

Roles of a Responsive Community, NGO and Government in Dealing with Events of Disaster

*MERCY Malaysia's Experience
in Aceh and Nias, 2005 – 2008*





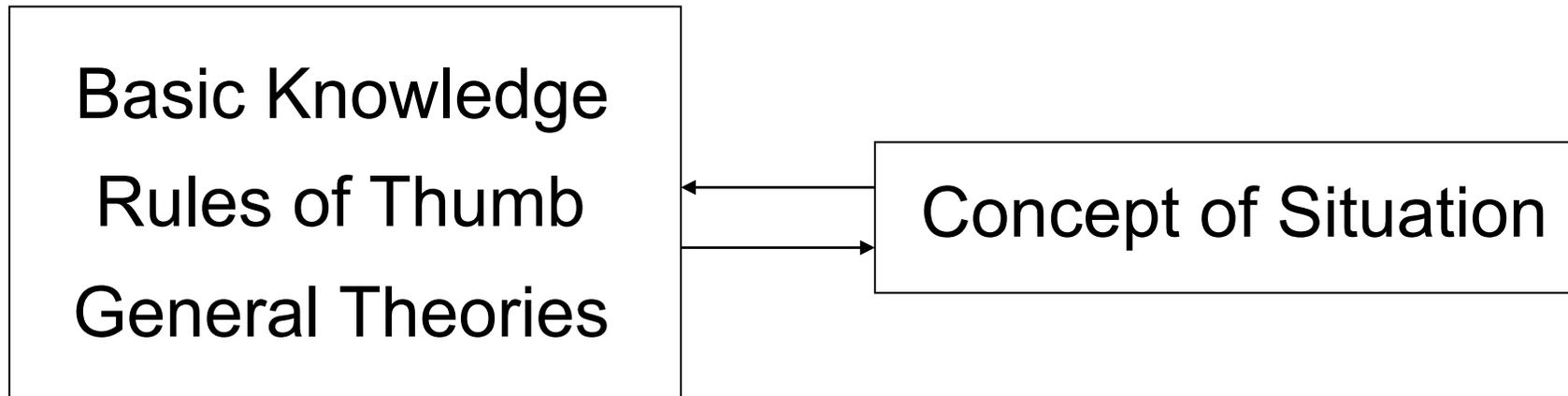
**Probability of a disaster taking place.
A hazard cannot be avoided but the
risk can be reduced.**



Fast
Precise
Effective

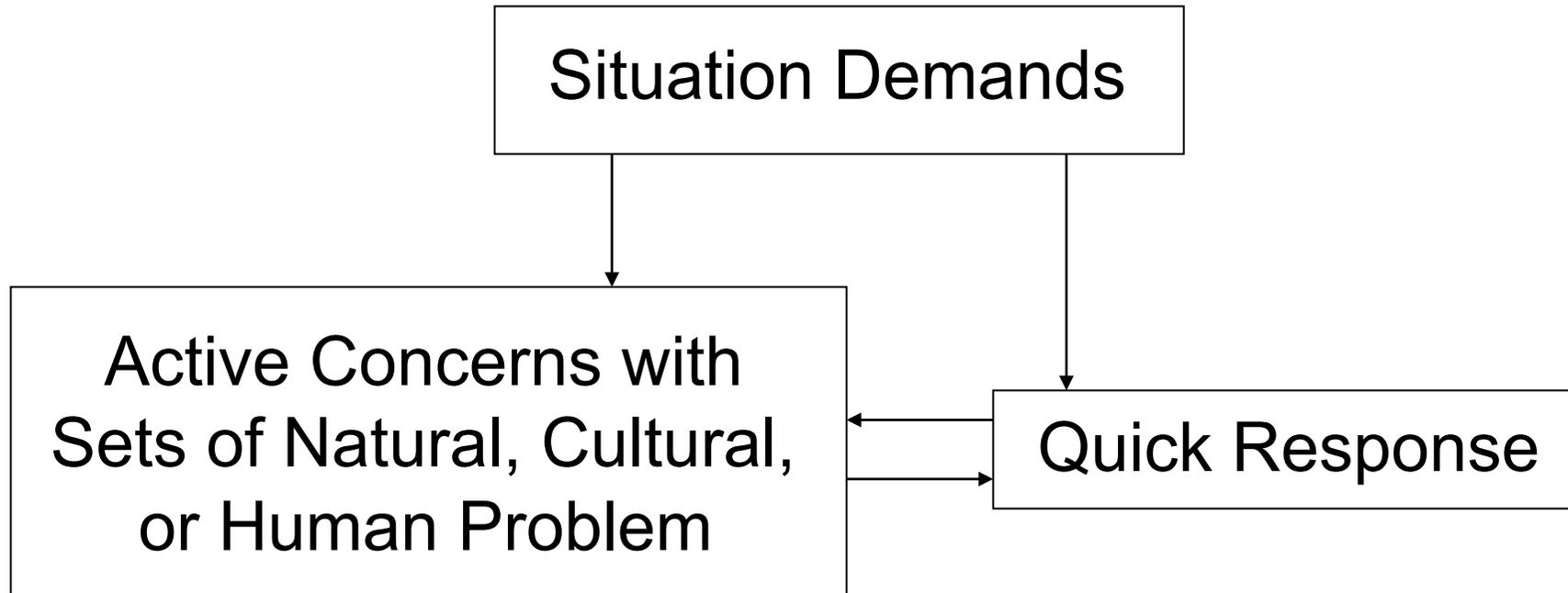
Situation

In this situation, civil society is being faced with a problem-solving process which is unknown beforehand whether a particular design strategy will yield a solution or not.



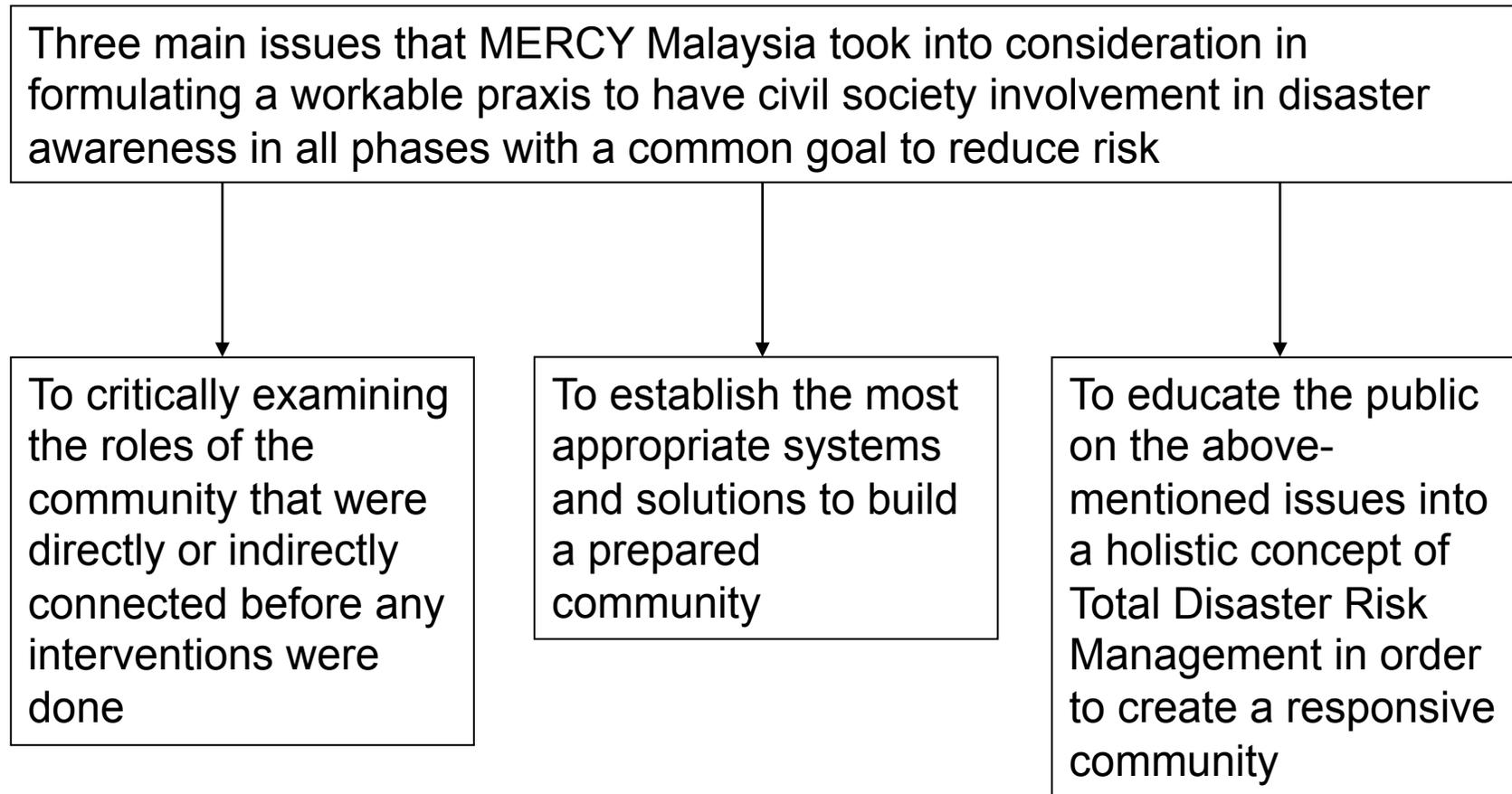
Concept of Situation

The context of Banda Aceh after the tsunami has led the architect to see situation in the terms of 'involvement in circumstances' .



