# Policy Implementation and Water User Associations Development in China

# Yahua Wang\*

School of Public Policy and Management / Institute for Contemporary China Studies,

Tsinghua University, China

wangyahua@tsinghua.edu.cn

# Tingting Wan

School of Public Policy and Management / China Institute for Rural Studies,

Tsinghua University, China

wantingting@tsinghua.edu.cn

<sup>\*</sup> corresponding author

#### **Abstract**

China has witnessed prevalent failure of institutionalizing Water User Associations (WUAs) in rural areas. WUAs, as a type of decentralisation of irrigation management, were initiated in China in the 1990s with financial support from the World Bank, aiming of effective selfgovernance in rural irrigation. This papers looks into how WUAs are promoted and performed in China. From the perspective of policy implementation, it analyses the process of promoting and developing WUAs in China. A Chinese mode of policy process is identified as 'top-down hierarchical push and strategic response from the local level'. On the basis of survey data from over a hundred villages and a thousand of farming households in rural China, it finds that this top-down policy implementation mode has led to rapid growth of the number of WUAs; however, WUAs development in China is in name only for completing a mandatory task, resulting in poor performance at the local level. Using cases studies, this paper further analyses the process of promoting and implementing self-organised irrigation management in Fujian, Gansu, Inner Mongolia, Ningxia and Sichuan irrigation areas. It is found that WUAs are mainly directed by local cadres, village directors, village committee members and local water bureau officers. These WUA cases demonstrate that policy implementation of selforganisation in China is based on administrative decision and forced by administrative duties. Furthermore, it illuminates that local areas are not only short of the conditions of implementing self-organisation policy but also without institutional demand for selfgovernance. The paper argues that local culture, socioeconomic differences and institutional diversity are of importance in policy decision and implementation processes, rather than imposing uniformity in policy process. Promoting and developing WUAs in China provides a unique lens to understand Chinese irrigation management reform over past two decades, shedding light on the process of how self-organisation policy is promoted, implemented and evaluated in changing socioeconomic circumstances.

## Introduction

Water User Associations (WUAs), as a form of decentralised irrigation management, were initiated in China in the 1990s with financial support from the World Bank, aiming of effective self-governance in rural irrigation. However, the development of WUAs in China is primarily in name only for completing a mandatory task. WUAs are directed by local cadres, such as village committee members and county water bureau officers, being the status "two names but the same staff". The dilemma of developing WUAs in rural China provokes controversy over promoting self-organisations in authoritarianism.

Since the opening up policy and economic reform initiated in the 1980s, China has witnessed the rapid development of social organisations (Foster 2001; Saich 2000). State-society relation has been given considerable attention by looking into the development of social organisations in contemporary China (Stern and O'Brien 2012; Zhang 2015). Civil society (Shieh and Deng 2011; Teets 2013; Woodman 2016; Yu and Zhou 2012) and corporatism (Hsu and Hasmath 2014; Lan 2014) are highlighted as the focal arguments in this inquiry. Studies are furthered by arguing that the dichotomy approach constrains the understanding of the Chinese reality, and the society and state are in the process of seeking a balance. Neither a bottom-up civil society perspective of nor a top-down corporatism viewpoint accounts for the dynamics of interaction between the state and society in China. On this basis, state-society relation is argued as dependent autonomy (Lu 2007), contingent symbiosis (Spires 2011), consultative authoritarianism (Teets 2013), and institutional interdependence (Hsu and Jiang 2015). All these arguments focus on understanding state-society relation in the Chinese authoritarian context.

Moreover, Chinese rural governance receives great attention in the inquiry of state-society relation (Shou 2015; Smith 2010; Wong 2015). The role of local governments and their relation with the central government is a key to understanding gradual transformation and state-society relation in China (Moore 2014; Zhou 2010). A dual role of Chinese village leader as state agent and community patron impedes the quality of rural governance, and self-governance is ineffective in China (Shou 2015). Studies of self-organisation in China are primarily concerned with democracy (Manion 2006; O'Brien and Han 2009; Ong 2009; Zeng 2016). As a form of self-organisation, WUAs development and associated policy implementation process in the Chinese locality pinpoints the problems of promoting self-governance in an authoritarian context. At this point, a fundamental question is raised whether authoritarianism and decentralization can work hand in hand? Studying WUAs development in China, further inquiry is made to understand why the development of self-organisation is confronted with prominent ineffectiveness in China, and what accounts for the dilemma of promoting self-organisation in authoritarianism.

