

# **Decentralization Dilemmas in Disaster Management: Lessons from flood control in Taiwan**

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## **Abstract**

Since the early 1990s, modern democratic countries have been devoted to enhancing the quality of public services and improving citizens accessibility. This has involved a shift in attention from bureaucratic norms of hierarchical commanding systems to an emphasis on promoting public services' efficacy, and on the concepts and implementation of local governance. The trend towards greater decentralization are obvious in both developed and developing countries throughout the world. This has empowered the authorities administrative responsibilities over public functions from the national level to the local level.

With the coming of risk society, natural and human-made disasters have challenged the governance capacity of national and local government. Although decentralization is a trend in various fields for governance, little is known about the appropriate mode and crucial factors influencing its capacity for disaster management. The purpose of this study is to clarify different modes of decentralization and summarize the crucial aspects influencing flood control issues in Taiwan. By conducting in-depth interviews with flood control principals in central and local governments, we analyzed the existing conflicts of power and responsibility between centralization and decentralization and defined the factors with a significant influence on building good partnership across levels of governments. Based on empirical findings, this study ultimately makes policy suggestions to facilitate the establishment of mechanisms for good governance.

## **1. Introduction**

During the past three decades, decentralization and the functions and roles of governments has been the source of great debate. The arguments in favor of

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decentralization view it as a means for overcoming the limitations of centrally controlled national planning and getting closer to where the problems are (De Vries, 2000, p. 197). Osborne and Gaebler (1993, p. 251), for example, argued that, “In today’s world things simply work better if those working in public organizations—schools, public housing department, park training programs—have the authority to make their own decisions.” Studies have demonstrated increased decentralization in a majority of OECD countries and developing countries) during the last three decades (RondiNelli, 1981; Stegarescu, 2005). On the other hand, the arguments against decentralization emphasize the problems of the tragedy of the commons (Hardin, 1968), the logic of collective action (Olsen, 1965), and the inabilities of the local authority (Prud’homme, 1995; Segal, 1997). These arguments seem plausible, although they tend to lead to a dichotomy.

In 1999, the Local Government Act was passed by the Legislative Yuan of Taiwan. The three levels, structures, and autonomic affairs of the local government were regulated under this Act. In 2009, the legislature passed amendments to the Local Government Act to provide a legal basis for cities and counties to merge or upgrade to special municipalities, which devote more power and responsibility to the local level. Although the clear scope of autonomic affairs have been identified in the Act and the trend of decentralization has been confirmed in Taiwan, there have still been many controversies of power and responsibility between central and local governments during the last two decades. One of the most prominent cases is the dispute of flood control. According to Articles 18 and 19 of the Local Government Act, such as the rectification and management of rivers, the conservation of catchment areas, and the building of facilities for drainage and flood prevention are local self-government affairs. For several reasons, the Executive Yuan passed the Flood-prone Area Management Plan (2005–2013) and Integrated River Basin Management Plan (2014–2019). Both of these plans rely on a fairly centralized orientation, generating two major questions for this study: 1) why do conflicts of responsibility still exist between centralization and decentralization? 2) what are the necessary elements for pursuing an effective operation when conflicts occurred?

Given this background, this paper starts with an overview of the theoretical debates of centralization and decentralization. It subsequently identifies a mixed authority model and explores the effective governance approach in this model. An empirical case of flood control in Taiwan is analyzed. Section 3 uses in-depth interviews of individuals in both central and local governments to collect qualitative data. The analysis and conclusions are presented in sections 4 and 5.

## 2. Theoretical Background

### 2.1 Centralization and Decentralization: Concepts and debates

In recent years, experts have engaged in a debate on the nature and merits of centralization and decentralization in academia and the real world. Centralization refers to the concentration of a government's power and its overwhelming coercive powers; decentralization is defined as empowering the authorities and administrative responsibilities over public functions or policies from the national level to the local level (De Vries, 2000, p. 193). Multiple forms of decentralization, such as deconcentration, devolution, and delegation, and dimensions, such as administrative, fiscal, and political, were suggested in the literature (Rondinelli, Nellis, and Cheema, 1983).

These two concepts are similar to the terms centralism and federalism, although there are important differences as well. Centralism and federalism emphasize the institutional arrangement between national and sub-national government units and inherently focus on formal regulation such as constitutions, institutions, and political contexts (Baldi, 1999, pp. 14-15).<sup>1</sup> In contrast, centralization and decentralization stress the nature of empowerment or power delegation between different levels of government and are particularly concerned with substantial power transition processes (e.g., decision making, administrative power, and fiscal resource control issues).

However, consensus does not exist in terms of how centralization and decentralization influence the effectiveness and efficiency of public governance. Of two distinctive schools in public administration, the scholars in favor of the centralization approach argue that centralized planning and control systems can enhance the integration, uniformity, decisiveness, and cost-efficiency for public service (De Vries, 2000, p. 202). They argue that, when dealing with public affairs, inevitably problems arise in terms of “the tragedy of the commons” (Hardin, 1968), “the free-rider problem” (Olsen, 1965; Ostrom, 1990), and “the prisoner’s dilemma” (Daws, 1975). From this perspective, scholars have proposed the need for a centralized governance framework, such as the Leviathan country derived from the classic theme put forth by Thomas Hobbes (1651). Scholars have further pointed out that these problems “cannot be solved

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<sup>1</sup> Federalism has been viewed as one particular constitutionally established balance between self-rule and shared-rule, which can secure good governance. As Riker (1975, p. 101) noted : “Federalism is a political organization in which the activities of government are divided between regional governments and a central government in such a way that each kind of government has some activities on which it makes final decisions.” For more details about centralism and federalism, refer to Riker (1975, pp. 93–172), Baldi (1999, pp. 14–15), Lijphart (1999, p. 185), and Elazar (1997, pp. 237–251).

by cooperation” and “the rationale for government with coercive powers is overwhelming” (De Vries, 2000, p. 199).

