#### CSIR-CECRI – BRASSWARE CLUSTER

The MoU between CSIR and National Innovation Council (NInC) has formed Cluster Innovation Centers (CIC) to promote innovation in brass cluster in the country.

### Objective:

The export of handicrafts products and brasswares from the country has shown a phenomenal growth and has further potential for increase if adequate steps are taken to improve the products quality with better finishing, packaging etc. The polishing and electroplating techniques currently used for finishing of brassware products are highly cumbersome, in-efficient and labour intensive. Apart from other technical problems, the brass wares industries require highly expensive machinery and special training skills for producing an acceptable finish with better quality products.

### CSIR-CECRI's role

CSIR-Central Electrochemical Research Institute (Karaikudi, Tamilnadu) is delighted to involve in this societal project by sharing their skill sets and experience and track record in handling industrial metal finishing and electroplating problems related to copper, zinc and brass. With this idea, this mission project is focused centering the brass cluster at Moradabad in the country. The proposed programme essentially focuses on the development of cyanide free electrolytes, and anti-tarnishing techniques for providing improved finishing and better quality products.

#### **Moradabad Brass Cluster Profile**

Location : Moradabad (UP)

Major products : Brass artefacts

People employed : 3,50,000 Business units : 29,000

Turnover : Rs 2,500 crores CIC : Host: MCIDS

(Moradabad Cluster Inclusive Development Society)

### Brass cluster growth challenges

Lack of infrastructure, new technologies, techniques and poor working conditions.

## No. of likely beneficiaries:

Entire brassware community at Moradabad and other related and allied brassware clusters in India.

## **Economic impact:**

- i) Improvement in life standards of the platers.
- ii) Improvement in health as Eco friendly plating environments.

# Pilot Innovation Activity Title: Cyanide free Electroplating

Cyanide in the current composition of electrolyte causes ground water pollution when disposed.

### Aim:

➤ To develop cyanide free electroplating process that reduces water contamination and also provides better finish.

## Methodology:

- Identification & feasibility of cyanide free copper/ brass electroplating on steel/ Aluminium.
- Testing in Moradabad, Cluster feedback, Cluster validation.

Cyanide free copper and brass plated aluminium.









Director, CSIR-CECRI interacting with brassware industry people at Kumbakonam, Tamil Nadu



**Demonstration at Moradabad (Nov 2012)** 



Team Members with DG, CSIR (Sep 2012)