Semi-structured and in-depth interviews with villagers, village cadres, and county officials have been conducted during our fieldwork from 2012 to 2016 in rural irrigation districts in Inner Mongolia, Ningxia, Gansu, Fujian and Sichuan provinces. On this basis, we argue that the crux of the dilemma is underlain by a paradox mode of 'administration oriented self-governance' (AOSG), which is the outcome of the incompatibility of authoritarianism and

decentralisation in the changing rural society. In the subsequent analysis, we will discuss about the development of WUAs in China, and then delineate the shaping mechanisms of the AOSG governance mode from the interactive nature of structure and actor in the Chinese intensified authoritarian locality.

## The Development of Water User Associations in China

Association and state relation in the context authoritarianism are characterised by the power dimension as autonomous vs. controlled. When associations achieve autonomy, they form the basis for a civil society that provides a counterweight to the state. When associations lose autonomy, they become a sign of continuing domination of society by the state (Foster 2001). China sees a strong state role in water resources management, which is defined as hydraulic mission (Meinzen-Dick 2007), and rural irrigation management has been of great importance in the progress of Chinese socioeconomic development. Chinese commune system has been replaced by the small-holding farmers since the economic and rural reform in the early 1980s (Walder and Zhao 2006). Small-holding farming challenges the collective action of a large number of irrigators and irrigation at the local level was largely left unattended. This requires a more intensive mode of irrigation management with a high degree of coordination and organisation (Lam 1996; Zhou 2013). It is argued that decentralised irrigation management improves the efficiency of governance by transferring irrigation management responsibility from governmental agencies to farmer-run organisations (Chai and Schoon 2016). Promoted by the World Bank's Yangtze River Water Resources Project (Zhou 2013), WUAs were established in 1995 in China in order to encourage farmers' participation and self-governance in irrigation management (Huang 2014), as one of reform programmes in China with certain degree of autonomy, representing social interests that are conveyed into the policy making process (Saich 2000).

In China, there are three types of irrigation management institutions: collective management, WUAs, contracting management. Collective management is the traditional form of water management, which is directly dependent on village leadership and administrative authorities for water allocation, infrastructure maintenance and fee collection. The reformed water management institutions are contracting and WUAs (Wang et al. 2014). In contracting an individual farmer is contracted by the village leadership for water management. WUAs are self-organised, governed and community-based associations with clearly defined membership (Ostrom 1990), and member-elected board is in charge of village's water (Wang et al. 2014). WUA has the status of an independent legal entity as long as it is registered in the local civil administration department (Qiao, Zhao and Klein 2009). The major difference between WUAs and traditional water management is the head of village water matters, and the traditional village water community is managed by a village head, who is an influential and respected figure in the village, with decision making power over water allocation, fees collection and infrastructure maintenance (He and Perret 2015).

Contrary to the traditional collective management, the development of WUAs in China poses

the dilemma that self-organisations are under the charge of local administrative authorities, and the majority of villagers are even unfamiliar with it. In the authoritarian context, the characteristics of policy implementation in rural China are argued as selected policy implementation (O'Brien and Li 1999), top-down and uniformity in policy making and flexibility in implementation, being an organisational paradox generated by the institutional logic of the Chinese bureaucracy (Zhou 2010), and hierarchical push and strategic response (Wang 2013). Historical reason is given that rural irrigation was considered as a typical public good provided and maintained by the government, and Chinese farmers were used to being users of irrigation infrastructure rather than the governors (Huang et al. 2010). Factors that encourage farmers' participation in WUAs are summarised including being a village cadre, good state of health, high degree of understanding about WUAs, small percentage of the household in the labour force, cropping income accounting for a high percentage of family income, and having had previous conflicts involving water use issues (Qiao, Zhao and Klein 2009). Researches on self-organisations in rural China are more concerned with participatory management, self-governance and collective action in rural China (Chai and Schoon 2016; Huang 2014; Lin 2003; Qiao, Zhao and Klein 2009; Zhou 2013). However, little attention is given to the critical issue of promoting self-organisation in authoritarianism. Based on the argument for the AOSG mode, the following analysis seeks answers to what beyond this dilemma, its shaping mechanisms of this paradox governance mode. Before proceeding further, there is a clarification on 'local cadres' used in the following discussion. We view that WUAs are directed by local cadres, including as village committee members and county water bureau officers, because our analytical focus is the local people who represent the local authority in rural irrigation management. Thus, in this case, it is meaningless to draw a distinction between village cadres and local officials.

