

The Management of Disaster Prevention and Rescuing System of the ROC

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ABSTRACT

During the last decade, on average, around 11,550 fire-events occurred in Taiwan area which caused about 300 deaths and more than 630 persons injured every year. For example, there were more than 368,000 emergent rescue calls answered in Taiwan area in 1999, that is, more than 1,000 calls a day in average and about 710 persons were rescued. These data clearly indicate that various disasters are threatening the safety of people's lives and properties. Facing these disasters, the government has attempted to improve the incident command system and to establish regulations related to disaster rescuing and prevention laws, such as, "Key Points in Establishing Central Disaster Prevention and Rescuing Assembly," "Key Points in Establishing Disaster Prevention and Rescuing Commission of Executive Yuan," "Amendatory Acts for Structure of Fire and Disaster Prevention and Rescuing Administration," and "Key Points in Operation of Central Disaster Response Center," etc. It is not only the responsibility of the government but also the citizens to protect and care for their lives and properties that are threatened. However, there were several major disaster and public safety events that occurred in recently years in Taiwan area, such as the 921 earthquake, Pa-Jon River accident, and Ton-Di-Shi modern building fire-event which caused severe damage in both lives and properties. Although there are several acts and regulations that try to improve the disaster rescuing system and operation, it seemed not effective in combining the rescuing procedure between government and civilian organizations. How to develop and integrate an effective rescuing procedure between the official departments and civilian groups is a critical point for the whole rescuing system. It is important to set guidelines to achieve the best results by combining the private sector into the rescuing action. The purpose of this project is to establish the guidelines that will allow the private rescue organizations to be consolidated through continuous training and approval mechanisms as well as the supply of necessary equipments and facilities so that they can appropriately offer their best assistance and totally involve in rescue action when a disaster occurs. In chapter 2, we not only described the background, definition, and concept analysis in the relevant issues about disaster rescuing but also constructed the theory to support some cases analyses in this chapter. In section 3 of this chapter, we provided some disaster rescuing theories for future analyses, such as the crisis management theory, the disaster rescuing theory, and the systematic theory. From these theories, we try to generate an appropriate comparison method to evaluate the disaster rescuing systems among different countries and also to generate a relevant method to improve our national rescuing operation system. In chapter 3, we used the disaster rescuing system of American, the Federal Emergent Management Agency (FEMA), as a case study. Beginning with the revolution of its history, we analyzed the governmental structures, and then took the 911 event as an example to evaluate their rescuing operation and system. Finally, we tried to evaluate the validity of the emergency progress that operated by Incident Command System and the reality practices of disaster rescuing. We also tried to examine the application of theory on real situation. In chapter 4, we discussed the UK disaster rescuing system. From 2001, the rescuing system in UK was lead by the Civil Contingencies Secretariat Office in the Cabinet Office. Besides emphasizing on the devolution of responsibilities, they also take further effort to improve the negotiation and conformation between government departments. We also explored the damage recovery and detection progress in disasters using the Posters Bar traffic accident that occurred in May, 2002. In chapter 5, we focused on the changes and revolutions of our national Disaster Prevention and Rescuing Laws in Taiwan before and after the event of 921 earthquakes. We also used the 921-earthquake as a sample to discuss the advantages and disadvantages of current disaster rescuing system. This can be an evidence-based experience to modify our rescuing operation and system. Finally, chapter 6 is the discussion and conclusion of this project. According to the statement of previous chapters, we codified the results based on the comparison between theory and practice; also, we pointed out the direction of future studies and possible suggestions for the disaster prevention and rescuing system in Taiwan area.

Keywords : Disaster ; Prevention ; Rescuing ; Theory ; Operation ; Organization ; Evidence-based