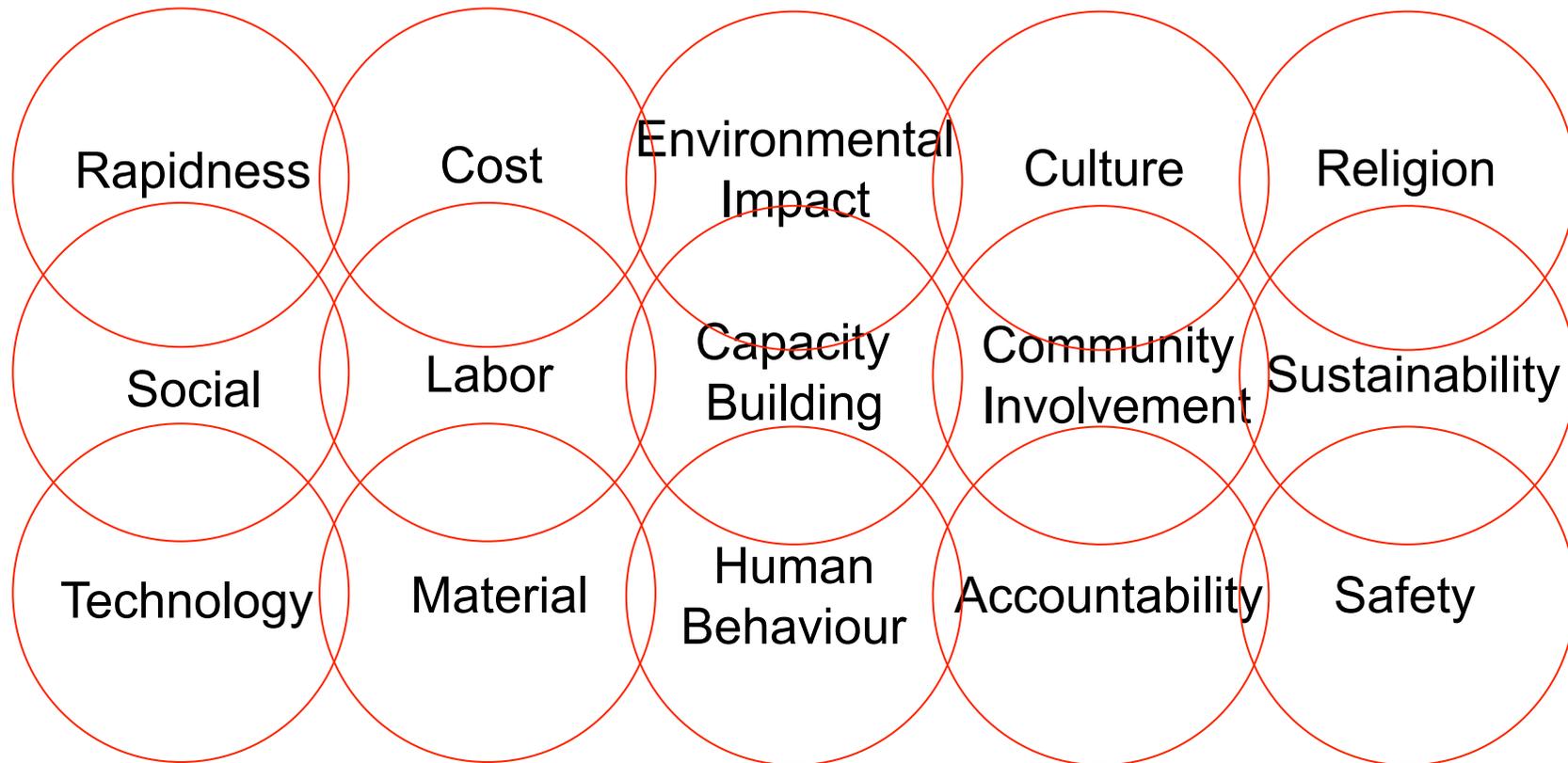


Strategies

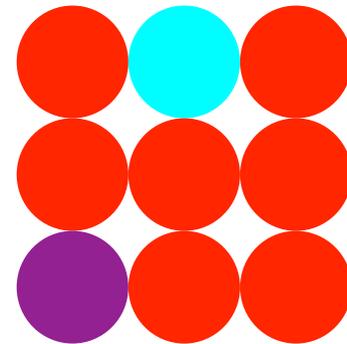
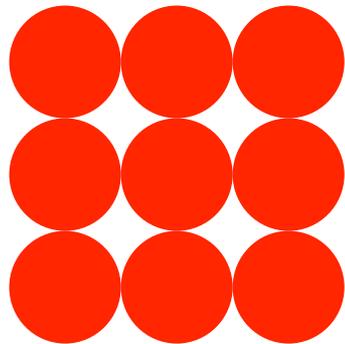
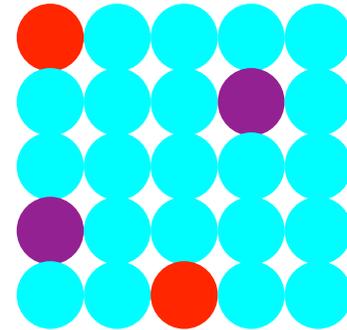
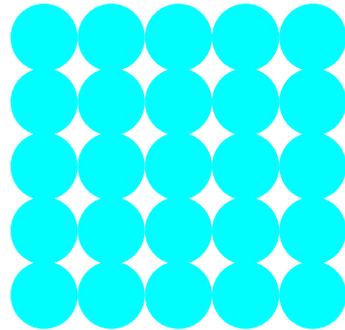
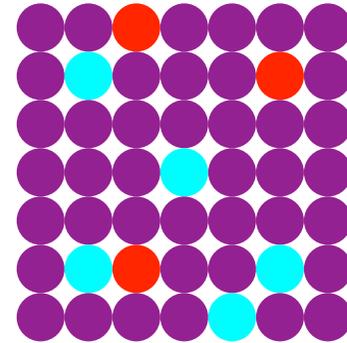
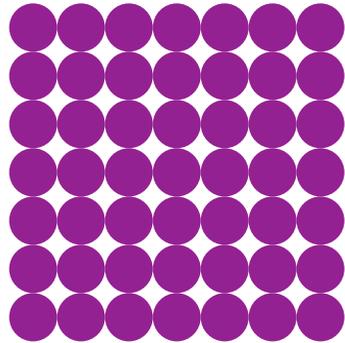
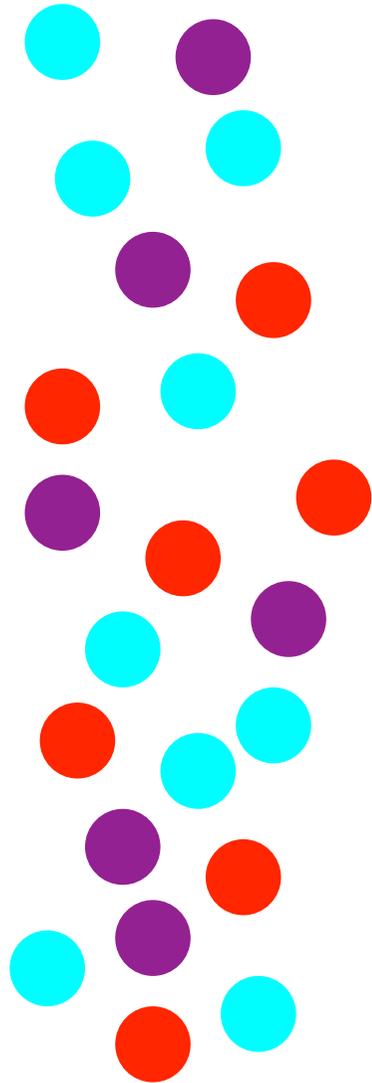


Learn How To Act

In the creative process of architectural design in responding to disaster, attempts shall be made to overcome the complexity and contradiction of the situation and make some sense out of it.



Process of Selection



**Each individuals/ groups/
community shall play
active roles during disaster**

**Government Authorities Affected
Individuals Specialists Volunteers**

Where do you belong?



