#### **CHAPTER VII**

#### CONCLUSION AND RECOMMENDATION

This chapter starts to analyze the four stages of water institutional practice together to make major findings on local water institution sustainability. Then it theoretically discusses research findings by drawing together the theoretical and empirical material presented throughout this thesis. Finally the policy implications of this research are suggested in the last section, as are some areas for further research.

# 7.1 Major Findings of the Study---- Institutional Sustainability

Through the history of Zengchong village, local water institutions have changed from one stage to next. Considering all these four stage together, we can find that: 1) In each stage, water institutions were stable for a period of time. This stability was a benefit of institutional practice in each stage. 2) From the clan stage to the household stage local *Kuan* institutions on water resource management kept continuing during this village's history: *Kuan* started in it's independent form then became controlled by local landowners then was destroyed by RCZV, but was reconstructed by local elders in the household stage. So in this case study, institutional sustainability has two definitions. One is institutional sustainability such as happens within in each stage and the other is institutional sustainability during the whole history of Zengchong village.

### 7.1.1 In each stage

# (1) Institutional sustainability comes from four interactive elements

In each stage, four levels institutional practices combined together make up the legitimation process. The four elements are connected and impact upon each other. A weakness in one may be compensated by strength in another. Through these four interactive institutional practices, the water institutions have been legitimated and

have been sustainable in each stage.

The fundamental element, the structure of power and interests, is the base of institutional sustainability since it can potentially influence the other three elements. So in the clan stage, collective stage and household stage, this element has had a strong role in strengthening institutional sustainability even though the performance element was weak in these stages. In the class stage, the local power and interests structure was constructed by the landowner class and was resisted by the landless class. This structure was vulnerable to deconstruction by the landless. Water institutional sustainability was achieved by strengthening the rule making and performance elements supported by the government.

The accountability element was quite important in institutional sustainability. Downward accountability mechanisms linked water management leaders with water users. Through this institutional practice, institutions for example the leaders, rules and performance could be monitored and adjusted, and finally accepted and consented to by the local people. For example, in the clan stage, *Kuan* law was consented to through its announcement and revision in *Kuan* meetings. Upward accountability can also support institutional sustainability. Through being upwardly accountable the water manager can gain support from above. For instance, in the collective stage, the rules came from government plans and state laws; and water control facilities built in cement were sponsored by the township government. In the household stage, the rules agreed by township government which also can be helped in performance by township government.

## (2) Impacts on institutional sustainability

Impacts on each legitimation process were different. In the clan stage, since no market mechanisms existed in this area and also no government institution came into it, there was no impact from the outside. Local water institution sustainability was

interacted with by other Kuan practices, such as forest management, drum tower repair, Sa spirit worship and so on. In the class stage, the government and market came into this village and became the main impacts upon local water institution sustainability. Their impact was not only on the element of structure of power and interests through inducing land exchange practices, but also on the performance element by supplying tools used to force agreement. In the collective stage, no market mechanism was used in this village. All production was arranged by government plans. So the government was the main source of impacts on local water institutions. High-level governments could encourage the prevalent structure of power and interests through helping the Revolutionary Committee of Zengchong Village build canals and weirs, and give strength to the element of rule making in their legitimacy by giving state plans and law as the blueprint of local rules. In the household stage, impacts again come from the government and market. Because the ChaHua land distribution make local villagers depend on each other to negotiate water allocation, it has constructed a strong local power structure for water institution sustainability. In the present impacts from the market and government are again starting to act on this structure.

### 7.2 From a holistic point view

From a holistic point view, these four stages, each with their quite different arrangement of the four elements of the legitimation process are not just discrete packets. Institutional practices in one stage impact on and are connected to institutional characteristics in other stages and the whole sequence can be seen as are part of a larger process: the institutionalization of local water resource management.