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REFERENCES

- 一、中文部分 1.陳繼堯， Risk Management in Taiwan ，風險管理季刊第一期，民國八十八年五月。 2.王光煜， 企業危機管理指針，風險管理季刊第一期，民國八十八年五月。 3.歐陽敏、陳永芳譯， Peter Davies著，企業倫理，台北:韋伯文化，民國九十年。 4.張建興，災害防救法解說，台北:鼎茂，民國九十年八月。 5.丘昌泰（2000），災難管理學，元照出版社。 6.陳輝吉，現代高級管理會計經營策略導向，台北:。 7.朱愛群，危機管理-解讀災難謎咒，台北:五南，民國九十一年二月。 8.張慧英撰，邱強述，危機處理聖經，台北:天下文化，民國九十一年一月。 9.吳佩玲譯， Augustine al.著，危機管理，台北:天下文化，民國九十年十二月。 10.林嘉慧、葛揚漢，我國因應重大災害與緊急管理模式初探，第一屆全國災害危機處理研討會論文集，台南長榮管理學院，民89年，頁477-490。 11.黃季敏、張建興，我國災害防治體系的探討，第一屆全國災害危機處理研討會論文集，民89年，頁1-38，台南長榮管理學院。 12.陳亮全、郭俊欽，台灣重大災害緊急應變之調查與分析，第一屆全國災害危機處理研討會論文集，民89年，台南長榮管理學院頁1-38。 13.余康寧，危機管理研究 政策設計面之探討，政大公行所碩士論文，民國八十一年。 14.林博彥，我國災變管理政策執行過程之研議，台大政研所碩士論文，民國八十三年。 15.陳勝仁，我國危機管理體系之研究，東吳政研所碩士論文，民國八十六年。 16.林昇德，我國緊急災難管理機制建立之研究，政大公行所碩士論文，民國八十九年。 17.郭俊欽，九二一震災地方行政部門緊急應變執行過程之研究，台大建築及城鄉所，民國九十年。 18.梁杏娟，我國緊急應變體系整建之研究 九二一個案分析，暨南公行所碩士論文，民國九十年。 19.閻立泰，政府與民眾危機溝通之研究 九二一個案分析，政大公行所碩士論文，民國九十年。 二、西文部分 1.Edward P. Borodzicz， ' The Terminology of Dangerous Events: Implications for Key Decision Maker Training '， in International Journal of Police Science and Management, Henry Stewart, 1999, 2(3). 2.Edward P. Borodzicz， International Journal of Public Private Partnerships, Sheffield Hallam University Press, 1999, 2 (1): 71-80. 3.Edward P. Borodzicz， International Journal of Risk, Security and Crime Prevention, Perpetuity Press, 1996 1(2):131-46. 4.Rutherford H. Platt, 1999, Disaster and Democracy, Island Press: Washington, D. C. 5.Auf der Heide, Erik. 1989. Disaster Response: Principles and Preparations and Coordination. St. Louis, MO: Mosby. 6.Dahl, Robert A. Who Governs: Democracy and Power in an American City. Hew Haven, CT: Yale University Press. 7.Drabek, Thomas E. 1986. Human System Responses to Disaster: An Inventory of Sociological Findings. New York City: Springer-Verlag. 8.Drabek, Thomas E. and Gerald J. Hoetmer (ed.). 1991. Emergency Management: Principles and Practice for Local Government. Washington D.C.: International City Management Association. 9.Hunter, Floyd. 1953. Community Power Structure: A Study of Decision Making. Chapel Hill: Univ. of North Carolina Press. 10.Lindell, Michael K. and Ronald W. Perry. 1992. Behavioral Foundations of Community Emergency Planning. Washington D.C.: Hemisphere. 11.Mileti, Dennis S. 1999. Disaster by Design: A Reassessment of Natural Hazards in the United States. Washington D.C.: Joseph Henry. 12.Perrow, Charles. 1984. Normal Accidents: Living with High Risk Technologies. New York City: Basic Books. 13.Rogers, George O. 1994. The Timing of Emergency Decisions: Modeling Decisions by Community Officials during Chemical Accidents. Journal of Hazardous Materials. 37:353-73. 14.Sah, Jy-Pyng. 1998. Risk Management and Power Structure: A Study of Risk Management in Texas Local Government. Ph.D. Dissertation. College Station: Texas A&M University. 15.Schumaker, Paul. 1991. Critical Pluralism, Democratic Performance, and Community Power. Lawrence: University Press of Kansas. 16.Stone, Clarence. 1989. Regime Politics: Governing Atlanta 1946-1988. Lawrence: University Press of Kansas. 17.Sylves, Richard T. 1991. Adopting Integrated Emergency Management in the United States: Political and Organizational Chanlleges. International Journal of Mass Emergency and Disasters. Vol. 9. No. 3. pp. 413-24. 18.Wenger, Dennis E. 1978. Community Response to Disaster: Functional and Structural Alterations. In Disaster: Theory and Research. Edited by E. L. Quarantelli. 17-47. Beverly Hills, CA: Sage. 19.Tom Cannon, Corporate Responsibility: A Textbook on Business Ethics, Governance, Environment: Roles and Responsibilities, London: Ptiman. 三、網路資源 1. http://www.homeoffice.gov.uk/webwork/ho_funct.htm 2.UK Resilience, The Role of The Civil Contingencies Secretarait, <http://www.co-ordination.gov.uk/role.htm> 3. <http://www.ukresilience.info/contingencies/dwd/index.htm> 4. <http://www.co-ordination.gov.uk/handling.htm> 5.HSE Interim Reort, 14, May, 2002, Train Derailment at Potters Bar. 6. <http://www.hse.gov.uk/railway/pottersbar/interim1.htm> 7. <http://www.taipei.org/teco/cicc/news/chinese/c-05-27-02/c-05-27-02-9.htm>