**Affected
Individuals**

**Special Needs
Individuals**

**First
Responders**

**Recovery
Workers**

Volunteers

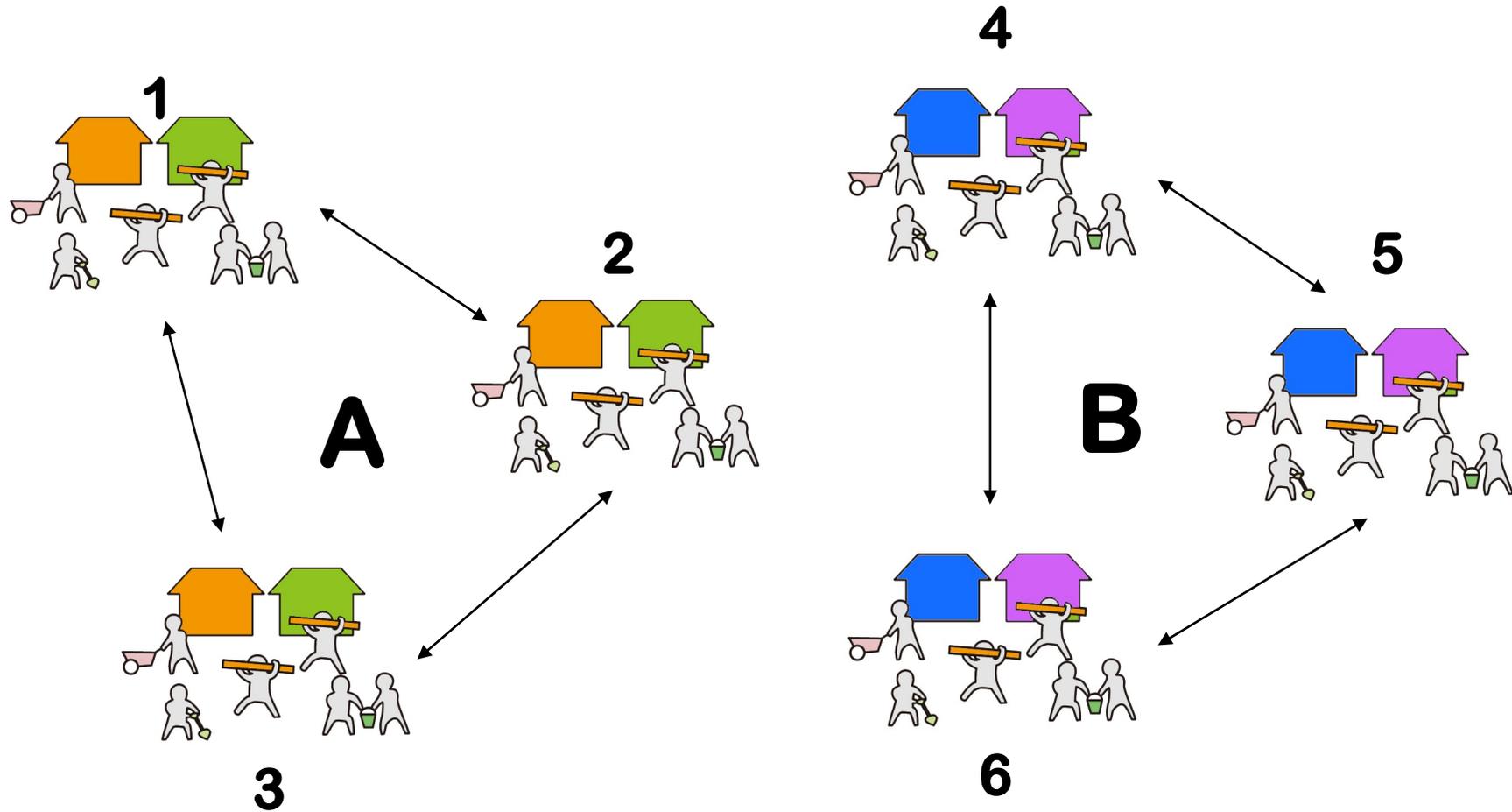
SOCIAL CAPITAL

1. Bonding with communities.

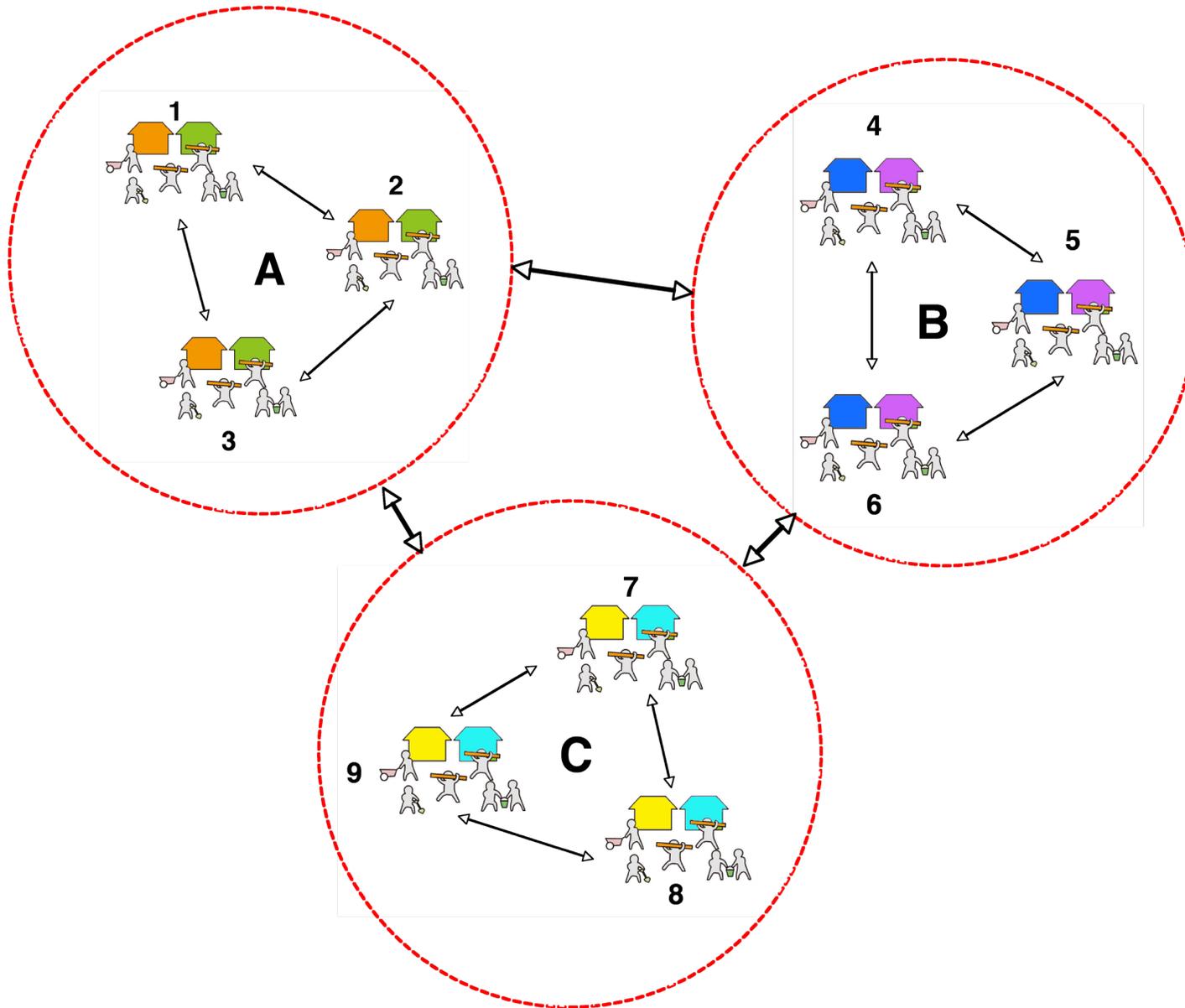
2. Bridging between and among communities.