## **Changing Rural China and Intensified Authoritarian Locality**

Authoritarian states are featured by uniformity in policy making, and this becomes increasingly imposing in China in recent years as the growing centralisation in resources and decision-making authority. However, policy implementation turns out be highly problematic, and collusion among local governments is argued as the basis for developing evading strategies in policy implementation. The inevitable consequence of uniformity in policy making is that policies are not congruent with local conditions. Uniformity of policy making results in the vital mechanism of 'flexibility in implementation' with the purpose of local adaptation. Three types of flexibility in implementation are identified: flexibility by purposive design, flexibility of unintended design and flexibility by special interests (Zhou 2010). Nonetheless, as the epitome of self-organisations, the dilemma of WUAs development in China is inadequately depicted by above three types of 'flexibility in implementation' mechanism. We argue that for self-organisations in China, the flexibility in policy implementation lies in the structural constraints in the locality. It underlines an indispensable issue of the incompatibility between decentralised management and the authoritarian context. It is true that policy implementation varies across regions and we find some WUAs have better performance than others in terms of irrigation water allocation and water fee collection, and

these variations in various localities are determined by the differences in geographical conditions and agricultural crops. Importantly, the development of WUAs in China is characterised by administrative arrangements. Therefore, we use 'administration oriented self-governance' mode to analyse this dilemma, and argue that in authoritarian China structural constraints in the locality underlies the ineffectiveness of developing self-organisation and flexibility in implementation. This resonates with the argument that good governance is determined by not only the type of governing institutions but also the social conditions in which institutions are created, situated and operated (Lu 2015).

In the top-down policy implementation process, WUAs are promoted and in the charge of village cadres. Concerning why the heads of WUAs are village cadres, we were informed by the majority of village cadres that they "have to shoulder this burden", as there are not suitable candidates for this position. In interviews with the heads of WUAs, who are also village committee members, it was told that WUAs are set up with the purpose of solving water conflicts over water allocation for irrigation among villagers; however, these so-called farmers' self-organisations end up bringing a series of problems of collaboration. Why are farmers not suitable for managing the self-organisation? From interviews with farmers, we understand that most of them are not interested in taking part in organising village water matters. This provokes the discussion of the changing rural China. A salient point in analysing the changing structure of Chinese rural society is migration. Migration associated off-farm employment increases farmers' income but decreases their interest in agricultural activities. Current researches on local governance in rural China points out that changing social conditions act as the key factor affecting rural governance and rural to urban migration exerts an adverse impact on farmers' participation in WUAs (Lu 2015; Qiao, Zhao and Klein 2009; Wang, Chen and Araral 2016). Importantly, direct consequences of migration are the absence of selfgovernance actors and collapse of local water governance community.

Back to the history of irrigation management in Chinese rural society, Chinese local irrigation community in the 19<sup>th</sup> century, known as 'zha hui', is analysed from the perspective of 'how cultural nexus brought the imperial state and local communities together within a common framework of authority'. Local irrigation association of water users incorporated members of more than one village, and in irrigation system there was a hierarchy of organisational levels, from family to groups to associations. Cultural nexus sheds light on the structure for accessing power and resources in the locality, and the success of running irrigation communities are highlighted by strong villages and market towns, because strong villages had sufficient political resources while economic resources were determined by market towns to finance the associations (Duara 1988; Lu 2015). Present rural China witnesses dramatic socioeconomic changes and improvement in the quality of living conditions and social welfare, and among the changes migration plays a significant role in reshaping the rural society. As discussed above, the collapse of local water governance community is not only on the account of insufficient economic and political resources for the local self-governed WUAs, but also as a result of migration and the absence of self-governance actors, which further intensifies local authority in rural governance.

