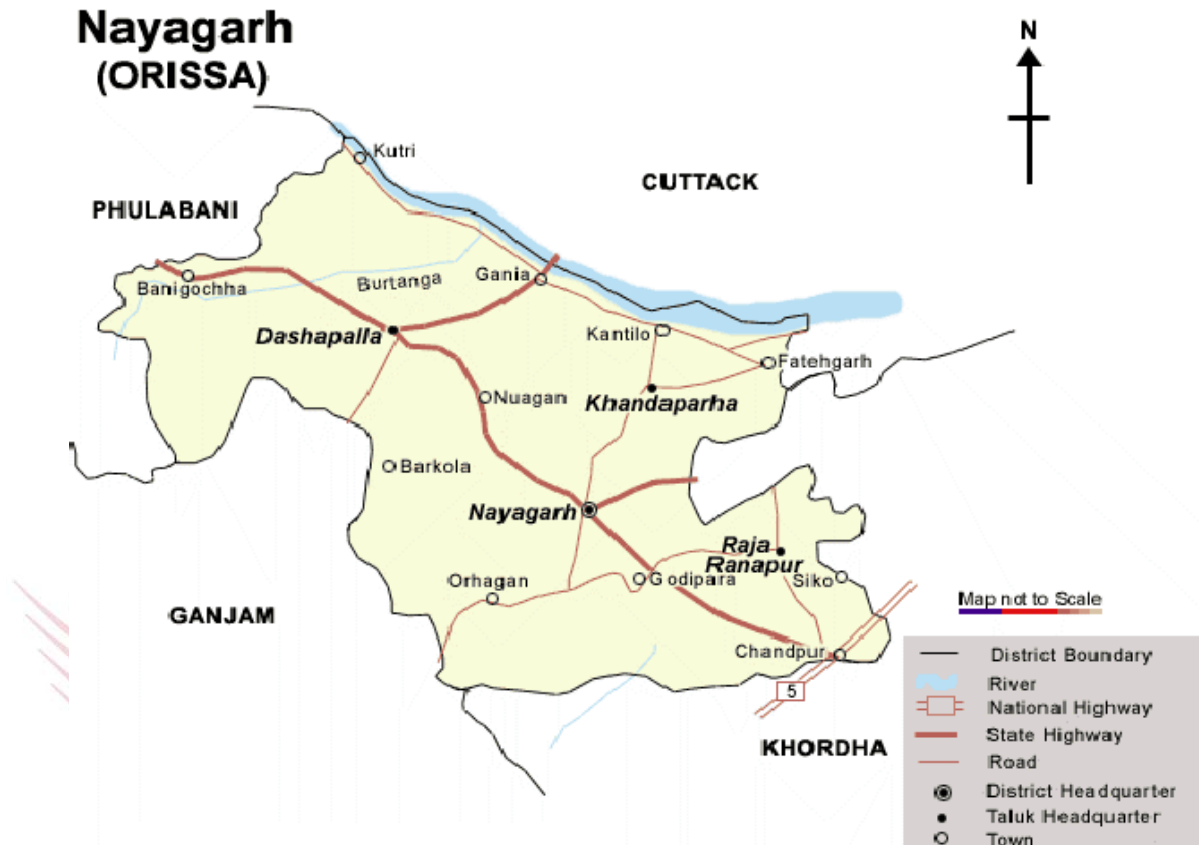
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## 1. Region and Location



Nayagarh is 70 kilometers from Bhubaneswar. It is among the oldest districts of Orissa. It is acknowledged for its leatherwork, brass utensils and bells. Gania is one of the eight blocks in Nayagarh district. It is 45 kilometers from Nayagarh.

## 2. Introduction

Metal is a common craft tool among the tribes of India. Orissa is best known for its *dhokra* metal castings, an important traditional craft. Brass is the metal used and is cast by the lost wax method to make exquisite products. *Dhokra* is not exclusive to Orissa alone. It is also found in Bengal, Bihar and Madhya Pradesh.