**3. Linking with external aid/
organization/ agencies.**

Bonding with Communities



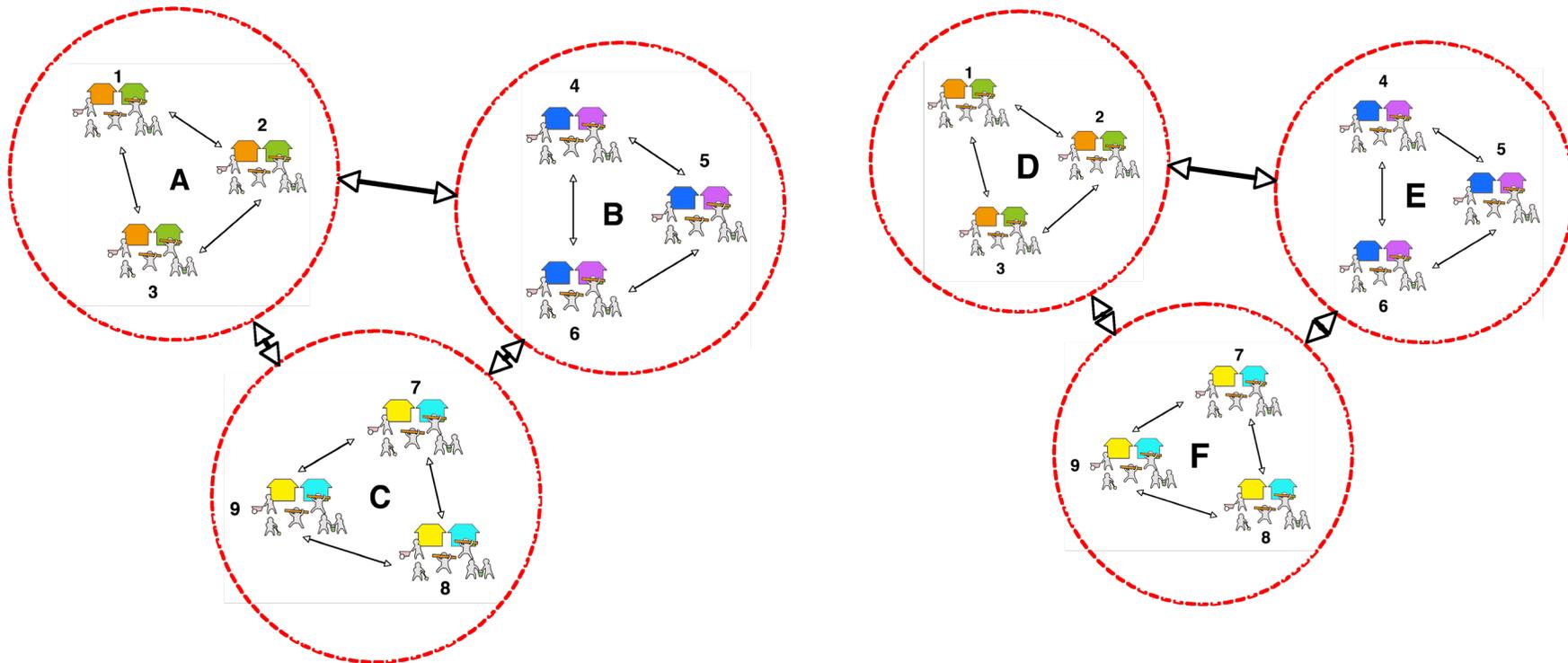
Bridging Between and Among Communities



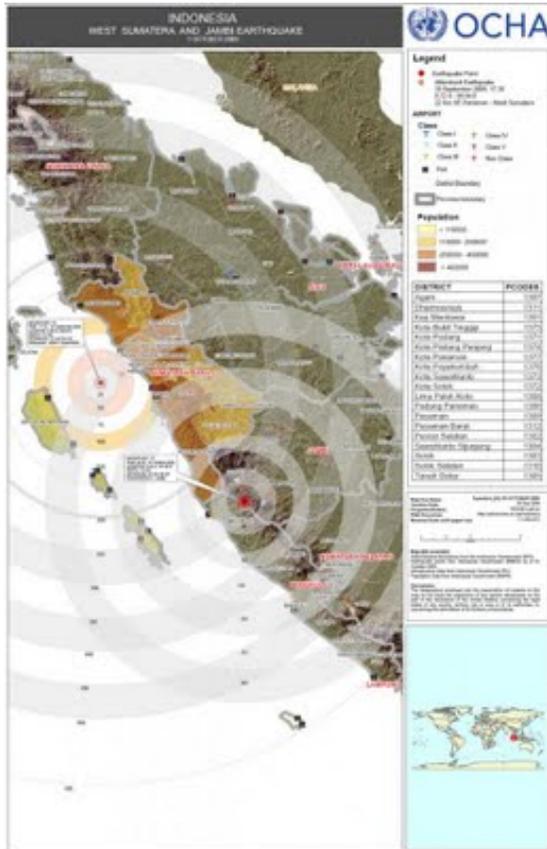
Linking with External Aid/ Organizations/ Agencies



