Scaling Community Innovations

innovation

Simple way of doing things better
Trends in global (near) surface air temperature for cities (1950-2018)

Source: IPCC AR6 regional factsheet
Problem of Indoor Heat

Existing Scenario

- Temperature: 47°C
- 1-10min to get completely destroyed by fire

Ideal Scenario

- Temperature: 33°C
- At least holds fire up to 1 hour
The answers are right there
Low cost, replicable and affordable solutions
SEEK. SUPPORT. SCALE
How do we scale?
1. Transference of Ideas
2. Enablement and Incubation
Cooling at source

In summers, water stored in overhead tanks get heated up. Our champion Vanshika. She came up with the idea after seeing the thermocol ice boxes that are used to keep drinks cool in stores.

Vanshika's solution

- The water tank would be covered with jute bags
- The jute bags will then be dampened with water
- Finally sheets of thermocol or cardboard would be used as an external covering to prevent evaporation.

By covering the tank in this manner would prevent the water in the tank from heating up.
HUMANITARIAN INNOVATION LAB

Call for Innovations

01 Water Scarcity and Flooding in Urban and Peri-urban Areas

02 Extreme Climatic Events of Heat Waves and Cold Waves

03 Inclusive Response During Emergencies in India
URMUL

Common Facility Centres for Pastoralists
DIGHIR GANGULY

Sunderbans Shelter Project
3. Technology for Scaling
$.056/sqft

15.6°C
#BeatTheHeat
साफ़ेद रंग से बनाए हैं चाँद के लिए संगमरमरी के उपाय
छायां के लिए फीन शेड नेट लगाएं और अश्विनी के लिए पानी के कंदरे
छात पर अबिनेश्यीस
4. Advocacy for Systems Change
HEATWAVE ACTION

HOUSE OWNERS’ GUIDE TO
ALTERNATE ROOF COOLING SOLUTIONS

National Disaster Management Authority

Bamboo, Thatch & Palm Leaves Roof Screen

Bamboo, Thatch & Palm leaves are locally available across India and can be installed as a secondary roof screen thereby reducing the heating effect.

GUARDING ZONE

BUILDING TYPOLOGY

SKILL SET

- Insulate eaves and edges
- High mass in the form of tiles and concrete
- Light weight
- Compensate excessive heat load
- Ridge line is made from thick leaves
- Properly laminated

Cool Roofs through use of reflective materials and techniques, help in reducing heat absorption and improving overall thermal comfort of the building.

Alternate Roof Cooling Solutions: The Working

Roof contributes up to 70% of the heat gain of a building during high temperatures. Solar radiation striking a surface is either reflected, absorbed, or transmitted.

Day

Heat is absorbed by the building in the daytime.

NIGHT

Radiation at night increasing the internal temperature.

STANDARD ROOF

REFLECTANCE - LOW

ABSORPTION - HIGH

Thermal Comfort - LOW

COOL ROOF

REFLECTANCE - HIGH

ABSORPTION - LOW

Thermal Comfort - HIGH
Co-creating Solutions

Brad Smith
President, Microsoft

Anshu Sharma
Co-founder, SEEDS
Scaling: Where from here?
Scaling Innovations

- Transference of Ideas
- Enablement and Incubation
- Technology for Scaling
- Advocacy for Systems Change
The challenges that remain for working at scale are:

1. Flexible Financing
2. Enabling Policy Environments
3. Partnerships – Market, Society & Governments
Thank You

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