



Technology Intervention to Improve Sustainability of Traditional Business in Asharikandi, Assam

Asharikandi is a village at Debitola development block in Dhubri district of Assam. The village is located at around 14 km east of Dhubri town and around 190 km west of the state capital Guwahati. The village is famous for its traditional crafts, Terracotta and Pottery culture. It is one of the largest clusters of Terracotta and Pottery in India practiced by 130 (one hundred and thirty) families of Kumar Paul community in the Asharikandi Gaon. The whole village has more than 1000 potters who practice pottery making manually. The uniqueness of Asharikandi style of terracotta is a traditionally artistic skill and the artisans reflect their class on their products. Further, the quality soil (Hirakata) used in the cluster is also unique. Artistic skill, quality of Hiramati (clay used to make the pottery items), climatic condition and age-old tradition of Kumbhakaras (potters) of Asharikandi have enabled to retain a separate identity of Asharikandi style of terracotta.

Terracotta and pottery work is mostly the sole source of income generation in Asharikandi village. The products are produced manually and burned in traditional kiln, and after then sold to the resellers. Entire process is manual and highly laborious, but the profit margin is still low due to lower productivity and higher cost of production. Average monthly income per family is around 5500 INR. Consequently, more people especially the young generation is gradually losing their interest in this traditional business. As a result of this declining interest, the historical terracotta culture is diminishing day-by-day, which is a key concern.

Major steps of terracotta processing are as follows:



The Government is also striving to survive the ancient terracotta culture where the strong technological interventions are essential. In view of this two key areas were primarily addressed and TARA proposed technological solutions to improve the production process of clay items through introducing semi mechanised systems. The first one is **Aging / processing of clay** in which a pug mill was suggested in order to control homogeneity and workability of clay for fabrication of green clay bodies efficiently. And the other was **firing of dried products** in this a fixed kiln with a proper insulating line was recommended to improve the firing efficiency with reduced emissions.

Under the NECTAR project on technical feasibility of semi mechanisation of terracotta processing, TARA successfully installed and demonstrated at pilot scale one de-airing pug mill and wood-fired static kiln at Pal Para Terracotta Cluster in Asharikandi village in March 2021. 10 people from local artisan group (Omkareshwar) were trained. It was tested and simulated that overall efficiency of the production system increased by almost 4 times with improved quality of the products which would definitely be helpful to strengthen the livelihood and more income generation for local artisans.

The pilot has been successful and work is fast tracked to scale up the process in other parts of north-east India.