Arguably, in rural China dilemma of promoting and developing self-organisations pertains to structural constraints and associated governance mechanisms. Rural to urban migration makes the absence of governance actors, and this undermines both cultural and institutional foundations of collective action in rural China (Lam 1996; Xu and Yao 2015) and becomes the underlying cause for village cadres' dual faceted role, being both the authorities and the heads of self-organisations. It is argued that these two roles often conflict because intensive structure of village leadership impedes the quality of rural governance (Shou 2015). WUAs organised by village cadres are commonplace in our studied locations. Rural to urban migration restructures the Chinese rural society and exacerbates irrigation management in the locality. L WUA in Sichuan was set up in 2005 and there are only 5 members consisting of the head of the WUA, the deputy head, an account, an officer for water fee collection and a WUA member. L WUA has jurisdiction over 5 villages with 8100 villagers in total. The head, deputy head and account of L WUA are villager directors; and water fee collection officer and an executive are 'well connected' men. Village directors comment that villagers are not interested in involving in WUAs as the livelihood of majority of households is dependent on off-farm employment in the urban areas rather than agricultural subsistence. Off-farm employment is argued has both positive and negative influences on farmers' inclination to participate in WUAs (Qiao, Zhao and Klein 2009). As the prevalent phenomenon of village cadre led WUAs, the authors argue that off-farm employment decreases farmers' interest in farm production and related irrigation management; however, those left behind such as the old, young and partially disabled household members are engaged in farming activities and they are more inclined to join WUAs for help with irrigation matters (Qiao, Zhao and Klein 2009). A county official in Ningxia, who is also an executive member of Q WUA, detailed the requirements for candidates of WUA members: candidates for the executives of WUA should be the officials in water bureaus; village committee members who in charge of village irrigation can be directly selected as the head of WUA, normally the head is the Party Secretary of village; and candidates for WUAs should have working experiences in village committee or being local officials. The rationale of imposing these requirements for selecting WUAs members is explained by the authoritarian logic of policy implementation, as we were told by several WUAs members that candidates equipped with administration experiences are good at 'communicating the superior documents'. This drives WUAs far away from selforganisations.

Although China makes the effort to search of effective means of decentralising decision making and coordinating authority at lower levels and the rise of local bureaucrats (Shue 1988), the authoritarian regime is structured for top-down decision making and hierarchical control at the expense of participation, self-organising and competition (Chan and Zhao 2016). The role of Chinese local bureaucrats becomes paradoxical and arouses controversy over rural governance (Kinkel and Hurst 2015; Smith 2015; Zhang 2016). In addition to the impact of migration on structural change in rural China, herein lies the other structural constraint, intensified authoritarian locality after decentralisation. Chinese rural governance is delineated by the intensive administrative structure and top-down policy implementation procedure. Self-governance is a hollow concept as election-induced improvement of village governance is ineffective in addressing the problems in present rural China (Shou 2015).

Discussed above that rural to urban migration underlie the absence of governance actors in promoting and developing self-organisations in rural China, decentralised irrigation management is ironically governed by local cadres, and local cadres hold reinforced accountability that is pressured by the ability of resources mobilisation (Newland 2016). According to Weberian theory, the logic of hierarchical direction is with the purpose of getting control and making staff to follow superiors' orders rather than pursuing efficiency (Esman and Uphoff 1984). In rural China, decentralised irrigation management is confronted with problems of disorderly conduct and further shortage of human and capital resources (Wang, Chen and Araral 2016). This becomes impetus for intensifying local authoritarianism and applying administrative instruments to manage self-organisations and obey top-down orders, and in this process, efficiency and quality of policy implementation are sabotaged. Resources mobilisation is critical to understanding village officials' impact on public goods provision (Newland 2016). Resource, in both tangible and intangible forms, is the key to analyse control in the Chinese political system, and the power of control and related problems are minimised when resources are abundant (Huang 2002). This positive influence of governmental and public agencies on irrigation management is identified in Taiwan (Lam 1996). Irrigation in Taiwan is characterised by bureaucracy and centralisation with similar institutional structure to China, and the success of Taiwan's experience underlines a compatible top-down and bottom-up accountability system. While for China the bottom-up accountable track is broken in an absolutistic authoritarianism (Fei 1953). Moreover, bottom-up accountability and resource mobilisation are highlighted as two important mechanisms in assessing village appointed officials' ability in public goods provision (Newland 2016). On this basis, our analysis focuses on how intensified authoritarian locality forms and how this structures the 'administration oriented self-governance' (AOSG) mode.