There is a dynamic process of water resource management in Zengchong village's history. From the clan stage to the household stage, water resource management had different characters in different stages. In the clan stage, water resource management was carried by *Kuan* institutions, which was based on the local

clan structure. In this stage the practice of water resource management, including structure of powers and interests, rule making, performance and accountability were all under *Kuan*. In the class stage, although power was in the hands of landowners and water institutional practice was different from the clan stage, the practice of water resource management also was titled *Kuan*. In the collective stage, *Kuan* wasn't accepted by the government. Through the Cultural Revolution, *Kuan*, considered as the remainder of feudalism, was destroyed by the government. Water resource management was instead carried out by local government. In the household stage, since government policy has been implemented loosely in Zengchong village, water resource management power was moved back into villager's hands. They use *Cun Gui Min Yue* to manage water resources. This institution although it has a different name, is derived from *Kuan* as remembered by the older local villagers.

Through this dynamic process, Kuan could be sustainable and continually practiced in local water resource management. There are some reasons for Kuan institutional sustainability. The first relates to the long history and heavy use of Kuan in the clan stage. Kuan had already been practiced for a long time by the end of the period. The Dong people have more than two thousand years of history. Of this the clan stage takes up about one thousand five hundred years. So in this stage, Kuan institutional practices had been implemented for a long time. During this long history it was tested and used in many ways and proved very durable and usable. In this stage, Kuan was at first an organization to defend the local Dong against outside intrusions. Since they were attacked by outsiders several times, both by the central government and other ethnic groups, Kuan became a way of survival for the Dong. Kuan was also effective in defending against outside cultural incursions. Inside the village Kuan implemented to manage local affairs, became an indispensable part of every day life. Because of this state law couldn't come into the Dong area for most of the clan stage. In fact, through the practice of only one institution of Kuan, the Dong were totally self managing in every aspect of their lives.

Secondly, through the long time of institutional practice in the clan stage and class stage, *Kuan* had become part of the cultural identity of the Dong. Until now in Dong society, *Kuan*, together with Drum Towers, Roofed Bridges and *Sa* spirits are the essential elements of Dong ethnic identity (see photo 7-1). The name of the institution is inseparable from the name of the people. People call *Kuan* the "*Dong Kuan*". This institution only exists in the Dong ethnic group. It is the major dissimilarity between the Dong with other ethnic groups (Xiang, 1991; Wu, 1991; Oakes, 1997; Zhou, 2002 etc.).



Photo 7-1 Drum Tower and Roofed Bridge in Zengchong Village

Thirdly, *Kuan* institutional practices were legitimized and strengthened because of their combination with other practices, such as the *JiSa* ceremony, drum tower repair and so on. On the one hand, *Kuan* institutions can support these practices, for instance, acting as a way to mobilize labors for *Kuan* leaders and on the other hand, these practices increased the symbolic capital of *Kuan*. For example, the rules of *Kuan* were marked on a stone stele which stood in the drum tower, the leader announced *Kuan* rules in the drum tower, and the procedure of enforcement (the

performance element of legitimacy) was recorded in the drum tower. The drum tower became a symbol of *Kuan*. Through long time institutional practice of investment in this symbolic capital, the durability of *Kuan* institutions was increased.

Fourthly, the practice of *Kuan* impacted deeply on local people's way of life. In the clan stage, all local affairs were managed by the *Kuan* institution. Not only local resource management, but also other affairs such as marriage, reproduction, inheriting etc. were all managed by the *Kuan* institution. Moreover, the rules of *Kuan* had were explicated as songs, stories and dramas. These song, stories and dramas were spread from one generation to next generation by the common people. In Dong society, there were many famous Dong songs and Dong dramas performed by the Dong people every New Year. Besides that not only in working time, but also in rest time, *Kuan* was always the core theme of local stories. So in the household stage, *Kuan* law was memorized by the old for local resource management.

Kuan as local self-management institution has continued for some other reasons. In the class stage, although water resource management carried as the title of Kuan, in fact water management was done by landowners. Class differentiation meant that local Kuan institutions had been changed. On the one hand, the influence of landowners linked with outside government made Kuan lose its safeguard function. On the other hand, landowners became the leaders of Kuan and destroyed the power structure of Kuan, which in the clan stage was the clan-structure. Through the revolutionary movement lead by the Chinese Communist Party in the collective stage, local power structures changed. Social structure changed from unequal class relations to more equal villager to villager relations. This power structure practice was the basis of Kuan was reused in the household stage. In the household stage, since the power structure of Zengchong village became equal, local people could co-operate together equally to make the rules of Cun Gui Min Yue, which were based on Kuan law.