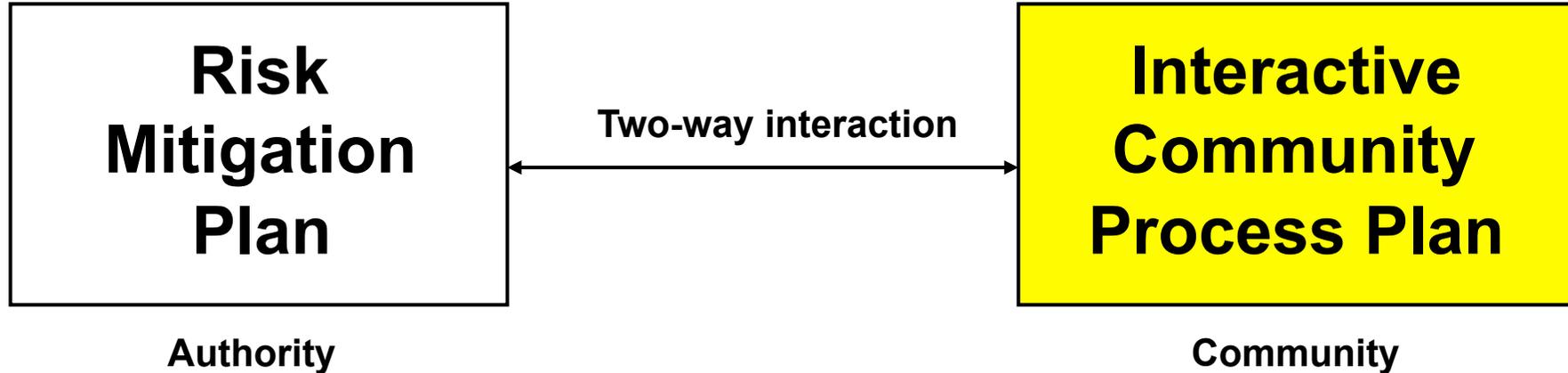
Others



Information Management



Being Responsive

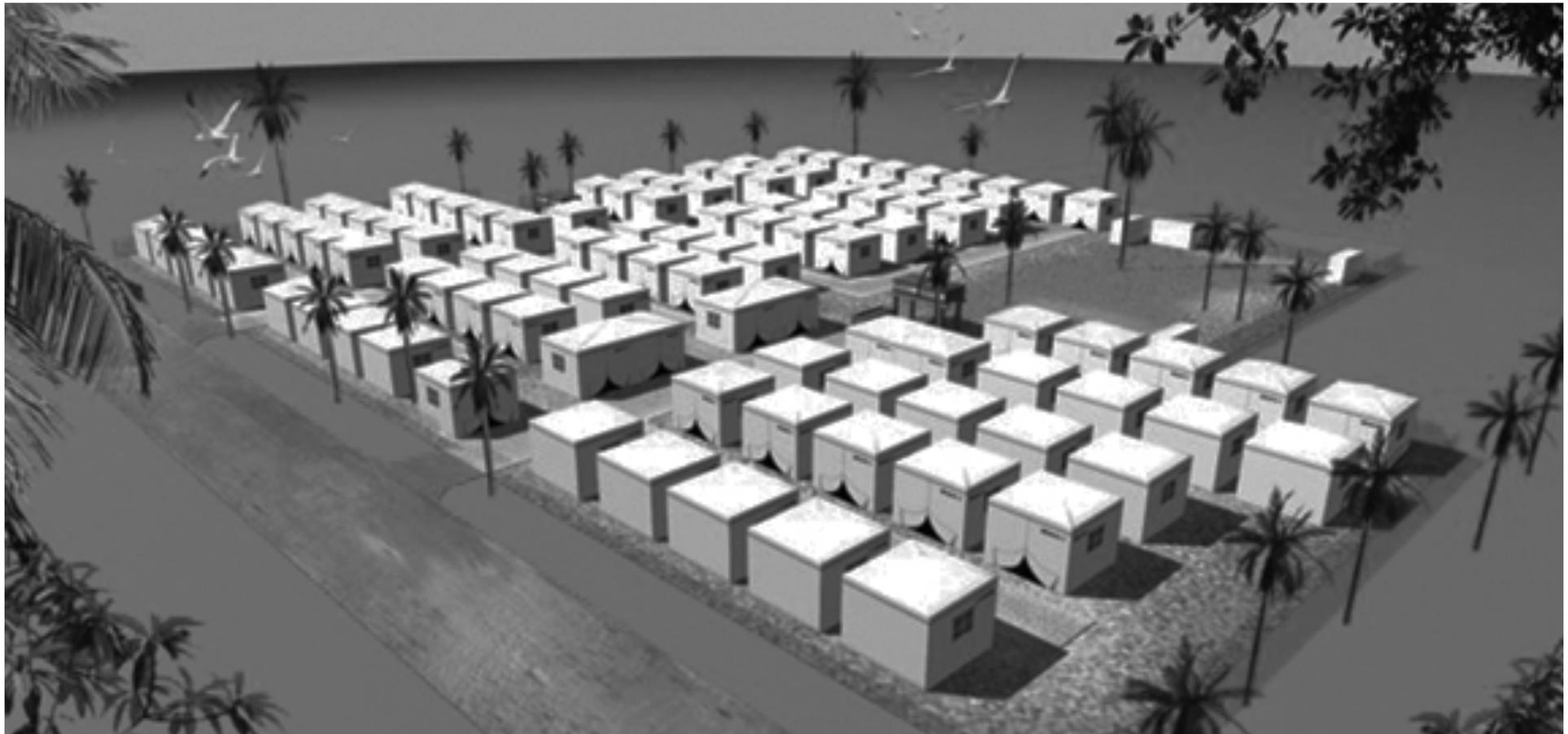


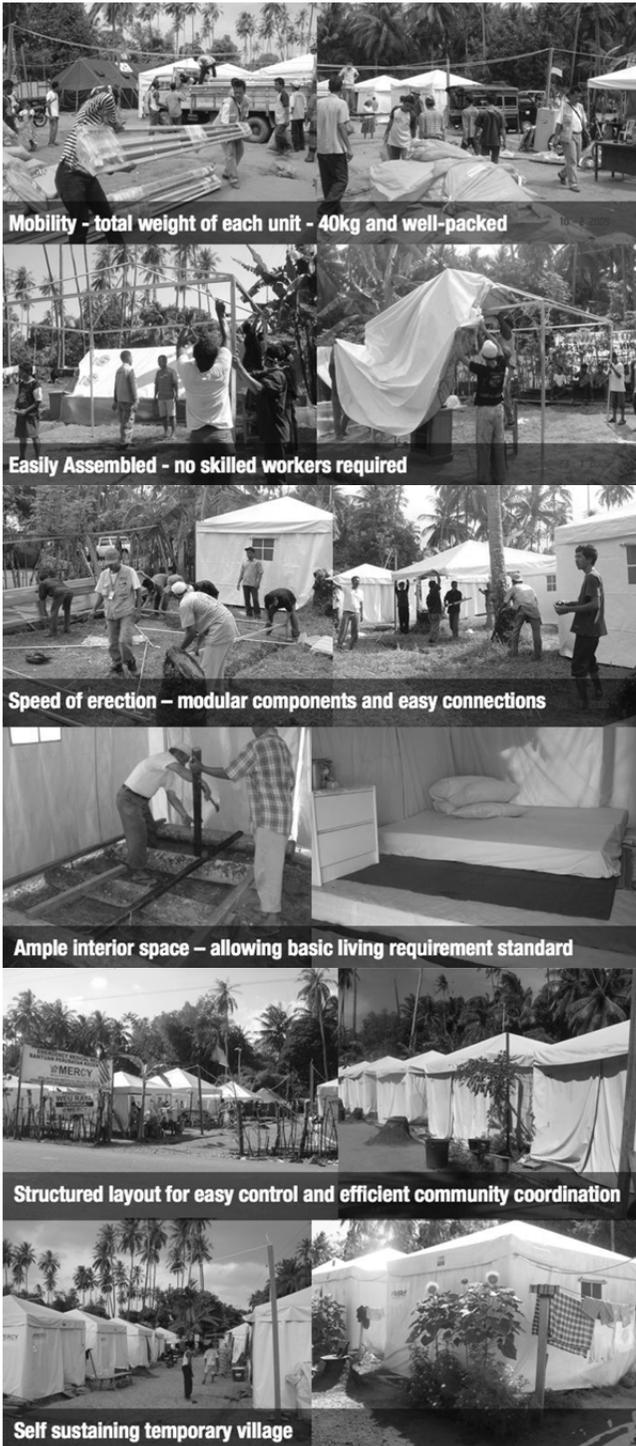
- 1. Emergency Communication**
- 2. Public Warning and Alert Guidelines**
- 3. Planning Guidelines**

- 1. Establish Committee**
- 2. Identify Strength and Weaknesses**
- 3. Develop Capacity and Community Strength**

Intervention: Case 1 (IDP Camp, Aceh)

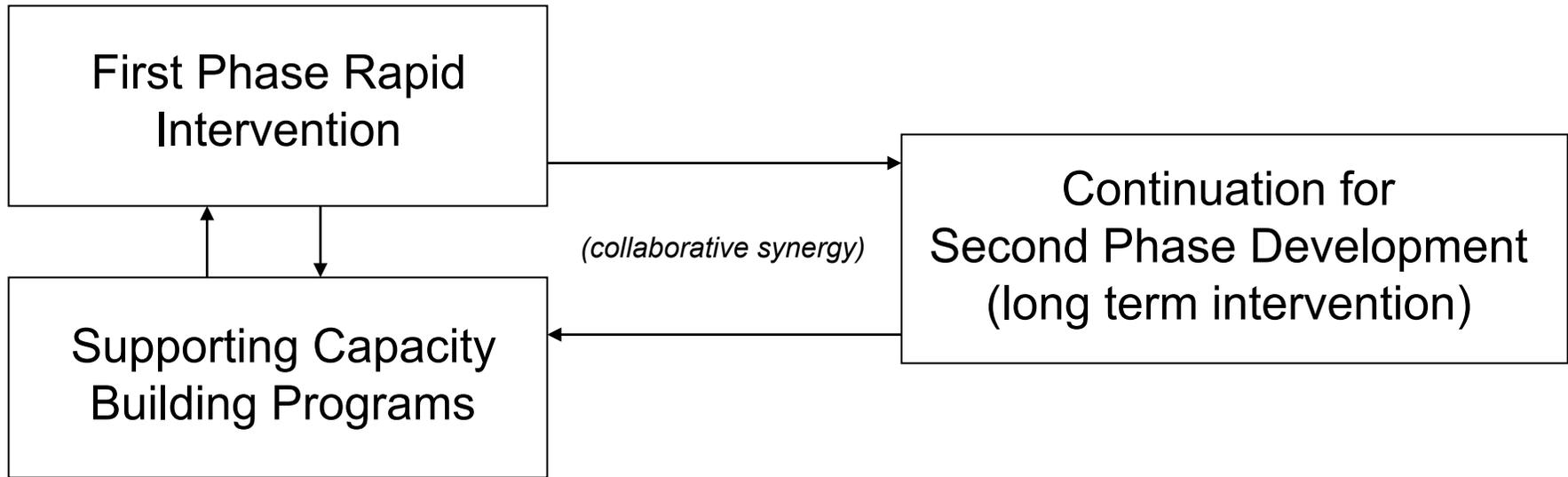
All intervention decisions were made through a process of identifying some of the most critical problems and attempted a set of action that would lead to a more specific problem solving strategy.





Examples of Design Considerations

Planning:	Safety and accessibility
Layout:	Privacy and social interaction
Height:	Lifestyle and climate
Weight:	Mobility
Size and Space:	Milieu of social practice
Shape:	Efficiency and stability
Openings:	Ventilation, view and comfort level
Structure:	Easy, strong and safe
Materials:	Climate consideration and durability
Detailing:	Simple and easy
Color:	Climate and visual connectivity



Intervention Product



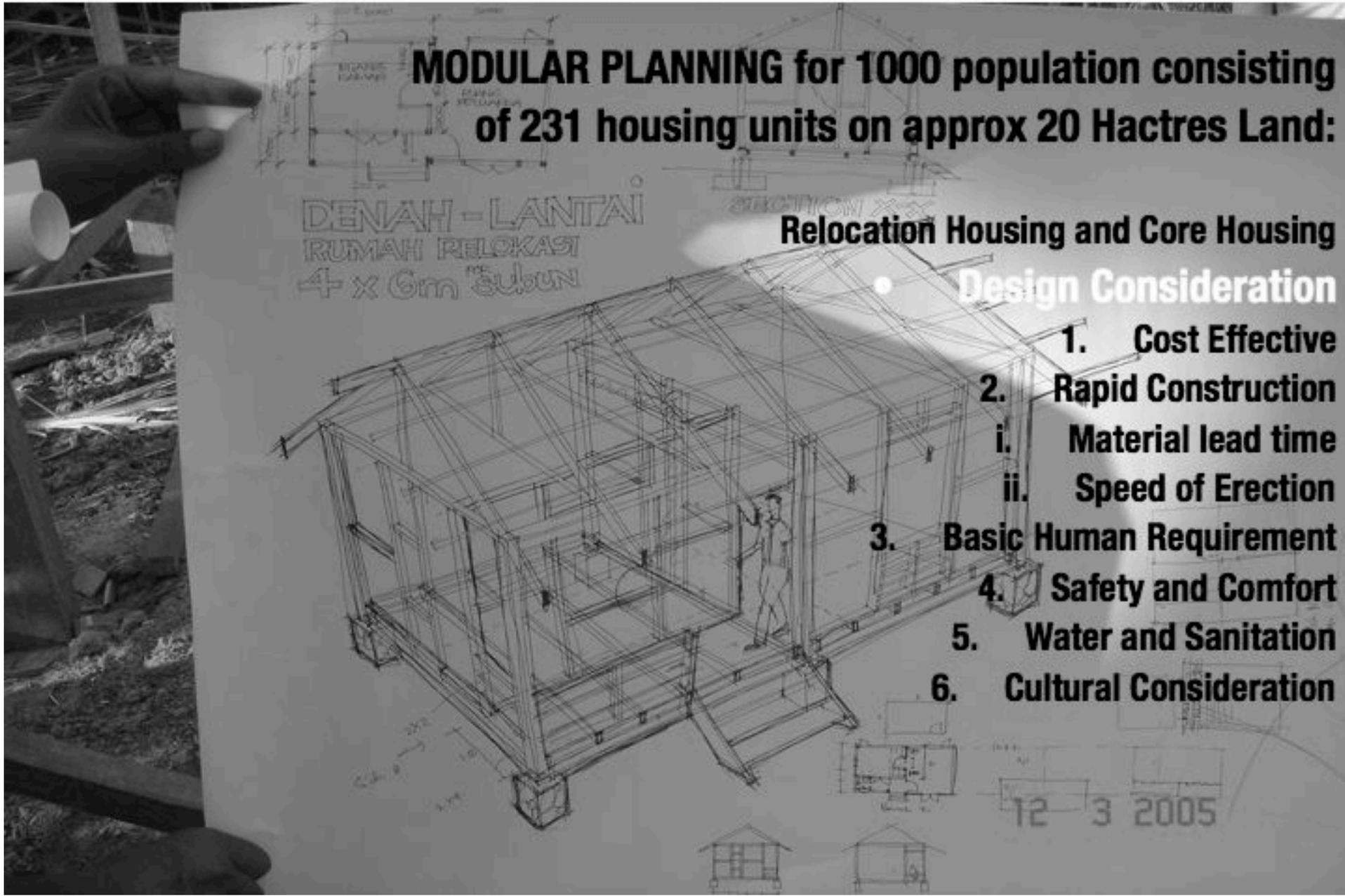
Intervention: Case 2 (Re-settlement Housing, Aceh)



Designing and construction process for the Core Houses took period simultaneously with the setting up of the IDP Camps. A parallel work strategy is needed to respond to the needs of the community.



