#### THE PRINCE CLAUS FUND FOR CULTURE AND DEVELOPMENT

## Annex II

### STABILIZING THE GRANARIES OF KOT DIJI.

Brief progress report on activities

#### **Details**

- 1. Title of activity: Stabilizing the Granaries of Kot Diji.
- 2. Contract number: CER.2014.05268
- 3. Amount of the contract: **Euro 35,000.**
- 4. Contracting party: Heritage Foundation of Pakistan (HF)
- 5. Person in charge of implementation: Yasmeen Lari, CEO, HF, Hon. Project Director, PCF-CER Project
- 6. Reporting period: January to August 2015
- 7. Brief report on activities carried out.

# Monthly pictorial reports are attached. Below is a summary of the work undertaken so far.

- a. The first months were utilized to carryout preparatory work which consisted of installation of external and internal scaffolding for commencing work, placement of tarpaulin on granary dome, cleaning of surrounding areas, excavation of pit to gauge the surrounding water level.
- b. As the granaries are continuously threatened by collection of water in the rear that cascades down the hill from the fort during rainy seasons, one of the urgent works was to divert the water from reaching the granary walls. For this purpose drawings were prepared, lime pits for slaking were activated and mud bricks were fabricated, which were later used to construct a retaining wall at the rear. The existing sewerage and drainage system was also investigated to accommodate the rainwater splashing down the hill in the rear.
- c. Samples of materials were collected and were sent for testing. Samples of bamboo lattice were prepared for approval.
- d. The methodology for stabilization of endangered dome was finalized in consultation with the structural conservation engineer and training of the artisans was carried out at the World Heritage Makli where conservation works on various tombs is in hand.
- e. Conservation work was initiated by filling of existing cracks with specified lime mortar, underpinning at the base of the dome was carried out in order to prevent any water ingress during forthcoming monsoon season. The heavy rains during July and August were thwarted from causing any damage to the Granary 3 dome due to the conservation work.
- f. The interior of the Granary 3 dome is expected to be stabilized through application of bamboo lattice, repointing with lime sand

mortar and re-plastering in September, after which further work on external restoration of the dome will be taken up.

8. Did you encounter any problems, if so, how were the problems resolved?

**Lack of water at the site**. This matter has been dealt with by arranging for water supply at the site.

**Garbage thrown by surrounding community**. A watchman has been appointed to guard the site to prevent dumping of garbage in the surroundings of the granaries.

**Free movement of cattle around the site.** Community is being motivated to pay due respect to the heritage site. A bamboo railing is being erected to prevent cattle from entering in close proximity to heritage.

Excessive heat in months of April and June, excessive rains in July. Upper Sindh is usually very hot from March onwards. However, in view of the need to complete exposed vulnerable parts, the work was continued during early morning and late evening.

- 9. Do you foresee any problems in future? A major issue is the drainage of rain water from the site into the municipal drainage system. This matter has been taken up with the municipal authorities.
- 10. What percentage of the monies inscribed in the budget has been spent **Approximately 35% of the total budget has so far been expended**.
- 11. What is the proportion of the activities which have been completed (percentages)?

While all studies have been completed, approximately 40% of the work has been completed.

12. Any other remarks:

After stabilization of Granary 5.3, Granary 5.2 will be taken up, where the dome has partially survived, as well as stabilization of Granary 5.1. Alternatives are being developed as to how to provide alternatives for protection for Granary 5. 2 and 5.1 in order to protect them from further damage. Since the monsoon rains are largely over, it will be our endeavor to carry out as much work as possible on stabilization of brick masonry of Granaries No. 2 & 3, during the coming months up to February 2016 before hot weather sets in.