



UNTRAVERSED

## Multi-use Permanent Disaster Relief Shelter

### 1. Introduction:

Disasters are great levellers. Anthropogenic or not, they cause pain and threaten the very survival of our species. Such occurrences seem to be becoming more frequent. No one is spared for their class, caste or colour. Disasters leave no room for differentiation and discrimination. Being together and working together may be our only hope.

Most habitable areas in India are vulnerable to natural disasters and some places are susceptible to multiple threats. Our habitats need to be designed to hold up against destructive forces and to remain functional and serviceable. With all their uncertainties, disasters often exceed our estimates and force large populations out of their homes. For want of adequate relief shelters, many are left to endure inhuman living conditions and some just fail to survive the harsh environment.

At present all our settlements, whether rural or urban, are grossly ill-equipped to face disasters of any serious nature. With the help of knowledge and good sense, humans must try to save themselves. From prevention to preparedness to rescue to relief to build-back, there is much we could do to help ourselves and others around us.

Well designed and well provided shelters are critical to relief management and resilience building. A disaster relief shelter is not just a temporary refuge for people and livestock. It is a place where people can start the process of healing from trauma, recovering from huge losses and rebuilding their lives. Such a space must necessarily be social, egalitarian, creative and reflective of the core Indian quest for Unity in Diversity.

Though construction of large disaster relief shelters cannot be termed wasteful considering their infrequent usage, it definitely is under-utilisation if they are designed to be used only during emergencies. Keeping the shelter ever-ready for emergencies can be achieved, at least partially, by putting it to regular use for other compatible purposes. Without the integration of the facility into the everyday life of the community, it would prove to be enormously expensive and wasteful.

## 2. Laurie Baker Trophy 2018

Laurie Baker Trophy 2018 is to design a multi-use permanent disaster relief shelter in a village.

Each entry is required to have five parts:

- To identify and understand the village context, document the present condition of the settlement and undertake basic analysis.
- To identify the location, capacity, multiple uses, etc.
- To draw up a detailed programme for the project.
- To prepare architectural design and construction scheme.
- To analyse the impact.

### 2.1 Identify and document the Panchayat

- Choose any one Gram Panchayat with population between than 10000 and 20000 as on 01-04-2018. Refer the url: [https://indiawater.gov.in/IMISReports/Reports/BasicInformation/rpt\\_RW\\_S\\_RuralPopulation\\_S.aspx?Rep=0&RP=Y](https://indiawater.gov.in/IMISReports/Reports/BasicInformation/rpt_RW_S_RuralPopulation_S.aspx?Rep=0&RP=Y) for population.
- The following Panchayats in Kerala shall not be chosen for Laurie Baker Trophy 2018: Pozhuthana in Wayanad district, Meloor in Thrissur district and Nedumudi and Cheriyana in Alappuzha district.
- Preferably an underdeveloped Panchayat with multiple disaster vulnerability should be selected. Argue justification / rationale for the choice. *A better representative choice will be valued higher.*

- Discuss with the Panchayat administration and obtain their consent.
- Document and analyse
  - implementation of the 73<sup>rd</sup> amendment of the Constitution
  - governance and administration
  - demography, socio-economic status, sectoral aspects, socio-cultural aspects, status of physical and social infrastructure
  - geography, climate
  - environment
  - hazard vulnerability and mapping
  - settlement pattern and mapping
  - building typology
  - Panchayat-owned properties with potential for use as shelters.
  - any other aspect of relevance

## 2.2 Identify and analyse the project

- This part must be done in close coordination with the local government and realistic solutions proposed in response to real situations. Undertake participatory exercises wherever possible. *Include evidence of consultation and their viewpoints.*
- Undertake basic study of the village characteristics including settlement pattern, evacuation routes, refuge areas, compatible multiple uses, availability of panchayat-owned land, etc. and arrive at a panchayat-wide layout of locations of shelters, along with catchment area and capacity for each.
- Arrive at a few options for multiple uses for the shelter facility, which are compatible with its use as a shelter and the socio-economic and other relevant contexts of specific locations.
- Consult an expert in the field of disaster management, preferably from the State Disaster Management Authority.
- Select one of the locations and a compatible project, in consultation with the administration.
  - Selection is to be made on the basis of the following aspects and justification to be given.
    - Disaster study

- Evacuation routes
  - Appropriate geographic location
  - Catchment area of population
  - Compatible multiple uses
- Existing structures/amenities in the selected site should be documented and studies for incorporation in the proposal and thus to save avoidable new construction.
  - Enhanced time-shared multiple uses may be proposed for more effective use of the building. *More efficient proposals would be valued higher.*
  - Analyse various information and arrive at inferences sufficient to develop a detailed design programme.

## 2.3 Detailed Programme

- Draw up a detailed design programme for the project.
- Prepare a list of basic design requirements in terms of population, stock, time, etc.
- The following aspects (not limited to) should be addressed.
  - Duration, capacity and turn-around time should be specified.
  - The relief shelter should cater to livestock and pets also.
  - It should fulfil international standards and contextual requirements.
  - Accessibility and emergency response should be addressed.
- Other multiple, time-shared uses to be detailed.
- Specific, temporary additions or extensions for enhanced functional performance in emergencies may be considered, by which avoidable permanent infrastructure creation and related impacts could be saved.
- Incorporate existing facilities.
- Health, sanitation and control of possible disease epidemics may be addressed.
- Standards, statutory regulations and best practices to be referred to.
- Provide justifications, as may be required.