Also since decentralization policy was implemented in the household stage

which gave a space where villagers could negotiate with the government using the discourse "Kuan law is the supplement of state law" and so hold management power. So the structure of power in this stage had two dimensions. One was based on rebuilding power structures from the collective stage through socialist revolution. The other was in the household stage state power was slowly moved out of the local step by step. These two power structure processes are the basis of water institution practices in the household stage. During a few years practice, local people continuing manage water resources through Cun Gui Min Yue. Through the four levels of institutional practice, it has again become legitimate in Zengchong village.

To summarize the above, sustainability of local water resource management institutions comes from institutional practices. In each stage, water resource institutions were legitimated through their four levels institutional practice. From the holistic point of view, these institutional practices had inter-impacts crossing different stages. At first, through long time institutional practice in clan stage and class stage, *Kuan* had a pretty good basis in some fundamental factors such as symbolic capital, cultural identity, and reinforcement as songs, stories and dramas. These factors are enough to exist durably for a long time and impact across periods. Then through institutional practice in the collective stage, the local class power structure was reconstructed into an equal structure. And at lastly, based on factors in the past, and also through practice of the four levels of institutional practice in the household stage, local water management institutions, *Cun Gui Min Yue*, which derived from traditional *Kuan* institutions have become legitimated.

## 7.2 Theoretical Discussion of the Findings

There are several theoretical findings to be made form this study. First, Zengchong village is not a static, but a dynamic community continually changed from the clan stage through to the household stage. These changes had their sourced not only in social differentiation inside village, for instance, in the conflict between

landowner and landless in the class stage, but also have been impacted by outside elements, such as state policies and market mechanisms. State policies, can be demonstrated in the class, collective and household stage. In the class stage, state policy intervention such as TuSi etc. let landowners became the local government officers. In the collective stage, "Socialist Revolution" came into Zengchong village and rebuilt local classed social power relations as equal villager's relations. In the household stage, the "Household Responsibility System" policy was practiced in Zengchong village. It changed the local water utilization power structure. Moreover, decentralization policy which was implemented in this stage let the local people have an autonomous space to reconstruct traditional water institutions. All these state policies had deeply impacted this village, and step by step made it change. Evidence of market mechanisms is found in the class stage, where timber business induced land collection which was then used by landowners. And also will be showed in the future through stimulating high market price crop planting in the land. Hence, we cannot meet a traditional community which exist statically, as advocated by some CBNRM scholars.

Second, there is not a static institution, but different institutions dynamically constructed by local actors based on their power and interest structure in different stages. For the institutional approach, a local resource management institution is a body of "rules-in-use" continually used and constructed in the local arena. Within this approach two schools, or lenses are used to study institutions. One is the "Conflict School" which focuses on conflict between local people, or between local people and outsiders. The other is the "Cooperation School" which focuses on cooperation between local people or also between locals and outsiders. The cooperation school thinks institutions can be created and made sustainable by shared norms and values, which are the basis of local cooperation. On the other hand, the conflict school sees institutions as fields of conflict. It thinks conflict is the source of institutional change through separate actor's strategic practices such as resistance and negotiation. In this study both these schools are combined. In Zengchong village

history, water institutions have been sustainable through shared values inside each stage of history, and changed from one stage to the next. Within one stage, collective rules were used based on principles produced by local social constructions. These collective rules, as norms and values, were shared by most local people through their power practices. Between different stages, water rules have changed by local people, again through their power practices. So conflict and cooperation are both aspects of local power practices which in this study have related to water institutions.

Third, the conventional school of study on institutional change and sustainability focuses on "static characteristics" such as preconditions, transaction cost or social capital etc. It loses focus on dynamic institutional processes. Although some "institutional practice" studies such as the "rule-in-use" school achieve a dynamic perspective on institutional processes, they cannot explain well how this process really takes place. For other modes of thinking, such as explaining institutional change as an effect of outside impacts or actor's strategic practice, are also unable to conceptualize this process. The framework of legitimacy not only distinguishes the four-hierarchical elements of legitimacy to analyze the institutional process, but also links institutional processes with outside impacts. These four interactive institutional practices combined create institution sustainability by reinforcing each other in each stage. In line with institutional change, change in these four elements of legitimacy between different stages can also be found. These four levels of institutional practices are all contingently carried out in institutional process. As sated by Muthiah (1995), this process is unending, contingent, dynamic and continuously defined.