Intervention Process



MODULAR PLANNING for 1000 population consisting of 231 housing units on approx 20 Hactres Land:

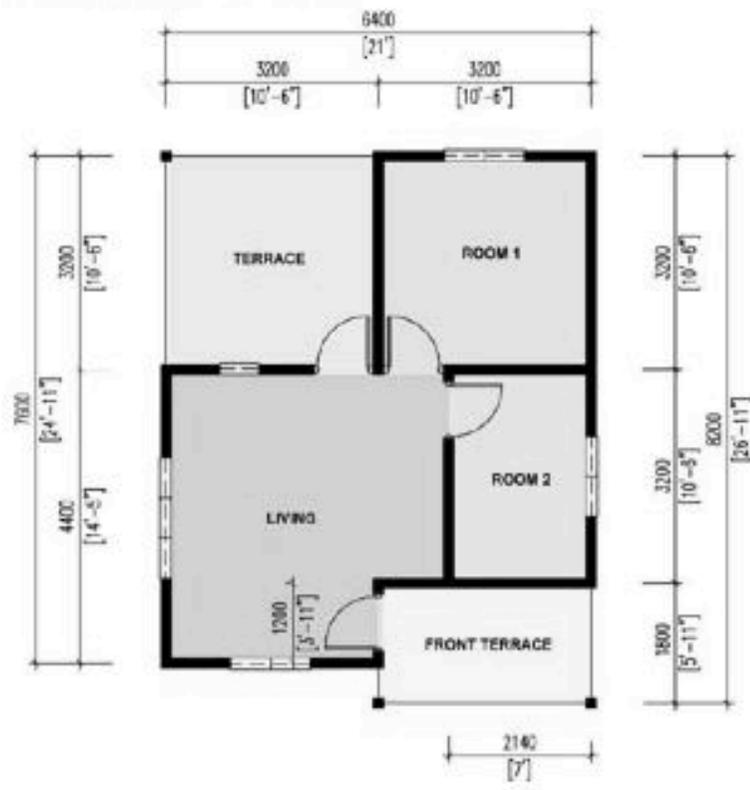
Relocation Housing and Core Housing Design Consideration

- **Design Consideration**
 1. **Cost Effective**
 2. **Rapid Construction**
 - i. **Material lead time**
 - ii. **Speed of Erection**
 3. **Basic Human Requirement**
 4. **Safety and Comfort**
 5. **Water and Sanitation**
 6. **Cultural Consideration**

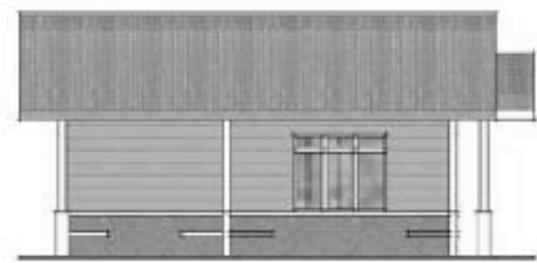
DENA - LANTAI
RUMAH RELOKASI
4 x 6m Subun

12 3 2005

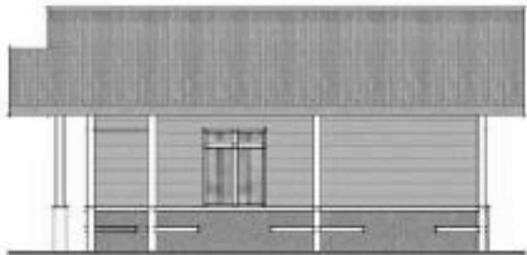
Intervention Process



Front Elevation



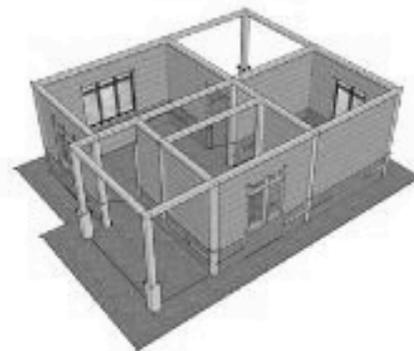
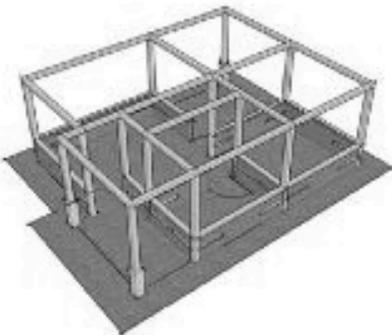
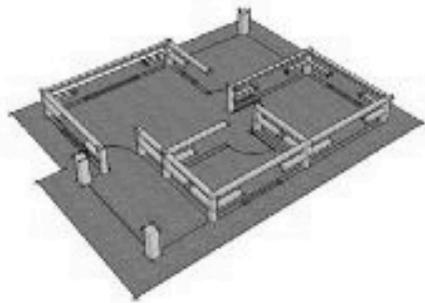
Right Elevation



Left Elevation



Rear Elevation



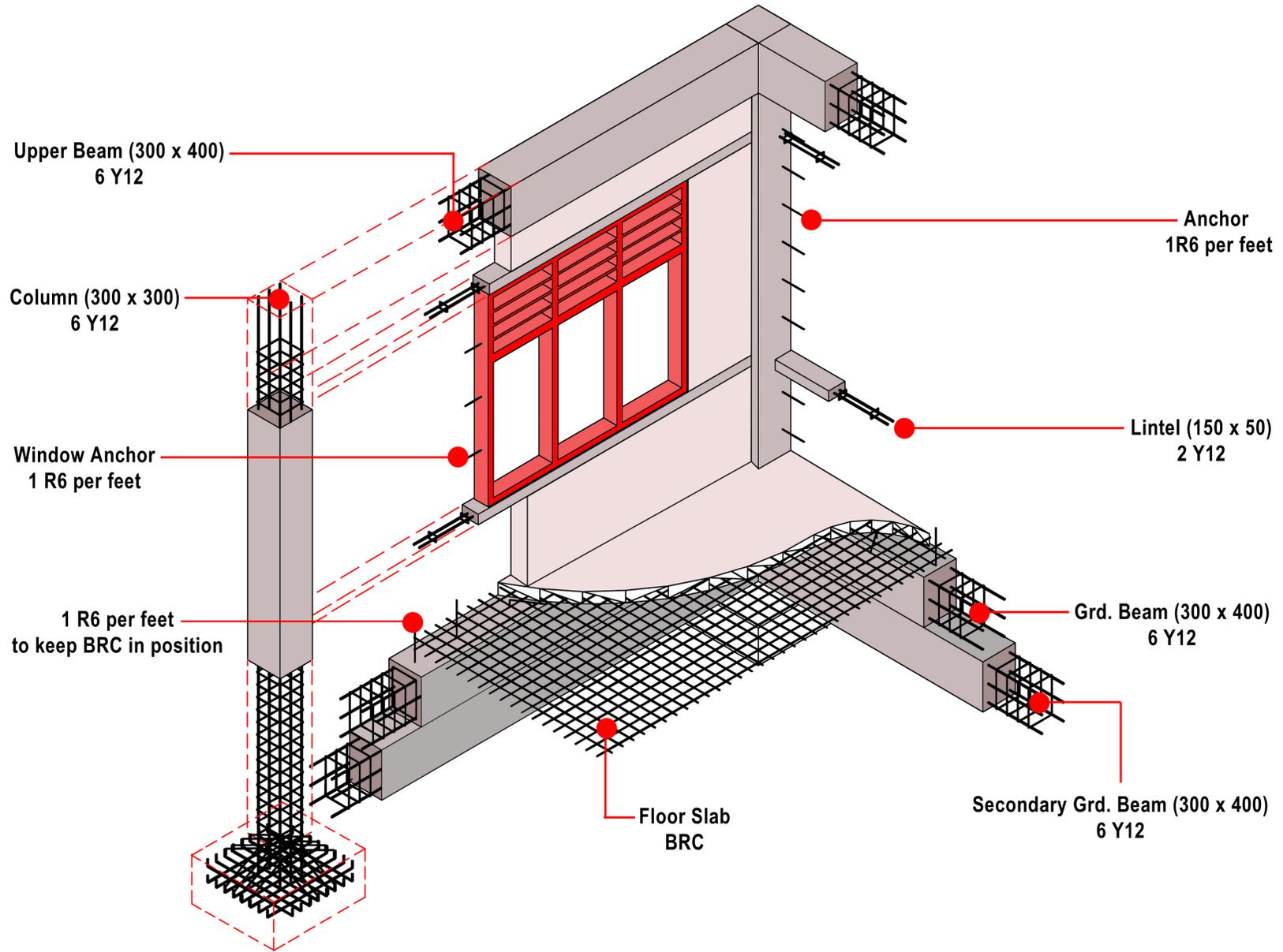
Intervention Process



Mobilizing Community's Spirit to Secure Humanity's Future on This Devastated Land of Finite Resources



