Towards Rural Grid Governance: A Case Study of Resettlement Communities of South-to-North Water Diversion Project, China

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Abstract. China's grid governance is a grassroots innovation diffusing from urban fields to rural areas. However, the process and mechanism through which urban grid management is transferred into rural grid governance haven't been sufficiently discussed so far. The analytic framework of governance interface is applied in a village level case study to understand the change of rural governance. It is found that: (1) external environment including strategical arrangement and attention allocation can affect the governance interface, (2) internal structure reflected by spatial pattern and organizational form also contribute to the transition process, (3) the governance goal and interface function are the most important attributes of governance interface. Some implications are given accordingly.

Keywords: grid governance · grid management · grassroots governance · rural governance · South-to-North Water Diversion Project · Resettlement communities

1 Introduction

Along with the advancement of China's new-type urbanization and the dissolution of the "unit system" in cities, a large amount of rural people has been transformed into urban dwellers, and a large number of "unit people" have been transformed into "social people". The pattern of urban and rural social governance has undergone profound changes, and it is urgent to introduce more sophisticated governance measures to respond. Since the beginning of the new century, "grid management" has been utilized in China's urban community governance as a grassroots innovation. This governance tool was innovated firstly in around 2003 in Beijing and Shanghai, two municipality directly under the Central Government. The Beijing mode is known for its "10000 m^2 unit grid management method" and "incidents and parts management method", while the Shanghai mode is described as urban grid management. The initial application scenarios

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of grid management include labor protection supervision, public security patrol, market supervision, crop residue burning prohibition, fire protection and so on. Gradually, the range of grid management has been expanded from simply "things" and "people", to all "people, land, things, organizations" and "grid, community, street, district, county, departments", and designed to cover the whole system, all time and space, and the whole process of service management (Fan, 2017). Geographically, grid management has been diffusing from urban domains to the rural areas in China.

More importantly, along with the discourse conversion from management to governance, "grid governance" is emerging in the grassroots level, particularly in rural area. This new phenomenon has not yet been sufficiently discussed in the current literatures. The complex interactions among the residents, the state and market actors are employed to resolve neighbourhood conflicts and reinforce governance in Chinese urban middle-class communities (Tang, 2020). Besides, China's grid governance through intelligence gathering, case coordination and real-time reporting is used to maintain the social stability (Xu & He, 2022). Compared with grid governance in urban China, more details about rural grid governance are supposed to be revealed.

Thus, this paper is trying to explore how is rural manage regime reshaped towards rural grid governance? In order to achieve the research purpose, this paper employs the thinking of the science of the artificial by Herbert Simon as a means to understand the reshaping of rural grid governance.

2 Literature Review and Analytical Framework

2.1 The Artificial and the Interface

In the observation to various practices, especially when more and more artificial objects are used as intersections, Simon proposed an idea, that artificial objects can be seen as an interface between the inside and the outside of a given system (Simon, 2019, P5). According to Simon's assumption, there are four main differences between artificial objects and natural objects: (1) artificial objects are synthesized by humans; (2) artificial objects may imitate some aspects of natural objects, but lack the substance of the latter; (3) artificial objects can be defined by function, goal and adaptation; (4) artificial objects are discussed with both descriptive and normative words (Simon, 2019, P6). Briefly speaking, the external environment, internal structures, function and goals are the essentials to explain artificial systems.

2.2 The Artificial and Governance Interface

Simon's thinking on the science of the artificial shed light not merely on the understanding of artificial system, but also on the diagnosis of governance. For decades, governance has become a frequently debated topic in social science and beyond. It is so widely used or even abused in different disciplines that it has become a blurred concept. Its attribute of artificial object just makes it applicable to the science of the artificial (Ostrom, 1980). However, this ambiguity just grants governance unlimited possibilities to expanded. In the context of today's China, governance has given rise to vigorous vitality. Issues are

discussed from global or national governance, to local or grassroots governance. From any angle, governance is a human activity, so that it can be seen as artificial. If we take the insight of Simon into the practice of governance in China, the complex of governance can be understood in the unit of interface.

Around a given system of governance, the internal structure and the external environment interact and jointly shape the interface. In turn, the interface also effects the internal and the external structure of the governance system. Any interface is designed and operated for certain goals, by means of its designed or promised functions. Thus, an analytical framework is generated to help us describe, diagnose and design governance systems.

3 Method and Data

The case study is a research approach which is particularly appropriate in theory building (Eisenhardt, 1989). In case studies, data are selected and analyzed according to the theory rather than for merely statistical reasons. Case studies are often used to illustrate the main characteristics and holistic pictures of the chosen cases. In order to probe further details, archival materials are studied, key actors are interviewed, and site visits are made. To ensure the holistic validity of case study, construct validity, internal validity and external validity are given extra attention.

Two resettlement communities of South-to-North Water Diversion Project (SNWDP) are chosen because they are typical cases of the process in which rural manage regime is reshaped towards rural grid governance. Besides, the team of the author has kept tracking the governance of SNWDP resettlement communities for quite a long time. And a data base including archival materials, interview records and image data on this theme has been accumulated to facilitate the current research.