On the other hand, scholars in favor of the decentralization approach also have strong theoretical arguments. Derived from the political thought of J. S. Mill’s territorial decentralization as well as public administration thoughts from influential works, such as Waldo’s *The Administrative State* (1948) and Osborne and Gaebler’s *Reinventing Government* (1992), proponents of decentralization think it can facilitate the approach to good governance by transferring the responsibilities and revenue from national government to subnational authorities (Rondinelli, 1981). The scholars of this perspective indicate that, as local governments are closer to local residents and more sensitive to local problems, they would be more responsive and responsible to citizens’ needs. From this perspective, decentralization is not only a means for overcoming limitations by, for example, cutting red tape in centralized hierarchical commanding systems, it can also create tailor-made policies and increase the disparities of policies (Rondinelli, McCullough, & Johnson, 1989). Decentralization can also enhance the accountability and responsiveness of elected officials to local citizens. In sum, scholars have attempted to build a more democratic, flexible, accountable form of public service delivery through the process of decentralization (De Vries, 2000; Montero & Samuels, 2004; Musgrave, 1959; Oates, 1977; Ryan, 2004; Tiebout, 1956).

Over the past decades, an obvious trend in public governance has emphasized a shift from focusing on central control systems to enhancing public services’ efficacy delivered to citizens. Nowadays, the focus is more on the concepts and implementation of programs for local governance. The trends for decentralization are obvious in both developed and developing countries worldwide. The World Development Report (1999/2000) noted that “the experience of the last 15 years shows that the devolution of powers affects political stability, public service performance, equity, and macroeconomic stability” (World Bank, 1999). Trends in decentralization world wide have emerged from various factors, such as the bottom-up demand (e.g., post-Communist Europe), aspirations of nationalist movements (e.g., Spain, Belgium, United Kingdom, Canada, Indonesia, Nigeria, Russia), post-war peace-building processes (e.g., Uganda, South Africa, Cambodia, Iraq), and even the role of international development agencies (e.g., World Bank) (Brinkerhoff & Coston, 1999; Gordin, 2010; Rondinelli, 1981; Rondinelli et al., 1989).

As the literature indicates, despite the world wide trend towards decentralization, both distinctive schools of thought offer benefits and drawbacks. For example, although decentralization might offer opportunities to maximize public services’ efficiency and effectiveness through local governance, local authorities are also usually more prone to

corruption and mismanagement than central governments. De Vries (2000) indicated that some countries might adopt the policies for decentralization, but the public functions might not work well, and the countries ultimately return to their original state of centralization, which he called ‘recentralization’.

## *2.2 Different Criteria to Distinguish Types of Decentralization*

On a very general level, researches have distinguished three dimensions in decentralization programs: fiscal decentralization, administrative decentralization, and political decentralization (González, 2012; World Bank, 2001).<sup>2</sup> Fiscal decentralization is characterized by locally determined tax income and expenditure to strengthen and manage accountability by linking expenditures for local services and goods to sources of revenues (Montero & Samuels 2004, p. 7). Administrative decentralization stresses bureaucratic decision-making by focusing on managerial responsibilities and administrative powers for the delivery and regulation of public services while transferring revenues generated from the central government to the local government. Finally, political decentralization emphasizes the establishment or reestablishment of a democratically elected body with some degree of local autonomy (Falleti, 2003, 2005; Willis, Garman, & Haggard, 1999, p. 8).

A growing number of studies have discussed decentralization, including its conceptualization and measurement, based on these three categories. However, this might only give a partial explanation and have inherent limitations, such as the characterisation of public policy and public goods (e.g., externality, economy of scale, and fairness). As Michiel S. De Vries (2000, p. 201) noted, centralization or decentralization is a relative—not absolute—concept and often neglects actual effects.

De Vries further proposed decentralization policy types derived from the theory of public choice, based on two crucial criteria: externality and economy of scale. He pointed out that the types of policies in decentralization should be distinguished from different policy arenas, existing specific institutional arrangements, and corresponding characteristics. Furthermore, the decentralization approach to providing public good/services should be based on the different characteristics of the task, therefore, the responsibility and accountability should differ. De Vries (2000) summarized the policies across different levels of governments into three categories:

1) **Decentralized policies:** This type of policy is intimately involved with the responsibilities of the community and local government, so decentralization offers a

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<sup>2</sup> Available at <http://www1.worldbank.org/publicsector/decentralization/what.htm>. accessed September, 28, 2014.

good way to improve the quality of the policy. Policies of this type include those related to culture and leisure, social housing, and public facility services.

2) **Centralized Policies:** This type of policy focuses on human rights protection or national development; powers and responsibilities are concentrated at the national level, making it better to adopt centralized policies. Policies of this type include rights protection of minority groups, environmental pollution, national economic development, and national security.

3) **Collaborative and Co-responsible Policies:** This type of policy is deeply involved with public affairs that should be collaboratively solved and share accountability across different levels of government. Policies of this type include workers' insurance, citizens' education, and health insurance policy.

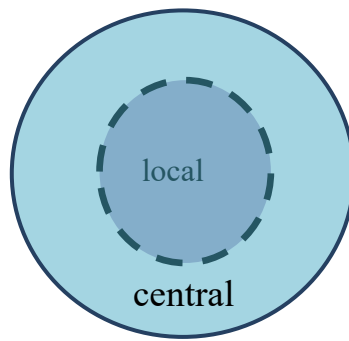
### *2.3 Why the Fuzzy Zone of Cooperation Exists in Decentralization: How to build good partnerships between central and local governments*

The literature discussed thus far facilitates our understanding of the conceptualization and measurement of decentralization. But limitations in real-world application exist. Figures 1.1 to 1.3 illustrate the possible relationships across different levels of government, which could supplement De Vries' (2000) three types of decentralization. Each circle represents the entity of central or local government. The circle with a solid line represents an entity of government with substantial power, whereas the circle with a dashed line represents an entity with no substantial powers. The following sections introduce their content and characteristics.

#### *Figure 1.1: Centralized Authorities Type*

The centralized or decentralized authority types depend on the share of fiscal resources, grant administrative autonomy, and degree of responsibility for political functions the central governments possess (Elazar, 1975; Riker, 1975; Witesman & Wise, 2009). The governance framework of the centralized authorities' type focuses on centralized authorities in national/central governments. Fiscal resources and administrative power are concentrated in the national government, and the sub-unit or local entities are subordinated to the central government and have no substantial powers; their given tasks are to be responsible for implementing the policies decided by the central government. In sum, this type of governance framework emphasizes power-concentrating characteristics and elite-led top-down policy-making processes (González, 2012; Lijphart, 1984).