Intervention Process





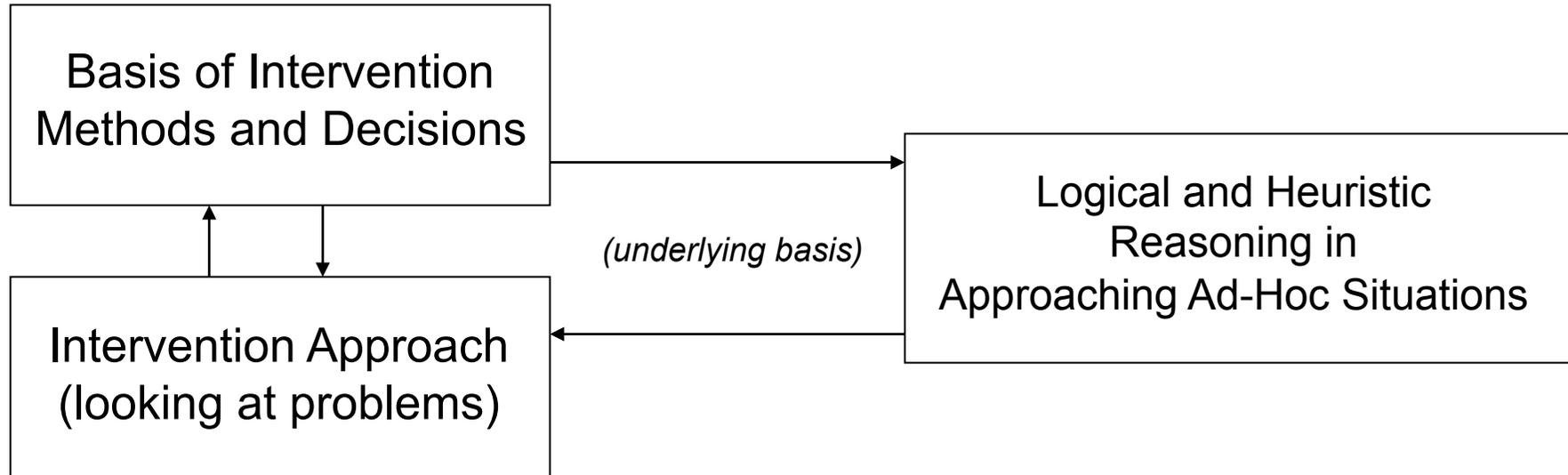
Community Participation - A Self Help Housing Initiatives





Mobilizing Community's Spirit to Secure Humanity's Future on This Devastated Land of Finite Resources



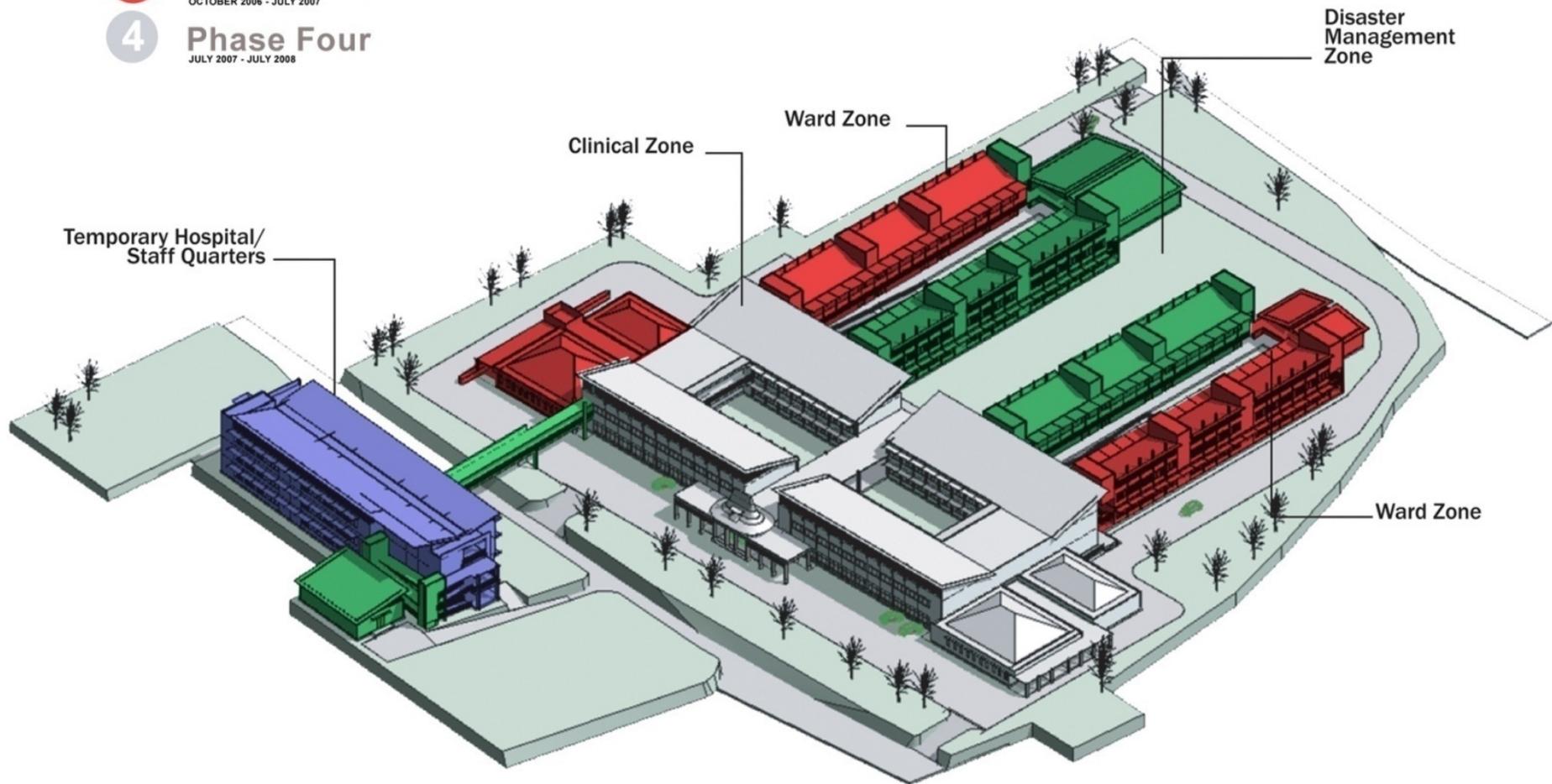


Intervention Product



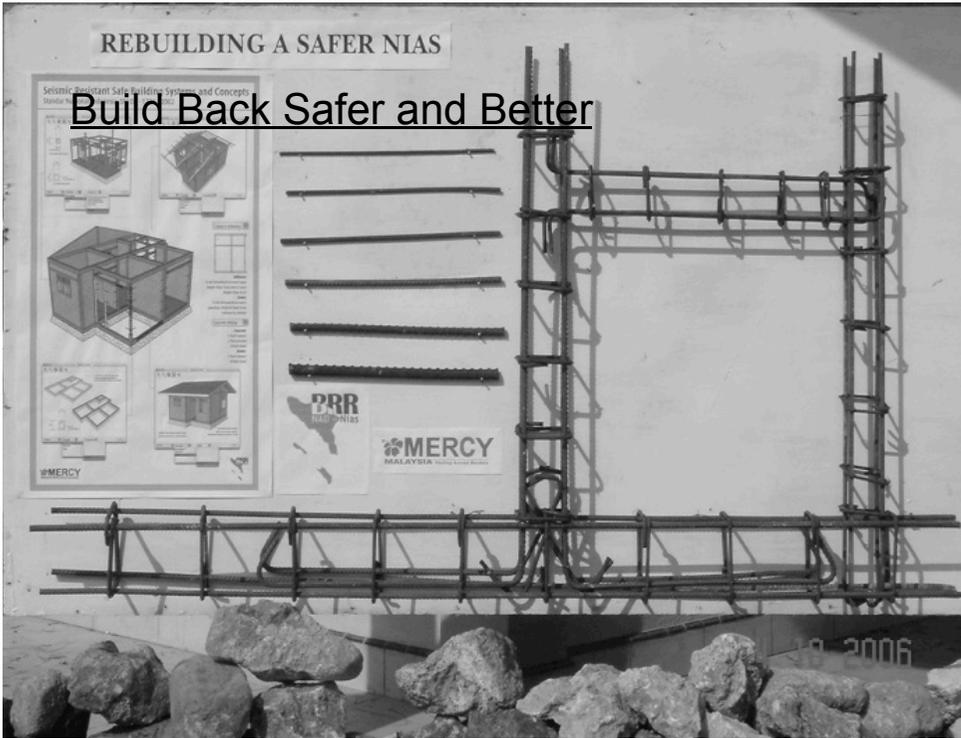
Intervention: Case 3 (RSUD Gunungsitoli, Nias)

- 1** Phase One
APRIL 2006 - NOVEMBER 2006
- 2** Phase Two
AUGUST 2006 - MARCH 2007
- 3** Phase Three
OCTOBER 2006 - JULY 2007
- 4** Phase Four
JULY 2007 - JULY 2008



