How to Generate a Common Concept of “Build Back Better”

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Problems

- We do not have the concrete and common concept of ‘Build Back Better’
- In order to share the concrete and common idea of ‘Build Back Better’, we need accumulate evidence from the case studies. The case studies have been conducted somehow in the past, but we have not had the ‘tool’ to compare those cases each other.
- The tool is needed as a common monitoring system in order to evaluate the process and results of ‘Build Back Better’
- The monitoring system needs the common index to measure the progress of ‘Build Back Better’.
- Through index we can construct a model to simulate a cities and communities’ recovery. So we can discuss what will be a well-balanced recovery we should enhance.
Scientific Approach should be taken to the issue, ‘Build Back Better’

Need to build up

1. *Common Framework* for ‘Build Back Better’

2. *Standardized Index* in order to measure the progress of the recovery
The Basic Elements of Build Back Better

1) Common Framework for ‘Build Back Better’

- Redeveloping Destructed Cities and Communities
- Revitalizing Local Economics
- Helping Disaster Survivors
Recover destructed cities and communities comprehensively with 3 Goals

“Build Back Better” should include “rebuilding livelihoods,” “rebuilding economy” and “rebuilding regional communities,” as common paradigms to be shared by relevant stakeholders in the recovery, rehabilitation and reconstruction process.

1) Common Framework for ‘Build Back Better’

Economic Recovery

Revitalizing Local Economies

As a Tool

Redeveloping Destructed Cities

As a Result

Helping Disaster Survivors

Life Recovery

Physical Recovery
1) Common Framework for ‘Build Back Better’

Basic Structure of Build Back Better

- Rehabilitation of Infrastructure
- Individual Assistance for Victims

Economic Recovery
- Major Industries
- Small Business

Life Recovery
- Housing
- Land Use Planning

Physical Recovery

1) Common Framework for ‘Build Back Better’
2) Standardized Index in order to measure the progress of the recovery

Basic Structure of Build Back Better

Individual Assistance for Victims

- Major Industries
- Small Business
- Housing
- Land Use Planning

Economic Recovery

Rehabilitation of Infrastructure

Physical Recovery

Life Recovery
2001 Random Sampled Social Survey’s Frame

**I ~ V**
Experiencing Disasters (Disorientation～)

**Demographics**
- Age/Gender
- Jobs
- Housing
- Family

**Damage**
- Experiencing Disasters
- Human Damage
- Housing Damage
- Workplace Damage
- Financial Damage

**Determination of Location**
- Changing Location
- Determination of residence

**Socio-economic Recovery**

1. Housing
2. Social Ties
3. Land Use Planning
4. Physical/Mental Health
5. Preparedness
6. Economic/Financial Situation
7. Relation to Government

**Restoration plans were Ended**

1999/3 (After 5 years)
2001/1 (After 7 years)
2002/1 (After 8 years)

2) Standardized Index in order to measure the progress of the recovery
Life Recovery Calendar Details

• The calendar is made up of questionnaires for affected people to put marks on it regarding 12 significant events that they think become a milestone in rebuilding their life in past disasters.

1. I understood the extent of the damage.
2. I felt safe.
3. I was prepared to be uncomfortable for a while.
4. Business offices/Local schools resumed operations.
5. Housing problems were resolved.
6. The disaster no longer impacted my household.
7. Everyday routines resumed.
8. Local activities were restored.
9. I no longer considered myself a disaster victim.
10. The local economy was no longer influenced by the disaster.
11. Local roads were restored.
12. Local schools resumed operation.
It takes 10 hours to understand the magnitude of a disaster.

It takes about 4 days to understand the extent of the damage.

Businesses and schools begin to resume after a week.

Local activities and rebuilding start in the spring.

Fewer identify as disaster victims after a year.

Many items require over 1,000 hours!
New Reality Acceptance
Creative Recovery

10
10
10

Everyday routines resumed
The local economy was no longer influenced by the disaster.
Housing problems were resolved.
Business offices/local schools resumed operations.
Daily routines resumed.
Local activities were restored.
I no longer considered myself a disaster victim.
The local economy was no longer influenced by the disaster.
Local roads were restored.

Almost 100% recovery for all items.

70% of households identify as disaster victims.
Only 34.5% for the local economy.

Evacuation order was lifted throughout the area on April 1, 2007.
Rapid recovery
Reconstruction Calendar in Banda Aceh (conducted in Dec. '05)

- I understood the entirety of the damage (n=127)
- I was prepared to have an uncomfortable life for quite some time (n=127)
- Daily life settled (n=127)
- I felt it was safe (n=127)
- Work/school resumed (n=81)
- Personal finances are no longer influenced by the earthquake (n=127)
- Housing problems are finally settled (n=127)
- The local economy is no longer influenced by the earthquake (n=127)
- I no longer feel that I am a victim of the disaster (n=127)

X = log 'Time elapsed since the earthquake'

2004 Sumatra EQ & Tsunami

At night

2004 Sumatra a EQ & Tsunami
Let’s make it happen with our hands

1. Explore “Build Back Better” by scientific approach
2. Review the process of the recovery
3. Provide a factual framework for future research
4. Make a hypothetical description of a complex entity or process in “Build Back Better”
5. Realize a Social Survey Research utilizing the recovery index for verification
Thank you for your attention