Figure 1.1 Centralized Authorities Type



*Figure 1.2: Decentralized Authorities Type*

The decentralized authorities' type focuses on the devolution of power and responsibilities over public functions, from the national level to the local level (De Vries, 2000, p. 193). This type grants subnational units or local authorities more autonomy and leverage in managing their financial budgets and more resources to deliver public services for which they are responsible (Musgrave, 1959; Oates, 1977; Tiebout, 1956). In other words, the sub-unit or local entities have substantial powers transferred from the central government in decentralization. Transferring the central decision making to democratically elected local authorities and regional entities gives civil citizens more ways to access public services, thereby enhancing opportunities for public participation while increasing accountability and responsiveness (De Vries, 2000; González, 2012). Hence, this type provides incentives for the formation of a more responsive and democratic government. In an extreme form within this governance type, the entities of local authorities would take full authority and responsibility for public functions and policies; thus, there might exist a competitive relationship among different entities within local authorities.

Figure 1.2 Decentralized Authorities Type

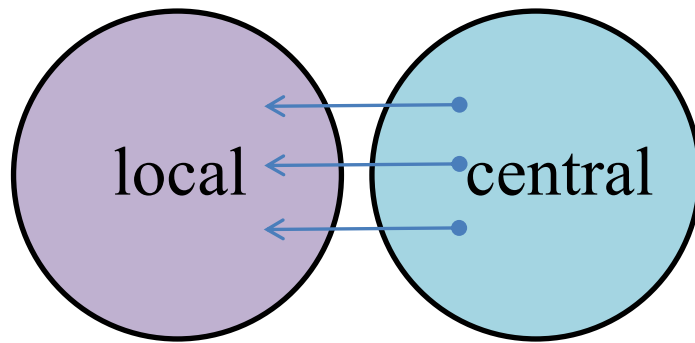
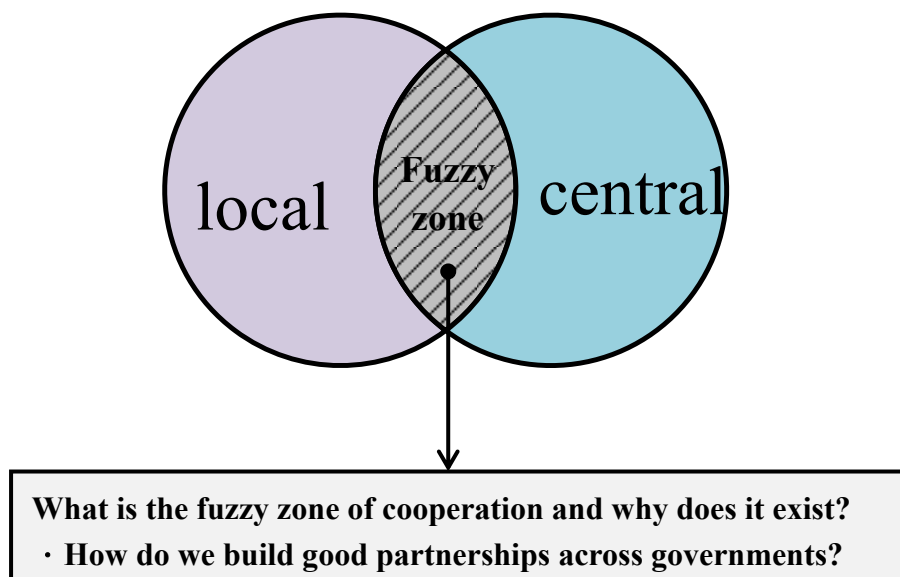


Figure 1.3: Mixed Authorities Type with Fuzzy Zone

This type of governance is interesting, but also ambiguous. As De Vries' third type of collaborative and co-responsible policies, some public affairs should be collaboratively solved and share accountability across all levels of government. Ideally, this type of governance might emphasize the partnership or cooperative relationship between governments more. A partnership refers to an appropriate arrangement in which the entities across governments agree to cooperate to advance their mutual interests (OECD, 2001). The characteristics of this type focus on power- and accountability-sharing. Building a good governance framework, especially enhancing good partnership and accountability across governments, is important in both academia and reality (Gaffikin, 1998; Teisman & Klijn, 2002).

Figure 1.3 Mixed Authorities Type



As shown in Figures 1.1 through 1.3, types of decentralization are measured in terms of the central government's proportion of the overall total public functions. One



unresolved question is whether a fuzzy zone of cooperation still might exist across different levels of governments (see Figure 2.3). The fuzzy zone in this type of decentralization might involve inter-government goal conflict: central government aims to satisfy the nationwide goal of a civil society whereas local government aims to satisfy the needs of local citizens, for example. This leads to the research questions for this study: what is the fuzzy zone of cooperation between central and local governments and why does it exist? How do we build collaborative relationships and manage the diverse needs and consistent goals across various levels of government? All of these elements are necessary in the pursuit of effective decentralization.

To summarize, this study aims to explore the crucial factors influencing capacity building in central and local governments, which can facilitate good governance in the decentralization process, such as carrying out public functions more efficiently, effectively, and responsibly. For this, we draw lessons from Taiwan's flood control policies.

### **3. Research Context and Methodology**

#### *3.1 Disaster Prevention and Flood Control in Taiwan*

According to Articles 18 and 19 of the Local Government Act, some affairs belong to local self-government, such as the rectification and management of rivers, the conservation of catchment areas, and building facilities for drainage and flood prevention. Prior to 2001, the Water Resources Agency, Ministry of Economic Affairs funded local government with approximately 4 billion NT dollars for river administered and regional drainage works. To promote local self-government, the programs granted under the ministries were changed into general grants, for the same amount, which local governments have planned and used since 2002. However, most local governments did not budget well for the rivers they administered, regional drainage, and improvements to urban sewers because of financial difficulties or because they were less concerned about water and soil conservation. They still depended on the grants from the Water Resources Agency for improving the regional drainage when they should have been fundraising themselves. Approximately 1 to 1.2 billion dollars were allocated to 22 local governments. In terms of water and soil conservation, due to the overexploitation of catchment areas, limited water-control funds, and the lack of systemic governance, several flood-prone areas in Taiwan were not improved during these years. According to the Water Resources Agency, Ministry of Economic Affairs (2005), the reasons the local government faced such disasters include the following:

1. Climate anomalies create extreme hydrological events. Fewer rain days and more concentrated rainfall expand disaster areas and make them more serious.
2. It is difficult to ensure overall improvement because the funds are not integrated well.
3. Land subsidence and low-lying areas have difficult drainage, and the tides create significant influences.
4. Due to the urban development, runoff has increased.
5. Existing drainage is not maintained well, leading to a section shortage.
6. Some areas of the drainage facilities are too old to operate well.

