

Dokra metal craft

December 23, 2022

In news– Bengal village Lalbazar is not only a hub but also moving towards becoming a centre for dokra, a metal craft.

What is Dokra metal craft?

- Dokra (also spelt Dhokra) **is non-ferrous metal casting using the lost-wax casting technique.**
- This sort of metal casting **has been used in India for over 4,000 years and is still used.** One of the earliest known lost wax artefacts is the **dancing girl of Mohenjodaro.**
- The lost wax technique for casting of copper based alloys **has also been found in China, Egypt, Malaysia, Nigeria, Central America, and other places.**
- Dhokra Damar tribes are the main traditional metalsmiths of West Bengal and Odisha. Their technique of lost wax casting is named after their tribe, hence Dhokra metal casting.
- The tribe extends from Jharkhand to West Bengal and Odisha; members are distant cousins of the Chhattisgarh Dhokras.
- A few hundred years ago, the Dhokras of Central and Eastern India travelled south as far as Kerala and north as far as Rajasthan and hence are now found all over India.
- Dhokra, or Dokra, a craft from Dwariapur, West Bengal, is popular.
- **Recently Adilabad Dokra from Telangana got Geographical Indication tag in 2018.**

Process of lost wax casting-

- **There are two main processes of lost wax casting: solid casting and hollow casting.**

- While the former is predominant in the south of India the latter is more common in Central and Eastern India.
- **Solid casting does not use a clay core but instead a solid piece of wax** to create the mould; hollow casting is the more traditional method and uses the clay core.
- The first task in the lost wax hollow casting process consists of developing a clay core which is roughly the shape of the final cast image.
- Next, the clay core is covered by a layer of wax composed of pure beeswax, resin from the tree *Damara orientalis* (more properly *Agathis Damara*), and nut oil.
- The wax is then shaped and carved in all its finer details of design and decorations. It is then covered with layers of clay, which takes the negative form of the wax on the inside, thus becoming a mould for the metal that will be poured inside it.
- Drain ducts are left for the wax, which melts away when the clay is cooked. The wax is then replaced by the molten metal, often using brass scrap as basic raw material.
- The liquid metal poured in hardens between the core and the inner surface of the mould. The metal fills the mould and takes the same shape as the wax.
- The outer layer of clay is then chipped off and the metal icon is polished and finished as desired.