How Private Private-Sectors To Be Partners of Public Public-Sectors by Participating in Disaster Recovery - Learning from Chi Chi-Chi Earthquake Recovery

Submitted by: Chinese Taipei
How Private-sectors to be partners of public-sectors by participating in disaster recovery

--Learning form Chi-Chi Earthquake Recovery

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Forewords

1. The recovery affairs are complex with thousands of things after large-scale disaster. Government (e.g. public-sectors) plays a key role for disaster recovery, in one hand. On the other hand, private-sectors, such as: non-government groups, enterprises, universities, community organization or volunteers, also play very important roles collaborating with public-sectors to facilitate rehabilitation and recovery for completion smoothly as soon as possible.

2. The case of disaster recovery of Chi-chi Earthquake on Sep. 21, 1999, will be introduced here. I will discuss several issues for disaster recovery, as followings:
• First, the types of private-sectors participating in disaster recovery;
• Second, the major working items of private-sectors during disaster;
• Third, the participating modes of private-sectors;
• Forth, the characters of private-sectors participating in disaster recovery;
• Finally, I will try to propose the ways for enhancing the public-sectors and private-sectors to collaborate and facilitate the recovery going smoothly.

3. The disaster recovery is defined as two of the four phases of disaster management which are disaster emergency response and recovery.
General Description (1)

- Time & Date: 1:47 AM, Sep. 21 1999
- Epicenter: Chi Chi
- Magnitude: ML 7.3

Chelunpu Fault expressed significant energy and caused strongest earthquake in the last hundred years period.
General Description (2)

- **Death**: 2,455
- **Missing**: 50
- **Injured**: 11,305
- **Direct property loss**: US$11.1 billion

**Housing Totally Collapsed**:
- 50,644 (households)
- 38,935 (buildings)

**Housing Partially Collapsed**:
- 53,317 (households)
- 45,320 (buildings)
Geological disaster
Fault disaster
Fault disaster

南投霧峰光復國中

碑豐橋
Public facility damage: Transformer station
Public facility damage: Dam
Public facility damage: Bridge

- Shiwei bridge
- Mingchu bridge
- Pifeng bridge
- Yijiang bridge
Public facility damage: School buildings
Housing damage: old-style house
Housing damage: Buildings
Deaths/ Mental trauma

Other disaster damages:
• Industrial and economic impacts;
• Cultural damages;
• Livelihood impacts;…
Briefing of Major items of the Chi-Chi EQ Recovery

- Reduction of the secondary damage
- Infrastructure reconstruction
- Livelihood recovery
- Revitalization of agriculture, industry, commerce and tourism
- Housing and community recovery
The major working items of private-sectors during disaster recovery

In various recovery items, there are parts of affairs can be completed by through collaboration between public and private sectors, however some affairs are suitable for private sector to set into actions. Here, **Table 1** is illustrated with the major working items of private-sectors during Chi-Chi Earthquake recovery. For elaborating the working items clearly, **Table 1** is shown that the private-sectors which participated in recovery on the phases of the disaster emergency response and recovery of Chi-Chi Earthquake.
## Table 1. The major working items of private sectors