To solve these problems effectively the Executive Yuan passed the Flood-prone Area Management Plan and integrated river basin management efforts. The former lasted for eight years and was divided into three stages, while the latter was expected to propose a water-control plan to address homeland disaster prevention, integrated water management, flood-control, and watershed management. Among these, the rivers and regional drainage administered by the Ministry of Economic Affairs and the storm sewer administered by the Ministry of the Interior are budgeted and overseen by themselves. When necessary, they are allowed to commission, entrust, and subsidize the local government to perform these actions. According to the Executive Yuan, the Council of Agriculture administers the water and soil conservation upstream, landslide control and flood prevention, agricultural drainage, agri-food and crops preservation, and aquaculture drainage. Of these, water and soil conservation upstream, landslide control and flood prevention, and aquaculture drainage are budgeted and performed by the Council itself. When necessary, the Council can commission, entrust, and subsidize the local government to perform these as well (Water Resources Agency, Ministry of Economic Affairs, 2005).

### *3.2 Research Methods and Case Selection Criteria*

This study conducted in-depth interviews to identify the factors influencing the degree of decentralization/centralization for Taiwan's flood control policy. This qualitative method emphasizes face-to-face contact among researchers and interviewees through an unstructured questionnaire to collect the data necessary. The purpose is to collect research issues for respondents' observations, experiences, opinions, and insights, providing researchers with in-depth research material to help clarify the key issues. As Creswell indicated, this can be done effectively to improve the internal validity of the research results (2003, p. 179).

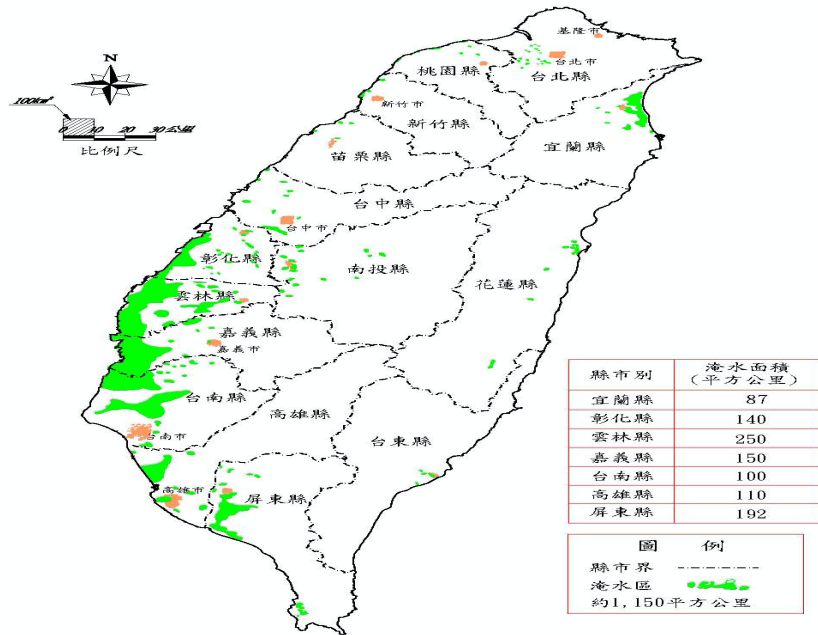


Figure 2: Counties/Cities frequently confronted with the water-flooding disaster

Source: Water Resources Agency, Ministry of Economic Affairs, 2005, accessed at 2014/8/1.

Subjects for in-depth interviews were selected using purposive sampling. The criteria for case selection were as follows: 1) we selected not only the relevant authorities of central governments, but also the relevant authorities of local governments. In central governments, we choose agencies in charge of flood control, such as the Water Resources Agency of the Ministry of Economic Affairs. Local governments were selected in areas frequently facing flooding disasters, as shown in Figure 2: Taichung, Changhua County, Yunlin County, Chiayi County, Tainan and Kaohsiung, Pingtung County, and Hualien County. 2) Selected interviewees were public servants from branches of flood control in central and local governments in Taiwan who were directly involved in the policy decision making. They are all middle or senior managers in central or local public agencies, including the director-general, deputy director, deputy supervisor, and chief engineer. Table 1 summarizes the information of interviewees in central and local governments.<sup>3</sup>

In this study, respondents provide different perspectives regarding the topic of capacity building in pursuit of effective decentralization across levels of government. In this way, the study not only provides a static inductive analysis of the theoretical

<sup>3</sup> This study has originally designed to conduct several interviews of the relevant authorities in Tainan City and Kaohsiung City Governments. Unfortunately, a serious disaster (gas explosion) occurred at midnight in 2014/7/29. Besides, the flood-prevention project for ‘Ganwei river’ in Tainan city was seriously damaged by heavy rain in 2014/7/29. Because the interviewees of Tainan and Kaohsiung city were busy coping with the affairs for disaster response and recovery it was difficult to conduct any interviews. These temporary limitations are going to be overcome in coming months.

literature, but also explores how to realize the delegation of power and corresponding administrative responsibilities from Taiwan's central government to local governments in terms of disaster management issues in a dynamic process. The outcome of this presentation provided simultaneously broad and deep interviews.

Table 1: List of Interviewees

No.	Date of interview	Place of interview	Agency	Interviewees
A	2014/08/14	Taichung	Water Resources Agency, Ministry of Economic Affairs	OOO
				OOO
B	2014/08/14	Taichung	Water Resources Bureau, Taichung City Government	OOO
				OOO
C	2014/08/19	Yunlin County	Water Resources Department, Yunlin County Government	OOO
D	2014/08/19	Chiayi County	Water Resources Department, Chiayi County Government	OOO
				OOO
				OOO
E	2014/08/21	Changhua County	Water Resources Department, Changhua County Government	OOO
F	2014/09/04	Pingtung County	The 7th River Bureau, Water Conservancy Department, Ministry of Economic Affairs	OOO
G	2014/09/11	Hualien County	The Branch for Water Resources of Economic Affairs Department, Hualien County Government	OOO

Source: Authors

#### 4. Analysis and Discussion

This study deals with the problems encountered in measuring the degree of decentralization and identifies the crucial factors influencing the decentralized governance framework. In the following section, we attempt to answer two research questions: 1) why do conflicts of responsibility between centralization and decentralization still exist? And 2) what are the necessary elements for pursuing effective operations when conflict occurs?