## 3. Producer Communities

*Dhokra* casting is essentially a folk art that is limited to a few places, largely located in the south and west of Orissa, namely Kuliana in the Mayurbhanj district, Kaimatin Keonjhar

district, Sadeiberni in the Dhenkanal district and Haradagaria in the Puri district and is practiced by an aboriginal caste called Sithulias. Other tribes practicing dhokra are Ghaniaran, Thatarian and Gharien. One type of *dhokra* handicraft that can be described as residual consists mainly of unique flexible brass items like the brass fish and snakes made by the craftsmen of Belguntha in the Ganjam district.

#### 4. Craft Tradition

Originally these *dhokra* craftsmen were nomads who went from tribe to tribe making their ceremonial and religious figures, ornaments and kitchenware. They were restricted to the materials of their immediate physical surroundings and the process of *dhokra* also matched their nomadic biorhythm. It does not require any fixed place or structure or any heavy, large tools. They used wax, resin and firewood from the forests, clay from the riverbed and made the firing oven in a hole dug in the ground.

##### *Traditional Motifs*

Its motifs are mostly drawn from folk culture. While among the animals, the elephant is the most popular, the other motifs include human heads, kings, *manas* or miniature replicas of measures, containers with lids, with or without locking devices, images of deities like Ganesh and Durga and lamps and lamp stands, the last being made in several intricate designs in the shape of trees and branches with as many as a hundred lamps on one stand.

#### 5. Raw materials

##### 5.1. Brass

Cost: Rs.100 - Rs.200 per kg.

Weekly buy 50-60 kg

##### 5.2. Bees wax (mohum)

Cost: Rs.80 - Rs.90 per kg.

Weekly buy 4-5 kg

##### 5.3. Clay bees-wax threads

##### 5.4. Coal

Cost: Rs. 240-300 per 40-kilogram packet

(All prices mentioned are with respect to October 2004)

Raw materials are purchased once a week from Kantilo and Khalisahi which are 10 to 20 kilometers from the place of making. While the lost wax method is followed, the raw

material used is not pure brass but contains miscellaneous scraps of other metals which give it the typically antique look.

## 6. Tools

- 6.1. Furnace (*bhatti*)
- 6.2. Sulka (to give impressions)
- 6.3. Small chisel (*nihan*)
- 6.4. Big chisel (*batani*)
- 6.5. Hammer
- 6.6. Graphite container to melt brass (*kui*)
- 6.7. Tongs (*chimta*)

## 7. Process

- 7.1. Male artisans apply pressure to obtain wires of beeswax from block
- 7.2. Female artisans applying mud to cover the whole object.
- 7.3. Red mud is again applied to cover the object fully.
- 7.4. Mould is prepared for casting of brass.
- 7.5. The model is taken out of the burner for casting. Molten brass is poured down the funnel-like opening on the upper surface of the model. The brass is melted in a vessel called *kui*, which is made out of graphite.
- 7.6. It has to be carefully arranged before heating.
- 7.7. A fire is lit by applying air pressure using a modern burner.
- 7.8. The wax between the core and mould is lost or burnt out as the mould is heated.
- 7.9. Fire is cooled with water.
- 7.10. Each object is taken out from the fireplace.
- 7.11. Then the molten metal takes its place and hardens between the core and inner surface of the mould which holds a negative impression of the wax model in all its detail. The outer surface of the hardened metal, therefore, reproduces the shape and details of the original wax model, with the core producing a hollow interior. The hard core and mould become spongy and soft on firing and are easily removed. It is allowed to cool down. This process takes about two to four hours.

7.12. Once it is cooled, it is beaten slowly with a hammer.

7.13. Mud is cleaned out from the outside as well as the inside of the model. The product is obtained which after cleaning results in the finished product for the consumer. However, during the whole process there is wastage of 20-25 per cent on brass. The whole process lasts for a day.

7.14. Finished products are displayed.

## 8. Glossary

**Batani** - big chisel

**Bhati-chamra** - blower made out of goat-skin

**Kendua kathi** - blower machine

**Kui** - a graphite container to melt brass

**Mohum** - wax

**Muri** - rice puff

**Nihan** - small chisel

**Sulka** - an iron instrument to give impressions on the wax

## 9. References

### Internet Sites:

1. [www.craftrevival.org](http://www.craftrevival.org)
2. [www.craftsbridge.com](http://www.craftsbridge.com)
3. [www.dollsofindia.com](http://www.dollsofindia.com)