<table>
<thead>
<tr>
<th>Phase</th>
<th>Major working items</th>
<th>Explanations and illustrations</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Emergency Response</strong></td>
<td><strong>Emergency Rescue</strong></td>
<td>Searching for missing victims or rescue victims from the collapsing buildings</td>
</tr>
<tr>
<td></td>
<td><strong>Deploy and transport rescue</strong></td>
<td>Gathering rescue goods and materials, including foods, drinking water, settlement camping, blankets, electric torches or materials, and transporting to disaster areas, then distribution.</td>
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<tr>
<td></td>
<td><strong>Recruit rescue goods and materials</strong></td>
<td>Recruit rescue goods and materials, also call on donating money, form the public and enterprise. In the Chi-Chi Earthquake case, the donating money is huge for offering emergency rescue and support recovery.</td>
</tr>
<tr>
<td></td>
<td><strong>Medical treatment and public hygiene</strong></td>
<td>Injuring victims are needed to be treated by medical cares. Besides, victim’s copses are needed to be treated, too. Disaster victims’ mental health because of earthquake shocking is also needed to console and take care.</td>
</tr>
<tr>
<td></td>
<td><strong>Temporary settlement</strong></td>
<td>Emergency settlement by temporary camping and places is needed to provide homeless and scaring victims.</td>
</tr>
<tr>
<td>Phase</td>
<td>Major working items</td>
<td>Explanations and illustrations</td>
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<tr>
<td>Recovery/reconstruction</td>
<td>Livelihood care</td>
<td>Victims’ life, such as hair cuts, clear house or living activities, need to be taken cares. In particular, unemployed victims because of the disaster need to be supported and taken cares at first priority.</td>
</tr>
<tr>
<td>Economic support</td>
<td></td>
<td>Economic supports are very important for various recovery and reconstruction activities. Basically, economic supports include money and material (such equipments and machines) offerings.</td>
</tr>
<tr>
<td>Continuing to gather donating money and materials</td>
<td></td>
<td>Continuing to recruit donating money and materials (such equipments, tools and machines).</td>
</tr>
<tr>
<td>Medical treatment and public hygiene</td>
<td></td>
<td>Continuing to provide medical cares or treatments for victims. For example: victims’ health exanimation, sick cure, surrounding disinfect and prevention infectious diseases.</td>
</tr>
<tr>
<td>Mental health recovery</td>
<td></td>
<td>There are many activities, such as victims’ mental recovery, children’ take cares, blessing ceremony hold y by disaster communities and villages and concerts, are important for recovery of victims’ mental health.</td>
</tr>
<tr>
<td>Public welfare</td>
<td></td>
<td>Powerless people impacted by disaster, such as elder people living alone and infant children, should give more take cares, including to visit daily, provide meals and check health.</td>
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<tr>
<td>Phase</td>
<td>Major working items</td>
<td>Explanations and illustrations</td>
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<tr>
<td>Recovery/reconstruction</td>
<td>Education care and service</td>
<td>Recovery of the schools and learning environments are important for education care. Besides, providing the education service of student counseling after classes are also important.</td>
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<td></td>
<td>Cultural recovery</td>
<td>Cultural or historical relics and ancient buildings damaged by the disaster should be preservation and rebuilt. Besides, aboriginal cultures is impacted by the disaster should be rebuilt.</td>
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<td></td>
<td>Building and physical reconstruction</td>
<td>Disaster impacted buildings, including composed temporary houses, housing, drain facilities, producing equipments and tools (farming machines and draining equipments), community transporting roads, clear water providing facility, and school surrounding should be rebuilt and reconstructed.</td>
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<tr>
<td></td>
<td>Employment training and assistant</td>
<td>The private sectors provided many employment trainings and assistants, such as training courses, workshops and meetings.</td>
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<td></td>
<td>Announces and information transmissions by media</td>
<td>The conditions of disaster recoveries and reconstructions are transmitted. Besides, announces and information are informed to people living in disaster areas.</td>
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<td></td>
<td>Others</td>
<td>Recovery laws and institutions are launched. Donate money is supervised. Resources (goods and materials) are deployed and integrated. Information is gathered and provided. Community is patrolled and secured.</td>
</tr>
</tbody>
</table>
The types of private-sectors participating in disaster recovery

There are several types of private-sectors for participation, such as:
1. Volunteer individuals
2. Religious group (Tzu-Chi foundation, ....)
3. International organization (Red Cross Society, ....)
4. Non-government rescue groups (International Headquarters Search and Rescue, ....)
5. Civil autonomy organization (including communities), Non-profit-organizations (Formosa charity group, ..)
6-1. Foundations supported by non-profit-organization (Child Welfare League Foundation, ....)
6-2. Foundations supported by profit-organization (TVBS, ....)
7. Enterprises, profit-organization
8. Professional societies: Architecture United Society,..
9. Medical Groups: Pu-li Christianity Hospital,....
10. Academic units and institutes: University,....
11. others:
• Residing aboard group and Foreign Friendship Group
• 921 Earthquake Relief Foundation
• Supervising donating-money of 921 EQ Foundation
• National Alliance for Post-Earthquake Reconstruction
The Alliance includes 115 civil organizations to participate, which are separated by 11 divisions as the followings:
• Housing Recovery Division;
• Culture Property Division;
• Volunteer Service Division;
• Children and Young Caring Division;
• Mental Recovery Division;
• Religion Assistant Division;
• Medical Service and Public Hygiene Division;
• Law consulting and right Division;
• Education Recovery Division;
• Information Contact Division; also life Recovery Division;
• Aboriginal Service Division.
The participating modes of private-sectors