#### ***4.1 Determinants on the Span of Fuzzy Zone and Its Consequences***

As has been shown, for the past several decades Taiwan has been devoted to building a decentralized governance framework that not only includes design policies emphasizing characteristics of decentralization and flexibility, but also reframing the administrative districts.<sup>4</sup> Theoretically speaking, the programs for decentralization should be well done, especially after the establishment of the Local Government Act Article which clarified that public affairs fall under local self-government affairs. In practical terms, some problems still exist, especially in cases when local governments must deal with public affairs and cooperate with the central government. In this paper, we called this ‘the fuzzy zone’ of cooperative governance.

##### ***4.1.1 Determinants influencing the span of fuzzy zone in decentralization***

This study examined the case of flood control and disaster prevention in Taiwan to demonstrate governance goal conflicts and dilemmas across levels of governmental cooperation. According to Local Government Act Articles 18 and 19 a clear scope of autonomic affairs has been identified, such as the affairs related to flood control and disaster prevention falling under local authorities’ self-government affairs.<sup>5</sup> That is, local authorities (e.g., county or city government) should take full administrative power and responsibility for disaster prevention and flood control. In practical terms, this decentralization appears not to function well, in part because of the capability of local authorities and in part because of administrative and financial capabilities.

Inevitably, whether public organizations function well or not depends on their organizational capabilities. By definition, organizational capabilities are rooted in the organizations’ abilities to develop, deploy, reconfigure, and recombine scarce resources that cannot be easily imitated (Bhatt, 2000; Wernerfelt, 1984). Here the resource can refer to “an asset or input to production (tangible or intangible) that an organization owns, controls, or has access to on a semi-permanent basis” (Helfat & Peteraf, 2003, p.

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<sup>4</sup> The administrative districts will be divided into six municipalities and sixteen county/city governments at the end of 2014.

<sup>5</sup> More details about Local Government Act Articles can refer to the website: <http://weblaw.exam.gov.tw/LawArticle.aspx?LawID=A0025009>.

999). Tangible resources usually refer to organizational members, machinery, or financial capital, whereas intangible resources are knowledge-based resources.

In Taiwan, a sequential flood control program of “integrated river basin management” was implemented: the six-year NT\$60 billion (US\$2 billion) Flood Control Program, in which the experts evaluate performance of the former Flood-prone Area Management Plan, the Special Eight-year NT\$80 billion (US\$2.7 billion) Plan. They criticized the lack of human resources and financial support in local government, resulting in decentralization inefficiency. The former Minister of the Interior and Professor Hong-Yuang Li pointed out a serious problem in the local government after a recent disaster: “After Morakot typhoon, the central government allocated 2.2 billion dollars to cope with the flood disaster to Taitung County. But the interesting thing is, although the local government has enough budgets, the Chief of Water Resources Department of Taitung County Government still can do nothing for disaster prevention. Because their department only has six servants for flood control, they do not have the capability to write a proposal for dealing with the flood disaster. Prof. Li even pointed out that the Pingtung County also faced the same problem” (United Evening New, 2010).

During the in-depth interviews with public servants from several related branches of flood control in Taiwan’s central and local governments, interviewees directly indicated that the key elements to effective governance in decentralization are to build the administrative and financial capabilities of local authorities. They indicated that local authorities’ resources are limited, so support from central governments is crucial **【Note 1】** .

Another interviewee further mentioned the characteristics of natural disasters, such as uncertainty, suddenness, and unusual nature. Therefore, local authorities would not have enough abilities and experiences to deal with such huge disasters **【Note 2】** . The interviewee indicated that the local government should take advantage of the experiences of the central government to build an effective operation of flood control **【Note 3】** .

Finally, one interviewee pointed out that, despite the clear scope of autonomic affairs identified in the Local Government Act, local entities’ lack of capabilities put pressure on the central government to intervene with local self-governance affairs. As Taiwan realized its democratic representative systems, the pressure or interest group would put pressure on the legislative entities when disasters occur **【Note 4】** , resulting in the central government playing an important role in local self-governance affairs.

Central and local authorities take cooperate with engineering according to their allocated proportions. For example, in the Flood-prone Area Management Plan (2005-2013), the percentage of division between central and local governments is 70% versus 30%. On the surface, it seems to be a clear division, but the interviewee indicated that the power and responsibility are actually ambiguous **【Note 5】** .

To summarize, this section briefly discussed how administrative and financial capabilities are important for decentralization. Although decentralization is an obvious trend, some obstacles might exist when local governments lack capabilities corresponding to decentralized policies. Under a democratic system, the pressure deriving from local entities might enhance the central government to play an important role in intervening with decentralization policies. This results in fuzzy zone for cooperation and ambiguous accountability mechanisms.

#### ***4.1.2 Challenges within the fuzzy zone***

As previously discussed, local governments' lack of administrative and financial capabilities result in inefficiency and ineffectiveness when implementing a decentralization program. As a result, the fuzzy zone might lead to problems in power sharing and responsibility sharing. Based on our in-depth interviews, we explored several other challenges in the fuzzy zone.

##### **Challenge 1: The local political context might raise challenges on merit and professionalism in decentralization.**

Despite the fact that decentralization expands the service delivery for local needs, the merit and professionalism of policies are possible for meeting the challenges of public quality. One interviewee indicated that local representatives still exert pressure upon public servants for flood control establishment **【Note 6】** . How can we manage the goal conflict between stakeholders with different perspectives? How can we promote merit and professionalism for flood control? This is a crucial challenge facing decentralization.

##### **Challenge 2: The designs of governance framework within local government threaten the operation efficiency of decentralization.**

The authorities in Taiwan have provided a legal basis in the Local Government Act Article for regulating the three levels, structures, and autonomic affairs of local government, but they still have drawbacks. When central authorities cooperate with the

local government to deal with flood control-related issues, they often neglect to make a better link from the local government to its sub-entities (e.g., the administrative entity of villages and towns). The different partisanshipes of the elected chiefs within the local governance framework might make goal consistency more difficult, readily resulting in few incentives for the lowest-level bureaucracies to cope with such difficult flood control tasks. **【Note 7】**

### **Challenge 3: Outflow of talents damage the function of decentralization, especially for agriculture counties.**

In Taiwan, the administrative districts are divided into municipalities and counties/cities. This framework for decentralization might be helpful. But in practical terms, the job level would facilitate public servants' movement from agriculture counties to municipalities. This is a serious challenge. Flood control and disaster prevention programs need qualified persons; without them, they cannot upgrade professional skills in the real context. **【Note 8】【Note 9】**

### **Challenge 4: Monitoring outcomes and providing protection against corruption and mismanagement**

Several news articles have pointed out the many scandals arising when implementing the program for flood control and disaster prevention. Indeed, in the central government, in Kaohsiung in Taoyuan County, several officials were imprisoned due to scandals.<sup>6</sup> Authorities should ensure protection against corruption. Yet too much examination by public investigators and inspectors might also frustrate public service motivations. Public servants would not have the courage to take responsibility to offer public services. **【Note 10】**

To summarize this section briefly discussed the several barriers to the pursuit of an effective operation when executing programs of decentralization. Determining how to get an appropriate balance of centralization and decentralization is essential to the effective and efficient functioning of government. The next section offers some suggestions for building a good partnership across governments in the fuzzy zone.