Fourth, the element of structure of power and interests is the fundamental of institutional change and sustainability. Institutional change starts from it and institutional sustainability can be achieved by strengthening it. Structure of power and interests is substituted for "shared norms and values", which are the ideological basis for local cooperation. "Rational choice" and "Moral economy" are two models for study of local cooperation in resource management. According to the "rational

choice" school, local people cooperate based on their thinking that they will obtain the maximize benefits for themselves from cooperation. In the view of the "moral economy" school, local people's cooperation is based on their thinking that to cope with the risk they have to rely on collective dependence on local resources. These two models are not used in this study because they do not apply to the study area. In the clan stage, local people cooperated because they were attacked by outsiders. They needed a unit to combine together to survive so they created a defense cooperation organization. In the collective stage, local cooperation was based on state discourses such as "collective production for our great country". In the household stage, the local people cooperated based on the interdependence structure used for water distribution. So the element of structure of power and interests, which is dynamic, locally contextualized and always impacted by outside factors such as state policy and market, is used as the basis of local cooperation in this study instead of "rational choice" or "moral economy".

Fifth, accountability can be found four models in this study. In the clan stage, accountability was downward. In the class stage, it was internally between power holders, the landowner themselves. In the collective stage, it was upward. In household stage, it is mixed, both upward and downward. So the accountability element has a more complex character than represented by Agrawal & Ribot (1999). This element is based on the structure of power and interests which is the fundamental element of legitimacy. Accountability will always be to those who hold the power. As stated by Agrawal & Ribot, only just downward accountability can indicate that the real management power hold by local people, which is real decentralization. Not only downward accountability which can achieve consent by local users support legitimacy but also upward accountability. Through upward accountability local water managers can obtain the support from high-level government such as in budget and administrative areas, as has been demonstrated by Wai in his study on Taiwan's irrigation institutions (1996a).

Sixth, these four interactive institutional practices are connected and impact on each other in the legitimation process of one stage, and also they impact on each other across stages. In each stage, a weakness in one element can be compensated by a strength in another element as demonstrated by Muthiah (1995). On a holistic level, institutional practices in one stage can produce factors such as symbolic capital, identity, song themes, and experiences, which can hand down to the next stage in the institution's life even several stages later, as has happened with these factors being handed down from the clan stage to the household stage. All the small stages connect together to construct the whole institutional process across different stages.

# 7.3 Significance of the Study

Water management is multi-functional in this village. It can be used as irrigation for agricultural production; it can be used for fishery in their river sections, paddy fields, and fishponds; and it can be used for domestic use, mouse and fire prevention and electricity production. Analytically the Dong people's water resource management can be divided into four stages paralleling with their history. In each stage, different institutions have been legitimized through the four levels of institutional practices. In the clan stage, water was managed using Kuan institutions which gave priority to higher social ranking clans and also survival to every member in this village. In the class stage, landowners held power in local water management through constructing rules which served their own privatized lands. In the collective stage, water was managed by local government that was controlled by high-level government. In the household stage, water is managed first by the Elders Association and then by the Villager's Committee, under the rules called Cun Gui Min Yue, which were derived from Kuan through introduced by the local elders. Right now, the local people have been successful in their negotiation with the government on water management. The decentralization policy has given local people a space or niche to construct in which the introduction of Cun Gui Min Yue was possible. institutional practices in the past gave given local self-confidence and some fundamental positive factors such as symbolic capital experience and others.

This achievement of t local control of water resource management could stimulate further decentralization processes in local resource management, especially water resource management in Dong areas. In China, conventional thinking depicts the local community as always opposed to environmental protection, over-utilizing resources or lacking the capacity to control resource management. Hence, the community is always designed out of environmental protection and resource management in role mapping carried out by state policy makers. Right now, since decentralization is extending in China through community capacity building projects supported by the "Community Democratic Construction Law", community participation in poverty alleviation, and a deepening of the market economy. Community management of local resource is also being tentatively implemented in water resource management. This case of Dong people's water resource management can help understanding of how local institutions have carried out water management. It should be able to achieve meaningful support for community management of local water resources.