There are several modes for private-sectors to participating:

- Individual services/ to propose recovery project and implementing the project
- Holding various activities, such as conferences, workshops and training courses et. al.
- Constructing buildings and physical recovery (including equipment recovery)
• Providing professional supports
• Providing Goods or materials and donating-money
• Providing information and announces
• Coordination and communication.
• Establishing Service Station, Empowerment Centers
The participating modes of private-sectors (continuing)

“Service Station, Empowerment Centers ”

The Station or Ceter is settled down in a community.

• It plays a key role for Community-based Disaster Recovery (CBDS);
• It is settled down in a community for a long-term service (2 or 3 years);
• It is in charge of all-over affairs related disaster recovery;
• It coordinated, integrated and implemented various affairs related disaster recovery;
• It is assistant to solve related problems of disaster recovery, such as applying for a recovery project form the government or applying subsidies.
• It formed a supporting network with the other Service Stations for helping each other.
Regional community empowerment centers (●) were established in 4 regions (●), and local residents were picked up to receive training for community empowerment workers to offer communities (○) support for recovery.
Community empowerment
The Characters of private-sectors participating in recovery

Comparing to the public-sectors which are focus on establishing law, designing institution, reconstructing public facilities with the principles of consistence, regularity, equality and institution, the private-sectors have several characters different form the public-sectors as the followings:

• More flexible and adjusting for implementation, and having more effectiveness;
• Have advantages to provide individual and specific services;
• Good at non-physical recovery, such mental recovery, living care, public welfare and caring powerless groups;
The Characters of private-sectors participating in recovery (continuing)

- Easy to combine various groups with different characters and purposes together for collaboration;
- Easy to involve into a specific community and fit the needs of the victims

Besides, the private-sectors have also participated in large-scale recovery of public facilities, for example:

- Reconstructing Collapsing schoolhouses:

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<tr>
<td>Total</td>
<td>293</td>
</tr>
<tr>
<td>Constructed by public-sectors</td>
<td>130</td>
</tr>
<tr>
<td>Constructed by private-sectors</td>
<td>163</td>
</tr>
</tbody>
</table>
Find the possibility to enhance the capacity of private-sectors for participating in disaster recovery

In order to increase the possibility for private-sectors to participating in large-scale disaster recovery and strengthen the collaboration between public-sectors and private-sectors, some suggestions are the followings:

1. On the public-sector side,
   • Establishing or strengthen the related laws or institutions for private-sectors to participate in disaster recovery; necessary to relieve suitably for private-sector participation from rigid regulations.
   • Supporting private-sectors for participating in disaster recovery by several ways, such professional training, assistant to organize establishment and financial providing.
• Local government should establish a mechanism for accepting private-sectors (such as NPOs, enterprises,....) for assistance after large-scale disasters, which facilitate collaboration between public-sectors and private-sectors by operation rules or modes.

The mechanism need to be practiced by the public-sectors and private-sectors together in a ordinary day.
2. On the private-sector side,

- Strengthen organizing structure for participating in disaster recovery; Besides, a private-sector should be emphasis on establishing the network with the other NGOs for helping each other;

- Improving human resources by training; strengthen private-sector ability and capacity by practices and exercise.
Thanks for your attention!
The recovery organization in public-sectors

921 earthquake post-disaster recovery commission
(Central government)

Director

Deputy Director

Premier of the Executive Yuan

Deputy premier of the Executive Yuan

Committee members (29–33)

Minister without Portfolio of the Executive Yuan

Executive Secretary

Deputy Executive Secretary

Deputy Executive Secretary

Deputy Executive Secretary

Deputy Executive Secretary

Roving service teams for disaster community
Housing and community recovery Division
Livelihood Division
Industrial Revitalization Division
Public infrastructure reconstruction Division
Geological engineering Division
Overall planning Division
Executive Division