## 2.4 Design & Construction

- Fulfill the requirements of the design programme.
- The design must foster egalitarian community life and social and mental healing.
- Must adhere to relevant standards and regulations. Any departure should be well argued.
- Conceptual landscape, water management, waste management, energy management and overall sanitation shall be designed and presented.
- Specify construction materials and techniques with focus on sustainability.
- Design at least one part, in detail.
- Show a time-share activity chart.
- Overall adherence to Laurie Baker's principles or well argued interpretations.
- Provide justifications, as may be required.

## 2.5 Impact analysis

- An overall analysis of impact on the environment.
- An overall analysis of impact on the socio-economic and cultural aspects.

## 3. Submissions

The following shall be submitted as Laurie Baker Trophy 2018 entries:

### 3.1 Sheets content

1. Drawings, site plans and charts showing the present condition, analysis, programme, design proposal and services.
2. Construction specifications and cost estimation on plinth area rate basis.
3. Proposals to contain environmental impact; in material usage and in operation.
4. Proposals for water and waste management.
5. A write-up on expected socio-economic & ecological impact of the project, not exceeding 500 words.

Hand drafting / sketching on recycled, un-bleached paper of A2 size is preferred.

## 3.2 Compulsory sheet usage requirements

A maximum of 8 A2 sized sheets may be used.

Sheet 1: Village identification, studies, vulnerability, etc.

Sheet 2: Specific shelter identification, analysis, justification

Sheet 3: Requirements, multi-use and design programme.

Sheets 4,5,6,7: Design (at least one sheet)

Sheet 8: Impact analysis.

## 3.3 Evaluation procedure

### Stage 1:

Online submission Procedure

- Maximum 8 A2 size sheets in "pdf" file format i.e. 1 file containing 8 pages (maximum size: 20MB), with title as the entry code.
- Maximum 3 entries per college can be submitted.
- All individual sheets shall have the words "LAURIE BAKER TROPHY | 2018-19" clearly mentioned on them.
- The entry code of each entry should be mentioned on right hand bottom corner in a box, left of the NASA logo. The entry codes will be allotted after registration.
- All sheets shall also bear the NASA logo in proper specification on the right hand bottom corner.
- Editable format of the sheets has to be submitted during the Annual NASA Convention (Applicable only for shortlisted entries).
- No editing allowed afterwards.

### Stage 2:

- Shortlisted entries have to get the hard copy of the same sheets at the Annual NASA Convention.
- These will be evaluated along with a presentation from participants.

## 4. Evaluation Criteria

The entries will be evaluated on the basis of

- Fulfilment of every requirement given under serial no. 2 and comprehensive contextuality.
- Clarity in understanding and presenting the existing conditions, analysis and responsiveness in the design proposed.
- Extent of optimisation achieved in terms of space, activity, etc.
- Adherence to Laurie Baker's approach to architecture, rooted in elements of ecological, socio-cultural and personal sustainability.
- 75% weightage will be given to evaluation done at LBC and 25% weightage to evaluation at the convention.

## 5. Prize Money

Prize money of 1 lakhs Rupees is allotted to the trophy and it will be divided according to the no. of Citations and Special Mentions.

## 6. Important Dates

- The release of brief - 21/11/2018
- Registrations open - 25/11/2018
- Registration closes on – 15/12/2018
- Queries till – 15/12/2018
- Submission deadline – 02/01/19

## 7. Check List for Submission:

- Soft copy of submission in PDF to be uploaded on NASA India website- [www.nasaindia.co](http://www.nasaindia.co).
- Authenticating letter from college HoD for each entry the work submitted is genuine and they have endorsed copyrights for the same and with the name of Participant(s) and stating the unit shall abide by whatever may be the final results and also agree that this entry is property of both the institute and NASA India.
- Declaration by the participant(s) stating the work submitted is genuine and they have endorsed copyrights for the same and to adhere by all the rules and regulations, Jury process and the results.

- Authenticating letter from college HoD/Principal/Director (on College Letterhead with Sign and Stamp of HoD/Principal/Director of the college), specifying the Account Details(Account Name, Account Number, Bank Name, ISFC Code) in which the Prize Money is to be awarded.
- Editable format of the sheets has to be submitted during the Annual NASA Convention (Applicable only for shortlisted entries).

## 8. Other Information

- For registration, submission and queries, submit at [www.nasaindia.co/trophy](http://www.nasaindia.co/trophy).
- Registrations and submissions should be done by the Unit Secretary in NASA India website before the deadline.
- Kindly print the form on the college letterhead along with the attestation by the college HoD/Principal/Director and upload the scanned copy of the same during registration.
- Late registrations and submissions will not be entertained and the defaulters will be disqualified.

**Any Kind of Queries need to be submitted through website to**

**Yatharth Gupta**

National Secretary | 2018-19  
NASA India