

# University - Community Business Continuity Management for Disaster Resilient Community:

## The Roles of University in Protecting Cultural Heritage

災害につよいコミュニティへ向けた大学・コミュニティ間事業継続マネジメント：  
文化遺産保全における大学の役割

International Training Program 2011 on 11 February 2012 at Conference Room Rits-DMUCH

### + Presenter

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PERIOD OF STAY 10 October – 15 December 2011 (67 Days)



# Disaster Management

[ DM ]

: Mitigation, Preparedness, Response, Recovery

Disaster Management

Disaster Risk Reduction

Capacity Building

Community - Based

Risk Communication

Recovery Planning

Land Use Planning

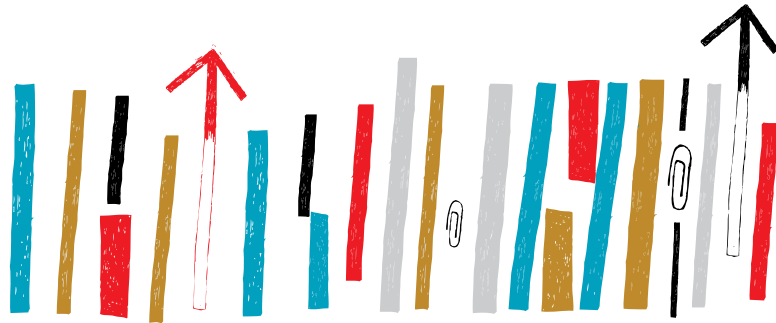
Early Warning

Contingency Planning

Partnership for Disaster

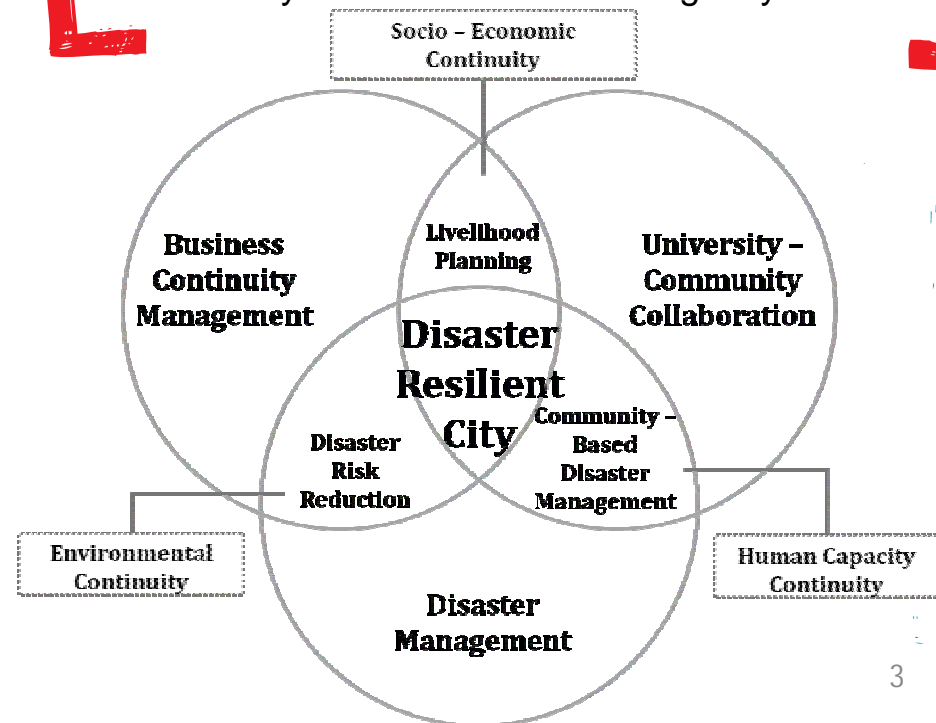
# University - Community Business Continuity Management

DEFINITION BY HIRUNSALEE SIYANEE © 2012



“The collaboration made among university members (On – campus) and the residents surrounded community (Off – campus) to mutually manage their community’s business as usual, continuously in the disaster or emergency events.”

A diagram shows 3 main theories combined in invented the new concept of university – community business continuity management for disaster resilient city. The concept of Business Continuity Management (BCM), Disaster Management (DM) and University – Community Collaboration (UCC) have been merged in to create continuity in the city, which lead to the final outcome as Disaster Resilient City. Environmental, Socio – economic and human capacity continuity will drive the city in the way that is resilient even in the time of disaster or other emergency events.