REBUILDING A SAFER NIAS

Build Back Safer and Better



Coordination and Workshops





Intervention Product



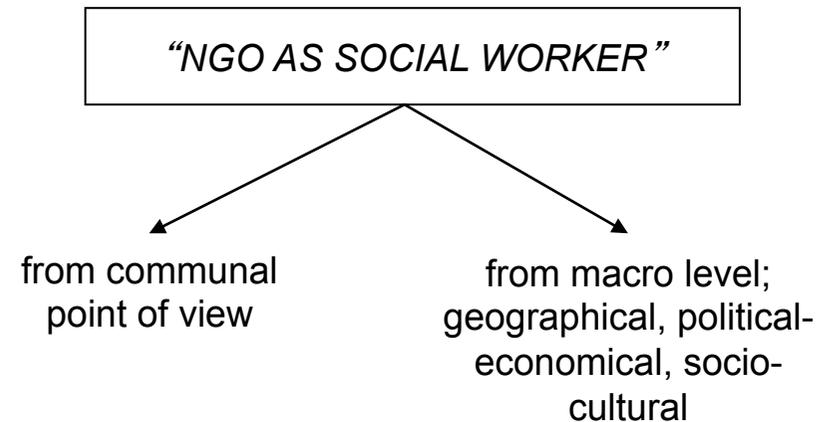
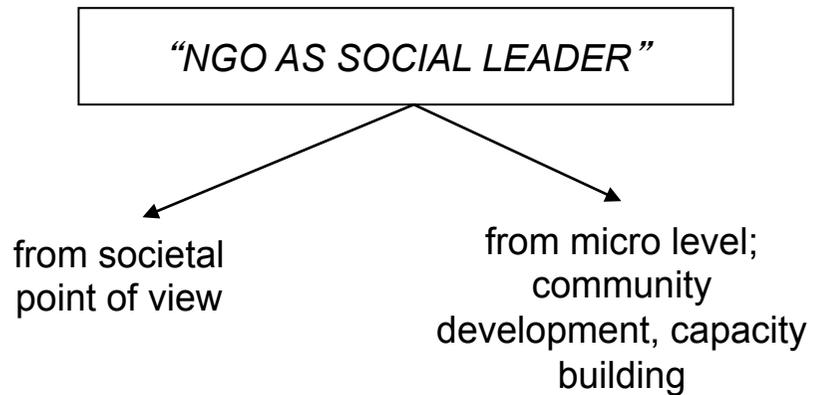
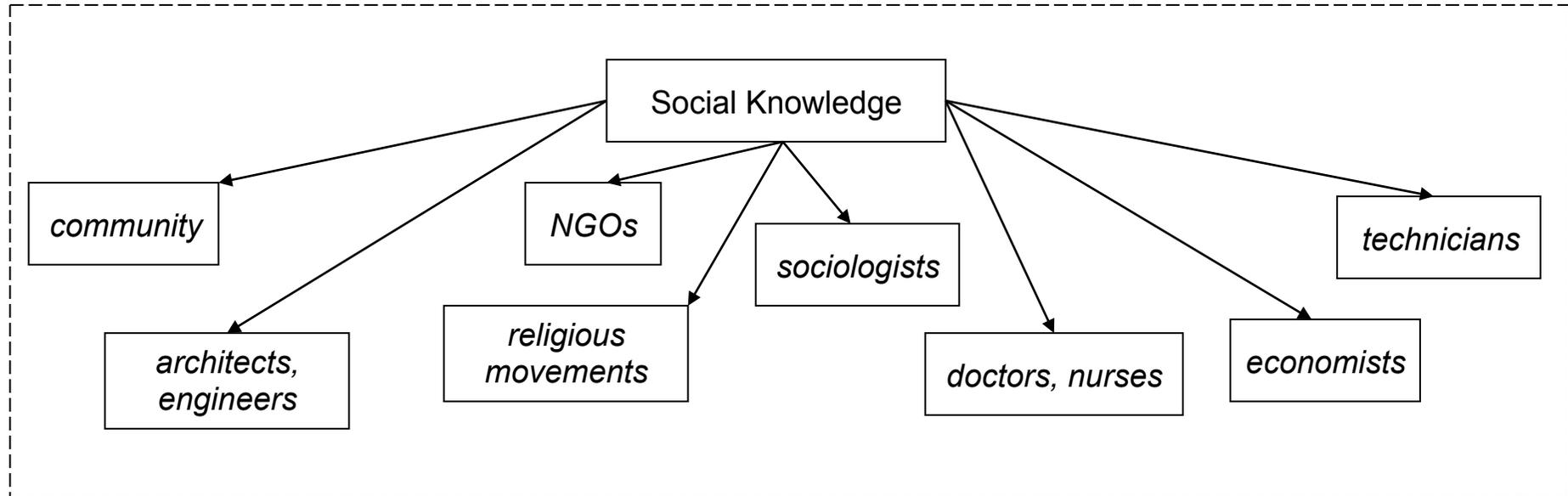


**Managing oneself/ a small group/
community, before/ during/ after
the event of disaster in a
systematically way.**

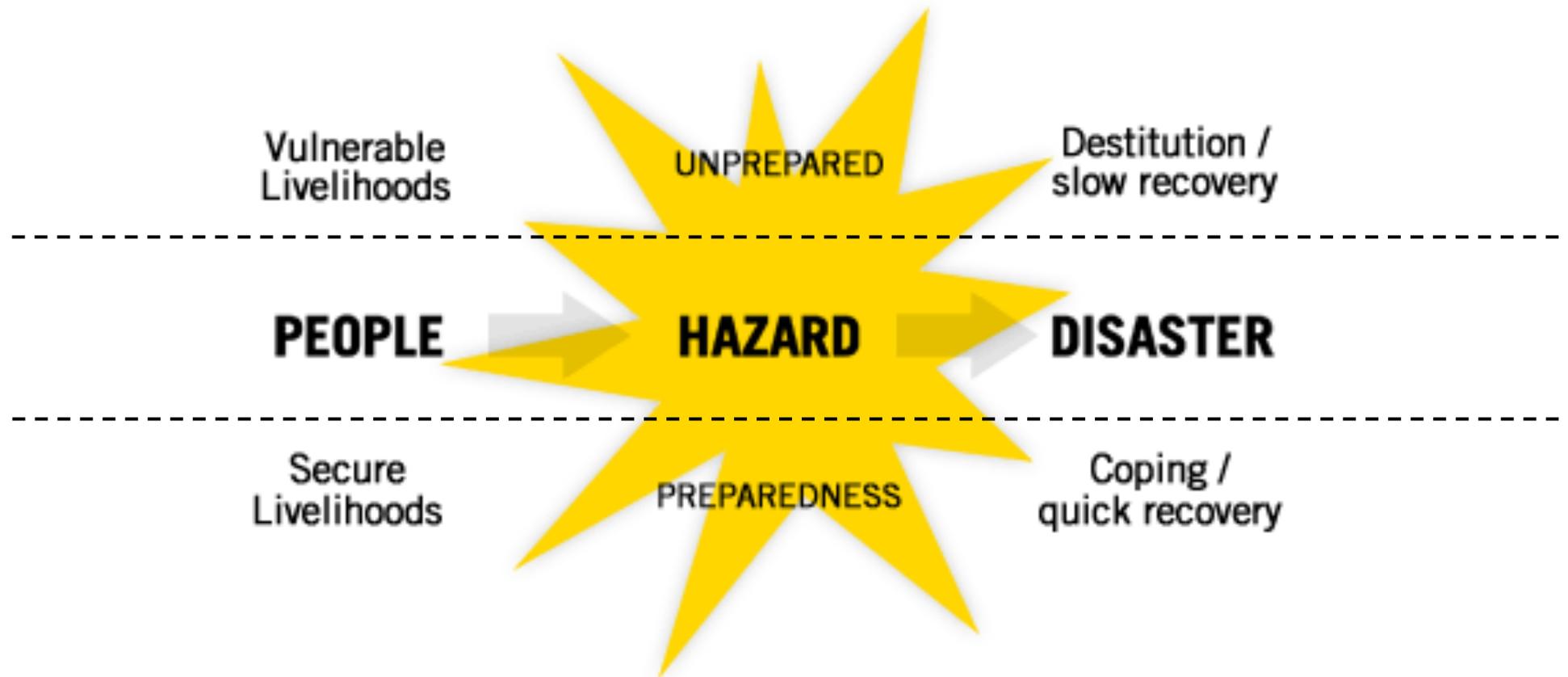


No matter where in the world disaster strikes, disaster management is all about people.

Cross-collaboration Practices



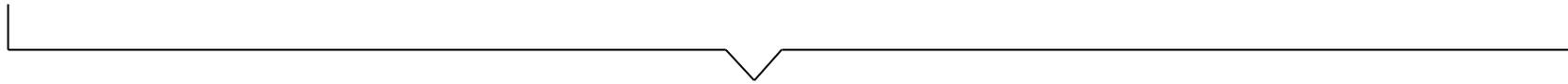
Being Prepared



Avoiding the Wrong Way

Un-holistic Approaches in Disaster Responses:

Critical Issues (*heavyweight*) were given compromising (*lightweight*) solutions.



ESCAPIST

REDUCTIONIST

AD-HOC

COMPROMISING AND NAIVE

Example:

Substantial and fundamental questions and problems were tried to be resolved from an old or conservative theories which may not be valid anymore.

**...everyone, rich or poor,
deserves a shelter for the soul**