4 Case Study of Resettlement Communities of SNWDP

4.1 Overview of Study Area

Peiying Town is north to the main urban area of Dengzhou City. Due to proximity to head work of SNWDP, Peiying Town was chosen by higher authorities to settle the immigrants of the Project. Immigrants were settled mainly in Liulou Community and Hexie Community, the two newly founded resettlement communities. Among all the 28 subordinations of Peiying Town, Liulou Community and Hexie Community are two unique existences, because all the other ones are still named “villages”. Symbolically, Liulou Community and Hexie Community are listed at the top of Peiying Town’s introduction page.[1]

[1] See http://www.dengzhou.gov.cn/pyxrmzf/index.htm.

4.2 External Environment of Resettlement Communities of SNWDP

4.2.1 Strategical Arrangement

SNWDP is the largest trans-basin water diversion project in the world. Along with the implementation of the project, the social structure of the basin is faced with profound adjustments. Especially in the grassroots level, quite a few villages have been submerged by the uplifted water level of Danjiangkou Reservoir. According to official statistics, over 400 thousand of immigrants, from 150 cities and counties of 8 provincial administrative region, left their ancestral homeland during the construction of the Project and its previous work.[2] With the aid and support from government at all levels, the immigrants were resettled in other communities mostly in other counties, where they began to build their new home.

For any countries in the world, the process of relocation is a great challenge, which costs a lot of manpower, material resources, and financial resources. Though, after the resettlements, huge differences in culture and habits between the immigrants and the natives often trigger additional social issues such as social inclusion, social identity, social governance. Which is just the context of the governance reshaping of Liulou Community and Hexie Community.

4.2.2 Attention Allocation

Since the 18th National Congress of the Communist Party of China, the modernization of China's system and capacity for governance has been gaining attentions nationwide. Modernization of grassroots governance has become a major agenda of local authorities. Grid management or rather "grid governance" was introduced into Dengzhou City to enforce the grassroots governance. The discourse of Dengzhou City's grid governance is called "general grid governance led by Party building". General grid governance led by Party building is a grassroots innovation implemented by Nanyang City, a prefecture of Henan Province. The special intergovernmental relations create the substantial governance isomorphism. Top-down pressure is one of the reasons why grid governance diffuses from urban field to rural China.

Although Dengzhou is namely directly under the jurisdiction of the province, it is under the administration of Nanyang City, specially under the municipal Party committee. Because the Party Committee Secretary of Dengzhou City is also a member of the standing committee of Nanyang's Party Committee. (Hei X.S., former official of the Organization Department of Dengzhou's Municipal Party Committee).

4.3 Internal Structure of Resettlement Communities of SNWDP

4.3.1 Spatial Pattern

People in a village or community are organized by the Party to elect their autonomous organizations such as villagers' committee or residents' committee. The committees are the structural foundation of grassroots' self-management, self-service, self-education and self-supervision. The committees connect the township governments upwards, and

[2] See http://politics.people.com.cn/n1/2021/0516/c1001-32104441.html.

the lower level or smaller units, which are usually natural villages or villager groups. For various reasons, decentralized distribution of inhabitation is often seen in rural China, which may bring new challenges to basic public service supply and grassroots governance when people's need for a better life is ever rising. The implementation of general grid governance led by Party building is a cure for this dilemma.

Differing from other villages, resettlements communities like Liulou Community and Hexie Community reveal more centralized and organized characters. From 2009, Henan Province began to establish resettlement communities of SNWDP. This project adheres to unified land acquisition, unified planning, unified standards, unified construction, unified relocation, and unified development, as known as "six unifications". In two years of time, Henan Province totally built 208 resettlement communities which can provide housing for 162 thousand people.[3] Liulou Community and Hexie Community are just two of the 208 resettlement communities which were built in lines.

We the entire village are relocated to this new community, so inclusion problems mainly exist between our community and other villages. The effect of relocation on us may be a little better than on those who are arrange in totally strange villages. (Zhang L., member of Liulou Community, chief of a grid).

4.3.2 Organizational Form

Rural China' governance system is led by the CPC. To be specific, township is the unified platform of rural governance led by Party committees, while the village level is the "last mile" of rural governance. Village Party branch is both the "political core" and "fighting bastions". Villagers' committee is the autonomous organization led by village Party branch. Around these two most important organizations are often some other organizations such as village affairs supervision committee, militia company, Party member and mass service center and so on.

The original intention of this kind of structure may be to ensure all the need of rural people to be fulfilled. However, with the accumulating quantity and diversity of people's need, rural governance gradually reveals the characteristics of fragmentation. There appeared mismatch between supply and demand of public services, which is another dynamic of grid governance diffusing.

4.4 Governance Interface of Resettlement Communities of SNWDP

4.4.1 Governance Goal

With the shift of work focus, more issues are included in rural governance system. Rural Vitalization is defined as comprehensive vitalization of industry, talent, ecology, culture, and organization. In the regime of current China, the goals of governance systems at all levels are also highly isomorphic.