# Business Continuity Management [BCM]

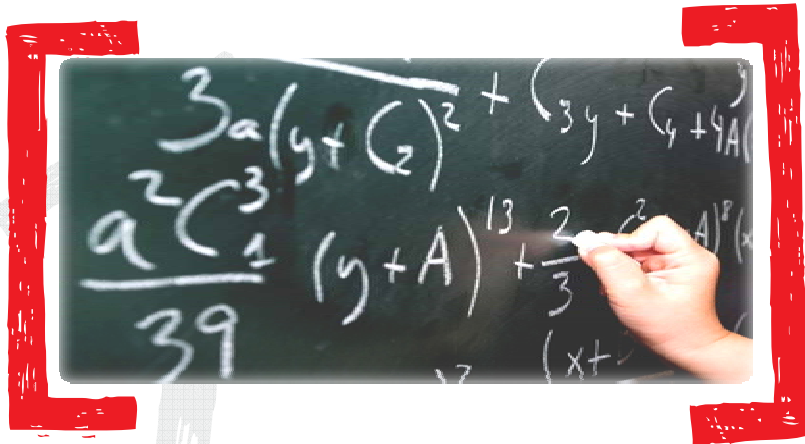
BCM advocated by USA, aims at pursuing the minimum consequential loss of businesses after unexpected emergencies. It assists private business enterprises not only to minimize their economic loss but also to maintain their competitive capacity in the economic market. BCM should be able to manage the risks, which could result in disastrous events and thus minimize the likelihood of a disaster, reduce the time taken to recover when an incident occurs and minimize the risks involved in the recovery process by making the critical decisions in advance in stress-free conditions. [1]

[1] Kaji Hideki. Business Continuity Plan Of Education And Researches In University-A Case Study On Tokyo-Tech Suzukake-Dai Campus". ACEE –2010, the 3rd Asia Conference on Earthquake Engineering, with the theme of "Disaster Risk Reduction and Capacity Building for Safer Environments" on December 01-03, 2010 at Bangkok, Thailand. Conference Proceeding CD, pp. 2.

[2] National Research Council. Building Community Disaster Resilience through Private-Public Collaboration. Washington, DC: The National Academies Press, 2011, pp. 39.

# University – Community Collaboration [UCC]

Collaborative relationships often begin with local organizers who have identified specific community needs. The process continues by mobilizing key leaders and relevant stakeholders in the community. Communication strategies and mechanisms that enable information sharing are critical to expanding collaboration to the broader community. Ideally, collaboration includes representatives from local, state, and federal agencies; small and large businesses; nonprofit and faith-based organizations; academicians, researchers, and educational institutions; the mass media; civic and neighborhood organizations; technical experts; volunteers; and other diverse community stakeholders. Nevertheless, specific resources may not be available in some communities, and this confirms the importance of extending the reach of community beyond jurisdictional or geographic boundaries. When a community needs specific resources, collaborative networks may expand to incorporate regional stakeholders to fill the gaps. Disasters ignore jurisdictional and geographic boundaries, so communities will benefit by looking beyond such boundaries when building community disaster resilience. [2]



+ More

Evacuation Center

Cultural Heritages

Providing Higher Education

The fundamental objective of the university is to genuinely provide a higher education to mankind and society.

# University – Community's Business

Residential Settlement

Places or Areas where humans settle their houses for the propose of living in the way that they would be able to also achieve their needs of socialization.

+ More

Local Business

Cultural Heritages



# Proposes of the Research

## Objective 1

To understand the conditions of University - Community Collaboration in Italy and analyze similarity or different from situation in Japan and Thailand

## Objective 2

To examine the roles of universities in protecting Cultural Heritages, especially roles in the faculty of Architecture and Planning.

Since, this research considers that study related Architecture and Planning these days abandoned/lacked of the understandings of history, archeology, authenticity and aesthetic of cultural heritages. Architects, Urban planners/designers or Policy Makers are involved directly and highly to the uses of land which can effect value of cultural heritages. However, the structure of the study related architecture or planning, mentioned less about issues related cultural heritage, as well a disaster.

# Findings [1]



## The Conditions of University – Community Collaboration

This research has its notion of the private and public collaboration and partnership concepts. Since, Private–public sector collaboration is an essential component of building capacity in communities. Unlike Japan and Thailand, the structure of the community in Italy is not clear and well organized.

### University – Community Collaboration

Collaborations made among University - Community were found mostly in the level of Public – Hearing. Meanwhile, the roles of universities in protecting cultural heritage from disaster are dominant (Show example of the activity held by L'Aquila University and children in an earthquake area.)