Decentralised irrigation management aims at improvement of farmers' participation and selfgovernance in rural China (Zhou 2013); however, it has downloaded rural developmental responsibilities in the locality after the abolition of agricultural taxes (Chen 2014; Kennedy 2007). Shortage of human and financial resources challenges the governance system and actors in rural China. WUAs financial income relies mainly on water fees paid by villagers according to the size of their arable land. It is stressed by many villager directors that they have to become WUAs members because not only they can exert their administrative power to force villagers to pay water fees but also they can use their social networks to solve related problems and obtaining social, financial and informational resources in order to fulfil the requirements from the higher governments, which are believed difficult for ordinary villagers to tackle. A model of informal governmental accountability argues that when formal accountability is weak, informal institutions of accountability can be provided by encompassing and embedding solidary groups (Tsai 2007). For self-organisations development in rural China, absence of self-governance actors resulting from migration hinders the development of informal institutions of accountability for self-governance and collective action.

Rural China sees the absence of both self-governance actors and additional resources that

used to be funded in the centralised system. Under this pressure, local cadres argue for the importance of their unavoidable roles and reinforced accountability for the development of WUAs, de facto administrative oriented self-organisations. Consequently, authoritarianism is intensified in the locality after decentralisation, imposing further structural constraint on the development of self-organisations in rural China. We are informed by the heads of WUAs that WUAs intend to select local cadres and well-connected men as their members for two primary purposes: using administrative instruments to follow bureaucratic procedures, and mobilise resources through their social connections. Our further findings show that monitoring and sanction mechanisms are general on paperwork and inapplicable in the operation of WUAs. These two mechanisms are among essential design principles of selfgovernance (Ostrom 1990), and local institutions is emphasized as the basis of providing effective norms and sanction mechanisms to restrain free-rider problems and forming the foundation for collective action in public goods provision (Zhou 2012). The ineffective provision of monitoring and sanction mechanisms in Chinese WUAs underlines the impact of structural constraints on local institutional arrangement, and the overused administrative institutions deteriorate the provision of accountability, norms and sanction mechanisms by informal institutions and social groups in rural governance (Tsai 2007; Zhou 2012).

In Inner Mongolia, the head of H WUA told us that WUAs performance is included in governmental performance assessment. The key issue in the assessment is pointed out by the head is collecting sufficient water fees from villagers as water users, the usage of which is composed by two parts: state managed fees and the general public managed water fees. According to his experience, being a self-organisation and farmer's involvement are not essential, the assessment is determined by whether paperwork and hard requirements from the superior offices are completed. Hard requirements refer paying for and attending WUA staff trainings at the county governmental agencies and paying state managed fees to the county water management station. Paperwork requires to fill out forms of WUAs registration, monitoring and approving procedures. The official "Farmers' Water User Associations Statute" is identical in our studied places, and we are told by some WUAs heads that they just copy the statute for other places without any revision based on the local conditions, and he remarked that no one reads it. On a statute, monitoring mechanisms are subcategorised as superior organisations' monitoring and financial monitoring, and monitoring contents are generally listed as 'to implement working tasks are assigned by superior water management agencies, country party committee and county governmental agencies; financial information is made known at WUA annual meeting'. Sanction mechanisms are focused on how to conduct ideological work with those villagers who are subject to overdue water fees rather than how to evaluate operational work and how to use sanction criteria to monitor WUAs operation. In terms of the applicability of these two mechanisms, it is commented by all the interviewed WUAs members that these mechanisms do not work in reality except for carrying out ideological work, which means persuading villagers to pay water fees by means of governmental ideological education using ideological slogans and the most used one is "actively collaborate with governmental work". In Gansu, we find that the local government is not only the ones provide operational guidance to WUAs, but also local governmental officials are heads and executive members of WUAs. In a municipality in Ningxia, the heads of WUAs are deputy directors of county governments where they are in charge of agricultural matters. Instead of encouraging the development of self-organisations, decentralised irrigation management escalates authoritarian practices at the local level. Along with migration and absence of self-governance actors, we define intensified authoritarian locality as structural constraints, and these conduct as structural shaping of the AOSG mode. The following analysis looks into how actors impact on this paradoxical governance mode in rural China.

## Alienated Relation between Governance Actors

The argument over governance actors in the Chinese WUAs lies in understanding a critical issue in AOSG mode, which is the distinction of actors of self-government and selfgovernance. The role of Chinese village cadre is emphasized that village cadres involve in strategic management of village affairs, however, officially they are not state officials and not part of the nomenclatura system. They are legally representatives of village self-government (Heberer and Schubert 2012). In rural China, villager committees, as basic collective units, are the basic level organisations, which are conceptualised as self-governing on the basis that they are elected by their constituents and are responsible for managing public affairs and social services (Woodman 2016). In terms of common-pool resources management, selfgovernance is defined by the fact that resources users are actually governance actors (Ostrom 1990). Even though elected village cadres can be conceptualised as the representatives of self-governance in rural China, according to self-governance theory they are not selfgovernance actors by reason of not being resources users. Chinese village cadres' role is not clearly defined in village public affairs and elected cadres account for only a small portion, therefore, it is difficult to draw a clear distinction between representatives of self-government and actors of self-governance. Preferably, the AOSG mode offers illuminating insights into the dilemma of WUAs operation and the relationship of governance actors, and weaknesses of AOSG governance mechanisms are examined from two aspects: transforming village affairs into administrative affairs and alienated relationship between governance actors.