#### ***4.2. Partnerships to Overcome Decentralization Dilemmas***

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<sup>6</sup> "Involved with money scandals, three chives are applied to a court for an arrest warrant," *Liberal Times*, 2008/5/1; "Acceptance for illegal money contribution, the chief of River Bureau are heavily punished to prison in cage," *Liberal Times*, 2014/07/18.



Since the rapid change and development of society, the role and function of government has continued to reform during the past three decades. In the process of reforming, intergovernmental relations (IGRs) have operated in a new form, among which the partnership between central and local governments is an issue. What we call partnership relates the multiple organizations to a common goal, creating sound and healthy interactions to make collaborative partnerships and relationships of interdependence. It improves the competency of governmental public service, which involves the establishment of organizational cooperation and the problems in coordination and management (Chen & Chang, 2010; Lee & Lin, 2009). Based on the examples discussed in this article, the establishment of partnerships between central and local governments helps conquer the decentralization dilemma.

#### ***4.2.1 Key to effective partnership within the fuzzy zone***

Disaster prevention and water control in Taiwan have historically relied primarily on the central government's financial aid and other resources, which has prevented local government from dealing with water disasters. Although this eased some counties' floods, it also caused problems like the financial dependence of the local government and decentralization dilemmas, thereby leading to the loss of institutional autonomy and greater financial instability (Gazley & Brudney, 2007). Thus, an efficient collaborative partnership was hard to develop. Whether or not the local government operated efficiently depended on the quantity of usable resources, and the central government activated a collaborative partnership through the guidance of financial resources (Lee & Lin, 2009). For future disaster prevention and water control in Taiwan, it is expected that the proportion of financial burdens for central and local governments be fixed to 7 to 3 or 6 to 4, instead of mainly depending on the central government. This could help the local government develop a willingness and ability to raise financial resources and improve the local human resources and skills at the same time [Note 11].

Trust is also a key to partnership as it helps shape the legitimacy of governance and further generates commitment, enabling individuals to go beyond their personal, organizational, or final challenges in the permission frame (Emerson, Nabatchi, & Balogh, 2012). Regarding the partnership for disaster prevention and water control, some interviewees considered the goals of reducing time, minimizing damaged areas, and decreasing the loss of life and property to sometimes be influenced by party differences and different opinions at various levels of government [Note 12]. However, enhancing the common goal and communicating from expertise [Note 13] and in an informal way [Note 14] help build trust.

Finally, information sharing is also a point for establishing partnership in disaster prevention and water control. Collective interactions are usually based on information sharing and joint action (Provan & Kenis, 2008, p. 231). Information sharing provides actors an opportunity to establish common, information based decisions (Dawes, 1996). When establishing a platform connected with the information from central and local governments through the Internet, local government could play a role as an informational mediator, passing the information on disaster prevention to the community and the public. These are all the keys of an efficient collective partnership. Among them, social media and apps are good technologies that the government can make use of [Note 15].

#### ***4.2.2 Collaborative Partnership: Easier said than done?***

Although both the literature and interviewees indicated that collective partnerships contribute to eliminating the fuzzy zone (see Figure 3), many limitations must be overcome. Kelman (2005) argued that individuals create the most obstacles to organizational change, so when facing the concern of parties, individual benefits [Note 16], and the increased awareness of public rights [Note 17], it is possible to misplace public resources in the end. Given a lack of trust, the central and local governments sometimes shirk their responsibilities [Note 18]. In other words, it seems easy to design a reasonable system of collective partnership, but the soft elements—such as trust, accountability, and communication—are key to the success of a collective partnership. In this case study, flood control not only involves coordination among different divisions in the central government, but also vertical relationships across levels of government and stakeholders. If the mechanism for coordination does not work well, it is difficult to pursue effective operations when conflict occurs. [Note 19]

## **5. Conclusion**

Over the past decades the design of relationships and structures across different levels of government has attracted increasing attention in the public administration field. Facing the trend of decentralization, local governments will play an important role in the future (Kusumasari, Alam, & Siddiqui, 2010). Theoretically speaking, decentralization would not only increase responsiveness to local needs and preferences, but also bring wider economic and social benefits. The policies of decentralization focus on building a governance framework emphasizing a more participatory, democratic, and responsible mechanism. Despite the many advantages of decentralization, public policies for decentralization still face constraints in reality. For

example, for local authorities decentralization sometimes can lead to public resource mismanagement and more corruption, as well as serious problems when the central government tries to cooperate with the local government to address public affairs.

This study explored the existing conflicts of power and responsibility between centralization and decentralization and defined the factors with a significant influence on building good partnership across levels of governments. This is a critical issue in academia and in practice, especially in Taiwan. Since 2011, Taiwan's governance framework has been divided into five municipalities and 17 counties. In December 2014, this framework will shift to six municipalities and 16 counties. How can we enhance capacities in this new governance structure in Taiwan? This is indeed a new challenge.

This study has taken lessons learned from flood control to best reflect the cooperation conflict or dilemma across levels of governments. By using in-depth interviews, this study has contributed to the existing decentralization literature and practice in three ways. First, we extended the traditional criteria and categorized the different types of decentralized systems according to the degree of whether the central governments possess a significant share of fiscal resources and grant administrative autonomy and cede a higher degree of responsibility for political functions. We categorized three types of decentralization: centralized authorities, decentralized authorities, and mixed authorities with what we called a 'fuzzy zone'. This third decentralization type is has seldom been discussed before. Second, this paper deliberately discussed the conflicts of power and responsibility in the mixed authorities with a fuzzy zone. We found that the administrative and financial capabilities of local government would decide the span of the fuzzy zone. In Taiwan, the policy for flood control is an apparent case originally designed for decentralization, but eventually returned to its original state of centralization. Finally, this study discussed the necessary elements required for effective operation when a conflict occurs in power and responsibility between centralization and decentralization. The key answer is to build a good partnership across all levels of governments.