### Government Policy

Italian government is confident that the Italian Civil Protection National Service could provides the best service, to protect human lives, goods, settlements and the environment from damages or from the danger of damages deriving from natural calamities, catastrophes and other disastrous events. Thus government tend to gave less supports for the university and agreed less for the collaboration among universities and communities. Since, the collaboration leads to empowerment for the community which considered by government that is a threat in governance.





Gaming Simulation Workshop for Student Education of Disaster in their hometown, held by Students and Prof. from University of L'Aquila and Prof. From Sassari University.



# Findings [2]



## Role in Provide Formal and Informal Education

### The Roles of University in Protecting Cultural Heritage

Italy is the country of the heritages. In each city has keep it own historic city in the center of the city. Most of the historical centers are the living heritage, contain heritages buildings, monuments and sculptures which residents, live in the area, are directly interact with. The hardest preservation works is to preserve the living heritages.

The structure in the University in Italy (Faculty of Architecture) is also emphasized on the intervention in architecture and restoration works after disaster and how to preserve the landscape of the heritages.

Many universities in Italy are now agreed to give the credits to university students who may had missing class and leaved school for joining the voluntary services in the case of emergency (direct experience in restoration process). However, not all cases have been approved.

Not only provide formal education and support society by send up volunteer students, but also universities are now trying to hold the activities (Conference, Exhibition, Seminar, etc) to educate residents who live in the heritage to understand about the value of it.

# Findings [3]



## Evacuation Space

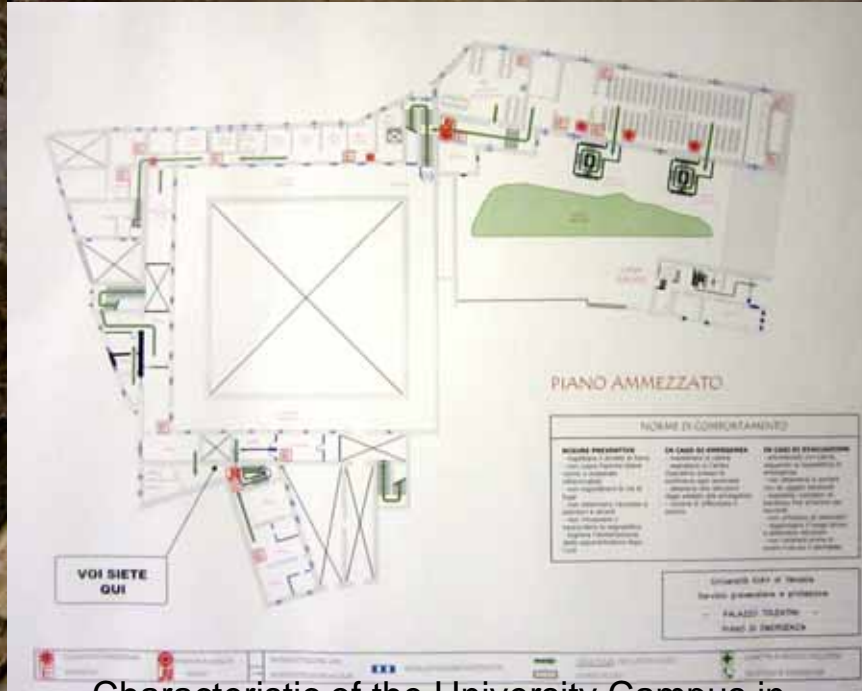
### The Roles of University in Protecting Cultural Heritage

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University in Italy have its characteristic of the building which is provide building space, enclosed by buildings. Thus, problem that universities are trying to solve is unlike in Japan and Thailand that suggest residents to be sheltered in the universities but in the contrary, trying to instruct students to evacuate from university and to suggest residents to avoid to use evacuation route via university route and be shelter else where.

Most of the universities in Italy are Cultural Heritages, from the history of its establishment and/or its old age. The structures of them are vulnerable to be collapsed in the case of earthquake.

Moreover, this way universities could protect assets which have cultural values in the universities as well.



Characteristic of the University Campus in University of Venice. Inner square court (Piazza), surrounded by corridors



# Conclusions

After Italy has been hit by various disasters in the last decade. In sum, The Roles of University in Protecting Cultural Heritage has been increasing recently which are;

1. Integrating the study of Archeology, History, Cultural Values and Architecture in order to improve the ability of the human resource to work on cultural heritages
2. Not only provide knowledge and information to students but also eager to communicate with the residents in historical areas. Operate the work with community such Meeting, Conference or Exhibition.
3. Offering the credits to students who went volunteer for the restoration process. In this way, students would have more opportunities to experience in the field work and in real situation.
4. Taking care its own buildings which are cultural heritages in preserving the structure and also its landscape.