

## **Knowledge Dissemination, finalization of design and Construction of bamboo/bamcrete cattle Shelter at beneficiary located near parties.**

Quotations are invited from companies and groups with experience of building bamboo structures for both of the following activities:

1. Two months session at the Indian Institute of Technology (IIT), Delhi where at least 3 artisans with experience in building bamboo structures will participate, learn and finalize the design requirements to build a cattle shelter.
2. The artisans will then construct the design finalized at IIT Delhi for a customer in their local community.

IIT Delhi will provide faculty guidance and support of an active architect and structural engineer in helping design the structure. Terms and Conditions as stated below applies.

Three Teams will be chosen as part of this process.

Selection will be based on technical evaluation of the experience of the artisan team and organization in bamboo structures as well as financial quotations. 6 teams will be selected by the technical committee. The order will be placed to the lowest three of the selected 6 teams.

If selected, the team will receive 30% of the payment quoted at the end of successful completion of its 2 month session at IIT Delhi, 30% additional payment after the foundational structure of the shelter has been built in the local community and 40% of the quoted amount after the structure has been built and a team from IIT Delhi has visited and verified the structure or within 1 month of photo documentation that the structure has been built according to design specifications agreed upon at IIT Delhi, which ever is earliest.

### **1. Background:**

IITD has been actively doing research for using bamboo as primary building material in a 1 level structure. IIT Delhi would like to disseminate this knowledge and build a cattle shelter as a demo construction in different parts of India. This is also an opportunity for bamboo artisans from around India to share their indigenous knowledge with fellow artisans and experts of IIT Delhi. Artisans will collaborate with IITD for two months in order to share their knowledge, learn new technologies and finalize the design of a cattle shelter that is appropriate to the climatic, social and economic condition of their region.

For two months artisans will be required to showcase their skills on bamboo joinery, wall panels, roofing and other relevant techniques. They will also be taught different modern techniques of bamboo construction. They may also asked to make specimen for experimental purpose.

Aim of this knowledge sharing is to scientifically validated their techniques so that it can be applied in the mainstream construction. All the components developed with the artisans will be tested in the IITD lab.

Accommodation will have to be arranged by the artisans. IITD will however make its best effort to facilitate the process.

Cattle shelter has to be minimum 700 sq. ft and should be built in the design approved by IIT Delhi.

## **2. Eligibility**

Only groups engaged and experienced in use of bamboo in housing are eligible. These groups could be part of companies, Self Help Groups or Non Government Organizations that are registered with the government.

## **3. Documents necessary for submission**

All groups are here by requested to submit the following in separate seal envelopes marked technical and commercial bids. Outside the main enveloped, write in Bold letters "**Quotation for NAIP Project, Attn : Dr. S. Gupta**"

### **Technical Document Submitted**

- a) The name of the organization, and whether it is a SHG, NGO or company.
- b) PAN, TAN, TIN or other registration numbers as may be applicable.
- c) How many employees (list full time and part time separately) in the organization?
- d) Please include 3 years financial statement of the organization.
- e) Any tie-up or part of any larger consortium?
- f) How many years of experience does the organization have in bamboo based construction or artisanship?
- g) 6x 1m samples of the types of bamboo used. In case you are using different forms, eg. Slivers, such samples 6 each in number need to be submitted. In case of confusion, IITD can be consulted (9873408782). IITD will pay for the postal charges for which telephonic permission is required and proper bill be submitted. The details of the species, age, treatment adopts to be provided.
- h) What species and dimensions of bamboo have been used in construction by

the group, what harvesting process and what preservative treatment is used by the group?

- i) Provide detailed designs of at least 2 structures built by your group.
- j) Provide examples, documentation and pictures of joints, wall panels, arches, beams, columns and composites made with bamboo by your group.
- k) Has any design been done for structural or other loads?
- l) For whom were these structures made? Please include letters of reference and order specifications and invoice
- m) Include biodata and picture of the artisans to participate at IITD

#### **Financial Document**

- a) Financial offer for training and building cattle shelter
- b) The beneficiary name and address and concurrence letter
- c) The beneficiary should not be related to the Group or the artisans (attach self attached certificate)
- d) The beneficiary should have minimum 3 years experience in cattle rearing and require a cattle shelter. (attach appropriate certificate)
- e) The beneficiary need to invest a minimum of Rs. 50,000 (fifty thousand)
- f) Cost break down, including profit to the construction group.

#### **4. Application Procedure:**

All the artisans will have to submit technical and financial data to IITD latest by 10<sup>th</sup> October, 2011.

#### **5. Tender Publication:**

This advertisement in whole or part will be published in one or more national newspapers and at IITD site. This is a re-tender.