The unique feature of the resettlement communities is the salience of this special group. The immigrants of SNWDP have sacrificed a lot for the whole basin and even for the whole nation. Thus, the prosperity of resettlement communities are top priorities of officials at all levels.

[3] See https://baijiahao.baidu.com/s?id=1732527366008359736&wfr=spider&for=pc.

4.4.2 Interface Function

China is undergoing the new round of technological revolution and industrial transformation marked by the widespread application of ICT. The Internet Plus Government Services initiative and Digital Villages initiative together boost the rural governance interface to be digitalized and intelligent.

Dengzhou City upgraded the existing information platform for comprehensive management of public security, grid governance functions embedded. Grid agents in resettlement communities and other villages can easily execute tasks such as grid diagramming, information entry, event reporting, mission dispatch and so on with a special purpose application called "Peaceful Dengzhou". And more interactions between grid agents and rural people occurs mainly in WeChat, which is the most popular IM software in China and meanwhile the most prevalent governance interface.

5 Conclusion and Implication

Rural grid governance is a major field of the modernization of China's system and capacity for governance. According to the cases, external environments from the national level to the local level all have certain impacts on rural governance system. National and regional strategy and project are the basis for governance change, in addition to legalization (Fan, 2015). Besides, attentions of the authorities are also critical for rural governance.

Internal structure reflected by the spatial and organizational arrangement is another aspect that effects the governance interface. Overlapped organizations and personnels contribute to the grassroots governance in rural China. But the model of rural grid governance is quite different from its urban peer (Xu, 2013).

The joint effect of the external environment and the internal structure can be seen as the main impetus of governance interface reshaping. In turn, governance interface per se has its goal and function, which are the most important attribute of it. Deriving from grid management, rural grid governance has apparently inherited the function of resource allocation (Zhu, 2010) and crisis management (Xu, 2011).

Among all, technology is a non-negligible variable in the transition process. The overall technological environment and the specific technology adoption in certain area jointly decide the configuration of the governance interface, especially in large data age (Liu, 2017; Wu, et el.,2022).

In the modernization of China's system and capacity for governance, the authorities should carry out more strategies and projects to boost development, meanwhile allocate more attentions to grassroots governance. Correspondingly, organizations and their personnels should adapt to the specific spatial and social patterns in rural governance. Last but not the least, interface reshaping by the application of suitable, but not necessarily the most advanced technologies are the key to the governance efficacy. The conclusion of this paper is to be tested in more cases. Future researchers can focus more on attention allocation of the authorities and technology adoption of the grassroots.

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References

Eisenhardt, K. M. (1989). Building Theories from Case Study Research. *The Academy of Management Review*, *14*(4), 532–550. https://doi.org/https://doi.org/10.2307/258557

Fan Xu. (2015). The Governmental Transformation and the Exploration on Legalization of Social Management Innovation at Grass-roots Level: The Experience of Community Grid Management of Nanhai District in Foshan City, China. Proceedings of 2015 International Conference on Public Administration (11th) Vol I, 890–898.

Fan. (2017). Research and Thinking on Grid Service and Management of Community in City S. Procedia Engineering., 174, 1177–1181. https://doi.org/https://doi.org/10.1016/j.proeng.2017.01.271

Liu Gui-hua. (2017). The Innovation of Urban Community Grid Management: A Case Study of Chengdu, China. Proceedings of 2017 International Conference on Public Administration (12th) & International Symposium on West African Studies (1st), Vol II, 109–115.

Ostrom, V. (1980). Artisanship and Artifact. *Public Administration Review*, *40*(4), 309–317. https://doi.org/https://doi.org/10.2307/3110256

Simon, Herbert Alexander. The Sciences of the Artificial. Cambridge, Mass: MIT Press, 2019. Print. doi: https://doi.org/10.7551/mitpress/12107.001.0001

Tang, B. (2020). Grid Governance in China's Urban Middle-class Neighbourhoods. *The China Quarterly, 241*, 43-61. doi:https://doi.org/10.1017/S0305741019000821

Wu, Abramson, D. B., & Zhong, B. (2022). Digital governance in rural Chengdu, China: Its potential for social-ecological resilience. Frontiers in Sustainable Cities., 4. https://doi.org/10.3389/frsc.2022.736965

Xu, & He, S. (2022). Can Grid Governance Fix the Party-state's Broken Windows? A Study of Stability Maintenance in Grassroots China. The China Quarterly., 251, 1–23. https://doi.org/https://doi.org/10.1017/S0305741022000509

Xu Min. (2011). The Innovation of Government Crisis Management in the Perspective of Risk Society. Proceedings of 2011 International Conference on Public Administration (7th), Vol III, 744–749.

Zhu Xiao-ning. (2010). Study on Grid-based Resources Allocation of Public Service in Urban and Rural Areas. Proceedings of 2010 International Conference on Public Administration (6th) /, 557–561.

Zhu Xiao-ning. (2012). Study on the Grid Management Model of Chinese Urban Community. Proceedings of 2012 International Conference on Public Administration (8th), Vol III, 512–516.