In G village in Fujian, we had conversations with some villagers. They told us that local villagers automatically became B WUA members when B WUA was set up in 2009. Nevertheless, their role being B WUA member is only appeared on documents and they are not considered as members as they have never attended WUA meetings and decision makings. They stressed that traditionally irrigation management was a village public affair and the managers used to be elected village able men, and villagers made their own decisions on water allocation. B WUA is managed by the village committee. The maintenance work is under the charge of the village committee and villagers are responsible for paying water fees. Importantly, villagers do not think that administrative work has improved the performance of water allocation. Even many villagers do not know the existence of B WUA, though they pay water fees, in their eyes which are regarded as one of compulsory fees paying the government.

During our fieldwork in G village, some villagers present us their self-organised Veg & Fruit Association (VFA). The founding of VFA in 2003 is aimed to solve the problems of selling local

veg and fruit. In the past middlemen purchased villagers veg and fruit at very cheap price taking advantage of a scattering of isolated villagers. Initiated by some villager, the VFA was founded on the basis of volunteering. At the beginning there were only several households joining VFA, and almost all the households in the village are its members as they see the good operation of this association and economic benefit to members. This informal and self-organised VFA does not have any relation with the village committee and does not have any statute, and the head and managers are elected annually.

The comparison between WUA and VFA in G village illustrates one aspect of weakness of AOSG mechanism, conceptualised as transforming village affairs into administrative affairs. An officer works for J county told us that the founding of B WUA is one of the items in the governmental performance assessment. Promoted by the J country government and water bureau, the founding of B WUA met the requirement of local governmental agencies and B WUA was rewarded with a certain amount of operational fund by the county government. The cost for G village to set up B WUA is filling out a pile of declaration documents. The mechanism of transforming village affairs into administrative affairs is vividly depicted by the officer as "two names but the same staff", and in self-organisation governance actors are administrative officers appointed by administrative authorities. Furthermore, in policy process the practice of local cadres can be termed as 'strategy' by the reason of strategic attainment of objectives that are considered as 'successful policy implementation', which are materialised as financial benefits and non-materialised as social reputation, the 'face' in the Chinese culture (Heberer and Schubert 2012).

The core responsibilities of village cadres are listed as collecting taxes and levying fees, implementing family planning, fulfilling grain procurement quotas, and providing public goods and services, and government appointed cadres focus more on the first three responsibilities as these are more related to the evaluation of their working performance assessed by the upper level governments (Zhang et al. 2004). Nonetheless, in decentralised irrigation management village cadres play prominent roles in promoting and developing WUAs, as what we argued that local authoritarianism is intensified after decentralisation. This phenomenon in rural China is conceptualised by governance mechanisms of the AOSG mode. In above discussion, we have identified the structural constraints and the weaknesses of AOSG governance mechanisms. The following analysis looks into the other aspect of weakness that is the alienated relationship between governance actors.

This alienated form of relation is pinpointed by the comments from a section chief of county water station, who is also an executive member in a WUA in Sichuan. He remarked that governmental officials should be a referee rather than being an athlete in the operation of WUAs. The reason he stated is that governmental officials are not water users. Instead of being referees to provide villagers with suggestions, administrative involvement makes the officials become athletes focusing on competing with the other athletes, villagers, in village water management. Likewise, irrigation management in Taiwan is characterised by small-holding farming households, requiring the collective action of a large number of irrigators

and a high degree of coordination (Lam 1996). Water governance actors in Taiwan encompass officials at the working station and farmers, and these governance actors are in a supportive relation rather than being in alienated relations. Irrigation management at the local Taiwan is based on cooperation and coordination between irrigation association staff and farmers. Officials at the working stations play supportive roles in working together with farmers to carry out irrigation management, as role of 'the referee' discussed above; and they are guaranteed de facto autonomy in dealing with the irrigation groups. It is argued that the autonomy allows the officials and irrigation groups to maintain supportive relationship and develop strategies to cope with the local situations, and this stresses the importance of how the relationships between officials and farmers are understood and structured in particular local context. Reduction of asymmetries of involvement of governance actors from both the grass roots and the authorities, as an essential mechanism is posited to understand how such a relation between officials and farmers is achieved (Lam 1996).

