IPRO 308 : TSUNAMI RELIEF

PROBLEM:

How can the IIT community (faculty, students, and alumni) collaborate in a long-term effort to provide support to the victims of the tsunami in their time of need?



100 are still listed as missing, and 1,126,900 were displaced by the earthquake and subsequent tsunami in 10 countries in South Asia and East



APPROACH:

- Pinpoint viable approaches to relief with real projects
- Contact NGOs for possible sponsorship and direct relationship
- Help set up future IPROs for further research and investigation of IIT's aiding services

SOLAR DESALINATION OF WATER

Technique:

Humidification-Dehumidification Cycle Advantages: Flexibility in capacity, moderate installation and operating costs, simplicity, and possibility of using low-grade thermal energy

LAMA HOMES

- Self-help, low-cost housing
- Color coded wall pieces and peg tools
- One person can build a 20 ft. by 30 ft. house in a week

CLAY POT WATER FILTERS

Field experience and clinical test results have shown this filter to effectively eliminate approximately 99. 88% of most water-born disease agents.

Objectives:

Meet an urgent demand for safe water in rural and marginalized communities Provide employment for local potters

SOLUTIONS:

Help set up future IPROs for further research and investigation of IIT's aiding services



ENGINEERS WITHOUT BORDERS

Mission: EWB-USA partners with disadvantaged communities improve their quality of life through implementation of environmentally and economically sustainable engineering projects, while developing internationally responsible engineering students.



THE DESIGN BUILD OF SITE SPECIFIC SUSTAINABLE BUILDING SYSTEMS

- Design-Build approach: a rapidly produced product that is feasible and possible
- 2. Collaboration of traditional and technological building techniques and systems
- 3. Cost effective building: human labor VS capital







