Relief, Recovery and Reconstruction After Catastrophic Events - Best Practices and Experiences Sharing

Submitted by: Chinese Taipei
Relief, Recovery and Reconstruction after Catastrophic Events

Chinese Taipei’s community recovery process after the Chi-Chi Earthquake

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PART 1
Recovery Issues after the Chi-Chi EQ
Discover Chinese Taipei

- **Capital**: Taipei City
- **Area**: 36,000 km²
- **Population**: 23 million
- **Population density**: 632 per km² (US 28.32 per km²)
- **Jurisdictions**: 25 counties/cities & 319 townships
- **GDP/capita**: $16,030 (US $ 44,197)

The devastation of Chi-Chi EQ

- **General Description (1)**
  - **Time**: Sep.21 1999 (1:47 local time)
  - **Epicenter**: Chi Chi
  - **Magnitude**: ML 7.3

Chelunpu Fault expressed significant energy and caused strongest earthquake in the last hundred years period.
The devastation of Chi-Chi EQ

- General Description (2)
  - Death: 2455
  - Missing: 50
  - Injured: 11305
  - Property loss: US$11.1 billion
  - Housing Collapsed:
    - 50,644 (households)
    - 38,935 (buildings)
  - Housing Damaged:
    - 53,317 (households)
    - 45,320 (buildings)

Characteristics of Damage

- Complicated Damage situation
  - Area: 90.5 km
  - Affected Town: 28
  - Affected areas included urbanized areas, small villages, agriculture areas
  - Countryside took majority of affected area
Characteristics of Damage

- characteristic of Countryside Areas
  - geologic sensitive areas between the Chelunpu Fault and the Central Mountain area.
  - low urbanized area with few commercial activities for daily living or scenic industry.

Issues of Social Impacts

- The earthquake also arouse lots of hidden social problems existing for quite a long time:
  - out-migration population and change of population structure
  - aborigine people and disappearing aboriginal culture.
  - complicated property rights of lands and inaccurate land data

These situations got worse after earthquake and might even disturb process of recovery.
Issues of Social Impacts

- **Challenge of Recovery**
  - Existing problem worsened earthquake damage
  - Low social standard of most affected area is disadvantageous to recovery affairs
  - No cases of community empowerment movement in countryside areas before

Issues of Economical Impacts

- No major impact on global economic growth of Chinese Taipei for 1999; recovery of industries turned out the economic growth rate
- However, agricultural area or small village suffered significant loss and got worse than before, such as:
  - Great impact on its original industry such as agriculture and tourism industry
  - Serious unemployment for local inhabitants and farmers with higher age
Chi-Chi EQ Recovery

- Public infrastructure reconstruction
- Geological engineering reconstruction
- Livelihood reconstruction
- Revitalization of agriculture, industry, commerce and tourism
- Housing reconstruction and community recovery

PART 2
Community Recovery
Overview of Community Recovery

The affairs of recovery are extremely complicated, which not only require administration support, but also depend on private power. Especially the effort from affected communities is the key to recovery. Before Chi-Chi Earthquake, “community empowerment movement” has already been promoted. In that way, communities can improve their living environment, create own community culture, and reinforce their activity through participation.

In the Chi-Chi Earthquake, traditional agriculture villages with better human communication took majority of affected areas. But before this significant disaster, there was no case of “communities empowerment movement” among these villages yet. However, we still recognized this movement as main strategy for community recovery.

Community Recovery - Taomi Village

- About Taomi (1)

Location: a small village located in countryside of mid-Chinese Taipei, in basin of Taomi River and Chung-Kwa River.

Area: 18 km²

Population: 1200 people, used to be a community with senior residents mostly

Hazard experience:
1999 Chi-Chi Earthquake
2000 Tao-Chi Typhoon
Community Recovery - Taomi Village

About Taomi (2)

**Industry:**
Used to be famous for red tea, sugar and so on; now with declining sightseeing and agriculture such as bamboo shoot.

**Social issues:**
- Distant social relationships
- Poor public facilities
- Lack of vitality and hope before Chi-Chi earthquake.

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Community Recovery - Taomi Village

Taomi in Chi-Chi EQ

**Time:** On September 21, 1999, the earthquake measuring 7.3 on the Richter Scale.

**Location:** The Taomi Community is located near the epicenter.

**Damage:** About 62 percent of the community buildings, mostly homes, collapsed and partial collapsed. Chi-CHI earthquake wrecked the lives and livelihood of the residents and natural environment.
Recovery Process – the beginning

■ Assistance

1999.10
New Homeland Foundation participated and assisted recovery
2000.01
the recovery committee of Taomi Community was established
2000.04:
more support from schools and civic organizations.

Recovery Process – the beginning

■ a Crisis? a Turning point?

"What should we rebuild?"
"how should we rebuild?"
Two practical problems came right after disaster
Confusion and anxiety spread between local people constantly
Recovery Process – the beginning

- Consensus of recovery
  - The New Homeland Foundation helped residents to integrate their ideas of about the best development through constantly communication and discussion.
  - Investigations on community resources around this beautiful valley were hold at the same time.

Recovery Process – the beginning

- Inspiring result of investigation
  
  **Frog**: 22 of 29 species in Chinese Taipei
  
  **Dragonfly**: 45 of 143 species in Chinese Taipei

  "The Taomi Ecovillage"
  - Advantageous resource
  - Spirit of recovery
  - New identity of Taomi
Recovery Process – the beginning

- Concept of “Ecovillage”

Ecology
Production
Livelihood
Life

these four concepts should be combined in harmony as development goal.

Recovery Process – the beginning

- Educational Training

In order to erase hesitation from community about new concept of recovery,

- ecology and ecological ethics, promotion of ecotechnology, and practice of ecological philosophy were all required

- process of educational training and concepts negotiation to put recovery with features into practice as strategy of recovery.
Recovery Process – the implementation

2001~
- Eco-potential environmental reconstruction started
- Taomi ecotourism promotion project started (left pic.)

2002 ~
- Chinese Taipei native plants field project started
- Taomi Earthquake memorial hall open (mid pic.)
- Local featured food exhibition hold, Guesthouse open
- 15 local people finished training, got license of Eco-tour guides and more activities and joined operation (right pic.)

Community Recovery Strategies

1. Financial aid for community recovery from government and private foundation
2. Academic institute and NGOs went into community in damaged areas, and have kept assisting recovery in a long period of time
3. 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