In the transition from collective farming to the household responsibility system in the late 1970s, the conflict between Chinese local cadres and villagers over taxation issues become increasingly serious and this provides stimulus to promoting village elections by the central government in the 1980s (O'Brien and Li 2000). After the abolition of agricultural taxation, new form of conflict between local cadres and villager in rural China is concentrated on the collection of water fees. Water fees, also known as irrigation fees, collected from farmers consists of two parts: the basic irrigation fees associated with the fixed quantity of land in the village and the volumetric irrigation fees associated with the volume of water usage (Wang et al. 2014). In our fieldwork, we often heard the complaints from local governors and villages cadres about water fees collection, which is considered as the most tough administrative work in their agenda. By the same token, water fee collection is highlighted as the top concern in the operation of WUAs. Growing conflicts between local cadres and villagers are reported commonly in our studied places. The conflicts reflect the incompatibility of changing structure of rural society and the prevalently applied AOSG mode. The explanations of overdue and refusal of water fees payment given by WUAs cadres cover three main issues: first, migration makes the households unable to pay these fees punctually, and many of these households will make the payment when they return village for the Chinese New Year. Second, there are economic disputes between village households and Village Committees or WUA, and economic disputes are often transferred and become refused to pay water fees. Third, if villagers are dissatisfied with village committees or WUAs for public services provision or solving related problems, some villagers refuse to pay water fees, acting as protests. We term the second and third issues as 'triangle debt dispute', which exacerbate the alienated relation between the two types of water governance actors.

In 2013, a farmer's greenhouse was lighted accidentally by a construction project conducted by a village committee in X Village in Ningxia. The farmer was unsatisfied with the compensation from the village committee, and so he has paid water fees for three years. The triangle debt dispute underlines the ineffective performance of WUAs. We also heard some villagers complained that WUAs are the tools for water fee collection. An officer in Water Bureau in Inner Mongolia explained the difficulty of maintaining a collaborative relation

between local cadres and villagers by the following example. A villager cadre was in charge of water fees collection in a WUA, and he had to pay for those households with overdue water bill in order to fulfil his administrative requirements ordered by the higher level government. However, what he spent for others had not been returned over the years. He refused to pay water bill after his retirement.

In terms of the conflict resolving mechanisms, we are informed by local cadres that only those tough and unpleasant methods and enforcing superior power can force villagers to cope with their administrative work, underlining the important role of local cadres in the intensified authoritarian locality as we discussed in the section on structural constraints of the AOSG mode. Conflict resolving mechanisms are usually informal, and we were told that even local gangsters had helped by local cadres using threatening methods to force stubborn villagers to pay fees, which deteriorate the relationship between local cadres and villagers. From the perspective of governance actors, weaknesses of governance mechanisms are examined in China's intensified authoritarian locality and this pinpoints the operational logics of AOSG mode.

## Conclusion

This paper examines the mechanisms of promoting self-organisation in authoritarianism. The dilemma of developing WUAs in China poses a question whether authoritarianism and decentralization can work hand in hand. In order to answer this question, an AOSG mode is proposed to examine the relation between authoritarianism and decentralization. The analysis is carried from the aspects of changing social structure and alienated governance actors. In the locality with intensified authoritarianism, state-society relations are explored on the basis of structure-actor shaped governance mechanisms. Structural constraints are analysed from the aspects of migration and absence of self-governance actors and intensified local authoritarianism. From the perspective governance actors, we identify the weaknesses of governance mechanisms, which are transforming village affairs into administrative affairs and alienated relationship between governance actors. The Chinese WUAs illustrates that authoritarianism and decentralisation have to work together with a AOSG mode in the Chinese authoritarian context, although their incompatibility is highlighted by structural constraints and weaknesses of governance mechanisms. The AOSG mode echoes the argument that governance mechanism of cooperation between authorities and the village committees in rural China is fostered (He and Perret 2015). Research findings also point out the importance of the principle in self-governance theory (Ostrom 1990) that institutional arrangement should fit with the local context.

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