The findings and suggestions discussed herein are all useful and supplementary to the existing literature and practices. We admit some research limitations do exist. First, this study was originally designed to conduct several interviews with relevant authorities in Tainan and Kaohsiung city governments. Unfortunately, a serious gas explosion disaster occurred at midnight on July 29, 2014. In addition, the flood prevention project for Ganwei River in Tainan was seriously damaged by heavy rain that same day. Because the interviewees from Tainan and Kaohsiung are busy dealing with affairs related to disaster response and recovery, we had difficulty conducting any interviews at this point. Second, the focus of this study emphasized in-depth interviews

with public servants among several related of Taiwan branches of flood control in central and local governments. We think they still have constraints. The best model for flood control might consider integrating opinions from citizens. But in this paper, we hoped to focus on providing the information from the administrative stakeholders. These limitations should be overcome and be discussed in the future.

## NOTES

1. “The budget for flood control engineering is huge, the local authorities cannot afford to do such things without the support of central government.” (**interviewee B**)
2. “The failure decentralization of Taitung County is not only because the simultaneous occurrence of various damages is unusual, the policy does work resulting from their limited financial and manpower. Therefore, although the central government affords them a huge amount financial support, the task is overloaded beyond their existing abilities.” (**interviewee A**)
3. “ In practical, there exist serious limitations on local government financial budgets; we still hope to have some support from the central government. In addition, the central government has a well-established governance division and practiced experiences to deal with the problems for flood control. Therefore, they have more professional knowledge and skills than the local government. (**interviewee C**)
4. “When the serious flood disaster occurs, the central authorities are also busy in dealing with the diversity pressures surging from the local entities, such as the local government, legislative representatives, and local citizens. Therefore, the central government under these pressures decided to set up a national project for flood control assistance. Originally, this project emphasized its assistant function to local authorities, but finally the Legislative Yuan passed the bills and decided the central government should take full responsibility for this project. Nowadays, the project executed by central governments has lasted till now, because it has a better performance by central governance. (**interviewee A**)
5. “When the central and local authorities simultaneously cooperate to implement flood control programs, it might result in a serious problem of ambiguous accountability. The relative servants would be concerned about whether the central or local governments should take the full responsibility.” (**interviewee F**)
6. “Basically, we cannot avoid this problem. When citizens suffer from flood damage, they inevitably try to put pressure on the local representatives or on the officials, especially hoping the government does something near their house.” (**interviewee D**)
7. “I think the attitude of the township office is a problem. Some township offices are not actively cooperating with us, even when we start to intervene with the program and support them. The relative public servant even stands aside from coping with the affairs. This response immediately frustrates our morale.” (**interviewee F**)

8. “In practical terms, seven or eight years should be spent training a useful and experienced public servant. It would facilitate the public servant to become familiar with the details of flood control. But the new recruitment usually has a strong incentive to be transferred to another post, especially move to municipalities in pursuit of a high job level.” (**interviewee D**)
9. “The truth is there is indeed a lack of manpower and financial budget. Overly heavy workloads and a low job level will result in the frequent outflow of talent. Therefore, the government should take some measures and provide incentives to hold on to talents to stay in local government.” (**interviewee C**)
10. “As in the case of the Morakot typhoon, when a disaster occurs, the authorities of public investigators and inspectors for the first time investigated the illegal behavior of our public servants. This would immediately influence the ability of crisis response and attack the morale of our public servants.” (**interviewee F**)
11. “The goal that we expect is returning to the local government. But how do you help? It is not using special statutes, using a special budget and special statutes—neither ways are legitimate after all. It should be returned to the mechanism of official budget.” (**interviewee A**)
12. “It may be okay, but it’s hard when there is an intervention of political force. Just like we Chiayi, it’s obvious that there are legislators of blue and green parties. This legislator and that legislator both argue for the contribution as their own.” (**interviewee D**)
13. “We (with the central government) are in a state of cooperation, so everybody fits each other with the current goal.... Since the public and representatives are not clear about the skills we perform, or they do not understand this kind of skills and process, they may have some doubts or their persistence.” (**interviewee C**)
14. “I think that our direct interaction with ministries exists in most formal meetings, when we have almost no informal meetings. It influences a lot, like understanding and trust.” (**interviewee C**)
15. “There are some measures about information of disaster prevention, like information net which the central government takes. Once there is a flood alert, we share at the same time. We also develop a disaster information system, integrating information from national central ministries and making a platform for the public to save themselves... Our city government owns a LINE account, and we spread the information about disaster prevention through the LINE when a typhoon comes.” (**interviewee B**)

16. “It is an election this year, and some issues are hyped again. These things are actually connected to each other.” (**interviewee D**)
17. “It costs the least, but the public could not accept it. They are fierce when negotiating and communicating, and all kinds of dirty words are said.” (**interviewee A**)
18. “Everybody thinks that that it is not his responsibility the first time. Such as the case by Sixth River Management Office in Kaoshiung, we have no idea whether the central or local government carried out the case, but it needed cooperation. Land expropriation was executed by local government, while the engineering was performed by the central government, and there was lots of cooperation. However, when media outlets reported something bad, everybody denied their responsibility.” (**interviewee F**)
19. “I think our system does not work well for consistent management. It takes the centrally controlled river, for example, the administrative power of the upper reaches of the river is controlled by the Forest Bureau and the council of Agriculture Executive Yuan; the middle and upper reaches of the river is controlled by the Soil and Water Conservation Bureau; the lower reaches of a river is controlled by the Water Resources Agency at the Ministry of Economic Affairs. The situation is the same in the county’s control river: The upper and middle reaches of the river are controlled by the Forest Bureau of the Council of Agriculture Executive Yuan, Soil and Water Conservation Bureau; the lower reaches of the river are controlled by the local government. The management system should be unified.” (**interviewee G**)