The decentralization process gives a space or niche for the local community to construct their own institutions of water resource management. Through this process, the legitimacy of the local community's capacity and power can be improved by their institutional practices. For instance, through rule making and performance, local leadership can be given structure and stabilized. This support is important not only for local resource management, but it also strengthens local social development. Local organizations and institutions can grows and becomes mature through the decentralization process.

Downward accountability will be achieved and strengthened through further decentralization. It this connects local leadership with local constituencies and adjusts local institutional arrangements to suit. It has an import role in the local legitimation

process. With no downward accountability, there will be no real decentralization. Really community participation can be achieved by institutional practice of downward accountability, as stated by Agrawal & Ribot (1999). In today's water institution of Dong, there is a mixed accountability. Through downward accountability, local villager, who are water users, can select and adjust their leaders, participate in rule making, monitor rule performance by their leaders, and have power to know about the affairs of their village. All these institutional arrangement can obtain their consent for carrying out water-related institutions, and also give the water management power to them.

Also upward accountability will be strengthened in the future. This accountability gets the high-level government support for the local community in terms of budget, administration, state laws and so on. This can be demonstrated in this case and also was found by Shashi Kolavali and John Kerr (2002) and Wai (1996a). In some villages, maybe the local capacity for rules making, rules performance, and also building the water resource facilities is low. In these cases, high-level government support is quite important. Decentralization does not mean putting the local community outside of government systems. Instead it means constructing suitable relations between them (Li, 2002). For the building and strengthening of local institutions, the government has an important role in giving enough space to local institutions but it also has a responsibility to support building of the local community's capacity by enforcing upward accountability. Especially in China, through the implementation of government management systems for a long time, local community and institution may have been destroyed or weakened which is indicated by individualism, confrontationalism and other bad tendencies in local management. Hence, government support for building a good working organizations and institutions is badly needed.

In the rural society of China today, land reform policy has constructed a strong base for equality between local people. In local water resource management, they have constructed a fair power structure for local interactions. This will stabilize water institutions in the future. In terms of social justice, this policy will be a strong support for the implementation of decentralization of local resource management. Otherwise, decentralization will only get empowerment for the powerful figures in the local area, like the case of landowners in the class stage.

So in the future, the Chinese government will function in local resource management as: on the one hand, decentralizing it's power to the local community by construction of downward accountability, and supporting building of the local community's capacity through strengthening upward accountability. On the other hand, continuing the stabilized land policy implementation is important in constructing an equal local social structure.

## 7.4 Limitation of the Study and Recommendation for Further Study

Due to time and resource availability, the limitations of this study are as follows:

- 1) During fieldwork multiple methods and tools were used to collect information based on the topic and the situation in the study site. However, rural society is complex and varies from place to place and from time to time and it is difficult to properly apply these methods and tools to serve research purposes in a real situation. It is also difficult to gather complete information to fully understand the village within the limitation of time and resources.
- 2) Zengchong village is used as a representative of the Dong community in this study. However, many differences exist among different Dong villages, such as language, dress, and even some customs and ecological situations. For instance, Dong villages in south cannot communicate with northern Dong people whose pronunciation of the Dong language is different to their own. So there needs to be a comparative analysis of these different areas to fully present the Dong peoples water resource management.

- 3) As a case study of water resource management, this study investigates a village in a mountainous area, which is different from villages in plains areas. In plains areas, the water management can be carried out by implementation of a big canal system. There will be differences in adjusting the ditch dam height between terraces in this village, differences in water multifunction, and also in the importance of spring water and so on. So this case study has some limitations in bridging cross-topographical explanation.
- 4) This case study focuses on local perspectives of water resource management. The point view of local government, such as the township government and county government, are not included in this case study. Maybe a more comprehensive framework to study water management would include all the stakeholders in a study team. This would not only to find a conclusion, but also lead to learning and understanding each other's surroundings, which could have a useful to impact on the government and scale up the impact of research in this area, maybe leading to a greater chance of it being used in real policy making.

Therefore, further study on different Dong villages' water resource management in different topographical areas would be valuable if carried out as a team study, which includes all the stakeholders.