## References

- Baldi, B. (1999). *Beyond the federal–unitary dichotomy*. (Working Papers 99-7). Berkeley, CA: Institute of Governmental Studies, University of California, Berkeley.
- Bhatt, G. (2000). A resource-based perspective of developing organizational capabilities for business transformation. *Knowledge and Process Management*, 7(2), 119–129.
- Brinkerhoff, D. W., & Coston, J. M. (1999). International development management in a globalized world. *Public Administration Review*, 59(4), 346–361.
- Creswell, J. W. (2003). *Research design: Qualitative, quantitative, and mixed method approaches* (2<sup>nd</sup> ed.). Thousand Oaks, CA: Sage.
- De Vries, M. S. (2000). The rise and fall of decentralization: A comparative analysis of arguments and practices in European countries. *European Journal of Political Research*, 38(2), 193–224.
- Dawes, S. S. (1996). Interagency information sharing: Expected benefits, manageable risks. *Journal of Policy Analysis and Management*, 15(3), 377–394.
- Daws, R. M. (1975). Formal models of dilemma in social decision making. In M. F. Kaplan & S. Schwartz (Eds.), *Human Judgement Decision Process* (pp. 87–108). New York: Academic Press.
- Elazar, D. J. (1997). Contrasting unitary and federal systems. *International Political Science Review*, 18(3), 237–251.
- Emerson, K., Nabatchi, T., & Balogh, S. (2012). An integrative framework for collaborative governance. *Journal of Public Administration Research and Theory*, 22(1), 1–29.
- Hardin, G. (1968). The tragedy of the commons. *Science*, 162, 1243–1248.
- Helfat, C. E., & Peteraf, M. A. (2003). The dynamic resource-based view: Capability lifecycles. *Strategic Management Journal*, 24, 997–1010.
- Falleti, T. G. (2003). *Governing governors: Coalitions and sequences of decentralization in Argentina, Colombia, and Mexico*. (Ph.D. dissertation). Northwestern University, Evanston, IL.
- Falleti, T. G. (2005). A sequential theory of decentralization: Latin American cases in comparative perspective. *American Political Science Review*, 99(3), 327–334.
- Gaffikin, F., & Morrissey, M. (1998). Why partnerships? Border crossings project. (Unpublished Report). Belfast: The Urban Institute.
- Gazley, B., & Brudney, J. L. (2007). The purpose (and perils) of government–nonprofit partnership. *Nonprofit and Voluntary Sector Quarterly*, 36(3), 389–415.



- González, L. (2012). The redistributive effects of centralization and decentralization across subnational units. *Latin American Research Review*, 47(3), 109–133.
- Gordin, J. P. (2010). Paradoxes of federalism?: Political institutions and fiscal decentralization in Argentina and Spain. *Revista of Federal and Autonomic Studies*, 11, 142–168.
- Kelman, S. (2005). *Unleashing change: A study of organizational renewal in government*. Washington, DC: Brookings Institution.
- Kusumasari, B., Alam, Q., & Siddiqui, K. (2010). Resource capability for local government in managing disaster. *Disaster Prevention and Management: An International Journal*, 19(4), 438–451.
- Lijphart, A. (1999). *Pattern of democracy: Government forms and performance in thirty-six countries*. New Haven, CT: Yale University Press.
- Long, E., & Franklin, A. L. (2004). The paradox of implementing the Government Performance and Results Act: Top-down direction for bottom-up implementation. *Public Administration Review*, 64(3), 309–319.
- Montero, A. P., & Samuels, D. J. (Eds.). (2004). *Decentralization and democracy in Latin America*. Notre Dame, IN: University of Notre Dame Press.
- Musgrave, R. A. (1959). *The theory of public finance: A study in public economy*. New York: McGraw-Hill.
- Oates, W. E. (Ed.). (1977). *The political economy of fiscal federalism*. Toronto: Lexington Books.
- OECD. (2001). *Local partnerships for better governance*. Paris: OECD Publications.
- Osborne, D., & Gaebler, T. (1993). *Reinventing government*. New York: Addison Wesley.
- Olsen, M. (1965). *The logic of collective action*. Cambridge, MA: Harvard University Press.
- Ostrom, E. (1990). *Governing the commons*. Cambridge: Cambridge University Press.
- Provan, K. G., & Kenis, P. (2008). Modes of network governance: Structure, management, and effectiveness. *Journal of Public Administration Research and Theory*, 18(2), 229–252.
- Prud'Homme, R. (1995). The dangers of decentralization. *The World Bank Research Observer*, 10(2), 201–220.
- Riker, W. H. (1975). Federalism. In F. I. Greenstein & N. W. Polsby (Eds.), *Handbook of political science, 5: Governmental institutions and process* (pp. 93–172). Reading, MA: Addison-Wesley.
- Rondinelli, D. A. (1981). Government decentralization in comparative perspective: Theory and practice in developing countries. *International Review of Administration Science*, 2, 133–145.

- Rondinelli, D. A., McCullough, J. S., & Johnson, R. W. (1989). Analyzing decentralization policies in developing countries: A political-economy framework. *Development and Change*, 20, 57–87.
- Rondinelli, D. A., Nellis, J. R., & Cheema, G. S. (1983). Decentralization in developing countries. *World Bank Staff Working Paper*, 581.
- Ryan, J. J. (2004). Decentralization and democratic instability: The case of Costa Rica. *Public Administration Review*, 64(1), 81–91.
- Segal, L. (1997). The pitfalls of political decentralization and proposals for reform: The case of New York City public schools. *Public Administration Review*, 57(2), 141–149.
- Stegarescu, D. (2005). Public sector decentralisation: Measurement concepts and recent international trends. *Fiscal Studies*, 26(3), 301–333.
- Teisman, G. R., & Klijn, E.-H. (2002). Partnership arrangements: Governmental rhetoric or governance scheme? *Public Administration Review*, 62(2), 197–205.
- Tiebout, C. M. (1956). A pure theory of local expenditures. *Journal of Political Economy*, 64(5), 416–424.
- Waldo, D. (1948). *The administrative state: A study of the political theory of American public administration*. New York: Homes & Meijer.
- Water Resources Agency, Ministry of Economic Affairs, 2005, *Flood-prone Area Management Plan*, accessed on 2014/8/1, English Website: <http://www.wra.gov.tw/ct.asp?xItem=31980&CtNode=6233>.
- Wernerfelt, B. (1984). A resource-based view of the firm. *Strategic Management Journal*, 5(2), 171–180.
- Willis, E., da C. B. Garman, C., & Haggard, S. (1999). The politics of decentralization in Latin America. *Latin American Research Review*, 34(1), 7–56.
- Witesman, E. M., & Wise, C. R. (2009). The centralization/decentralization paradox in civil service reform: How government structure affects democratic training of civil servants. *Public Administration Review*, 69(1), 116–127.
- World Bank. (1999). *World Development Report 1999/2000: Entering the 21st century—The changing development landscape*. Washington, DC: World Bank.