

Case Study on Later-stage Supporting Project Management for Reservoir Resettlement

Taking Suining City, Sichuan Province as an Example

Xiaojun Wang

School of Economics and Trade
Xinjiang Agricultural University
Urumqi, China 830052

Xinping Liu

School of Management
Xinjiang Agricultural University
Urumqi, China 830052

Abstract—In order to effectively solve the infrastructure construction, public service and industrial development in the reservoir area and resettlement area, and improve production and living conditions of reservoir resettlers, the State Council and the Ministry of Water Resources set up the reservoir area maintenance fund, reservoir area construction fund and later-stage -support fund in the reservoir area in 1981, 1986 and 1996 respectively, and took the later-stage supporting project for reservoir resettlement as the carrier to widely invest in reservoir area and resettlement area. This study, from the theoretical perspective, analyzes in depth the typical case of the later-stage supporting project management for reservoir resettlement in Suining City, to provide some reference for promoting the standardization and scientific process of later-stage supporting project management for reservoir resettlement and the development of later-stage resettlement supporting theory.

Keywords—reservoir resettlement; later-stage support; project management; case study

I. INTRODUCTION

Suining City, located in the heart of the central Sichuan Basin, middle reaches of Fujiang River, central node between Chengdu and Chongqing, two mega-cities. As a typical small and medium-sized city in the western region, Suining now has 13 large and medium-sized water conservancy and hydropower projects, 71,383 reservoir resettlers, and more than 70 million yuan of funds for later-stage supporting project for large and medium-sized reservoir resettlement in place every year (see Table 1 for details). Since the implementation of the policy of later-stage resettlement support in July 2006, in accordance with the principle of "living prior to producing", Suining has vigorously implemented the infrastructure construction in the reservoir area so as to solve the difficulties for resettlers in the reservoir area in travel, irrigation, medical treatment, education, drinking water and other issues. With the later-stage resettlement support funds, on the one hand, the entire city newly builds 208km of roads, 5 bridges, 16 irrigation stations, 13 centralized water supply stations and 37 village-level health clinics, and repairs 97km of canal, and the infrastructure in the reservoir area has been basically completed; on the other hand, the city accelerates industrial development in the reservoir area, selects suitable industrial projects according to the reality of the reservoir area, relies on

rural cooperative economic organizations to improve the organizational degree of farmers and promote the industrialization of agriculture, so far, Suining has developed over 40,000 mu of high-quality citrus, 16,000 mu of walnut, 12,000 mu of green pepper, 46,000 mu of vegetable, over 10,000 mu of Chinese herbal medicines, and has built 5 10000-pig farms, 49 1000-pig farms, with over 2000 large-scale farmers and 127 farmer professional cooperative economic organizations of all kinds. Through the development of leading enterprises and resettling industries, it has covered and driven 18,000 rural households and achieved an average annual household income of over 7,000 yuan, speeding up the pace of poverty reduction and enrichment for the poor.

TABLE I. BASIC SITUATION OF LATER-STAGE SUPPORT FOR RESERVOIR RESETTLEMENT IN SUINING CITY

Region	Total population (10000 persons)	Agricultural population (10000 persons)	Reservoir resettler population (person)	Funds of later-stage supporting Project for Reservoir Resettlement in place every year (100 million yuan)
Suining City	385	308	71383	1.5

II. CASE BRIEF

Suining City earnestly implements the policy of later-stage supporting for large and medium-sized reservoir resettlement. According to the principle of "fully respecting the will of resettlers, giving play to the masses and directly benefiting resettlers of the later-stage supporting project", Suining City actively explores the construction and management mode to implement the "self-selection, self-determination, self-construction, self-management" of resettlers of the later-stage supporting project for large and medium-sized reservoir resettlement, so as to fully ensure that resettlers will be able to exercise their rights to know, decide, participate and supervise in the implementation of the later-stage supporting project and greatly mobilize the initiative of the resettlers and the people in the reservoir area to participate in the project construction,

which increases the physical quantity of the project, raises the practical benefits of funds for the later-stage supporting project, and implements the party and government's policies of benefiting the people in a down-to-earth manner, and has been generally welcomed by the resettlers in the reservoir area and the local people. Since the implementation of the later-stage resettlement supporting policies in 2006, Suining City has cumulatively implemented over 2,300 later-stage resettlement supporting projects with a total investment of 1.5 billion yuan, and implemented more than 197 projects of "self-selection, self-determination, self-construction, self-management", accounting for 86% of the total projects, with cumulative beneficiaries of more than 900,000. There was no instability factor caused by poor management of the project. At present, the economy is developing in the reservoir resettlement area, the people are reassuring and the society is stable.

III. CASE ANALYSIS

In order to further promote the standardization, institutionalization and scientization of later-stage resettlement supporting project management for large and medium-sized reservoirs, Suining has carried out a series of exploration of mechanisms for later-stage resettlement supporting project management. After nearly 10 years of painstaking exploration, it has explored a set of new project management models with local characteristics and in line with the relevant norms of later-stage resettlement supporting project management.

A. To Solicit Opinions and Suggestions Extensively

The government should solicit opinions and suggestions extensively from the resettlers and scientifically develop later-stage resettlement supporting programs to let resettlers select and determine the project on themselves. During the implementation of the later-stage resettlement supporting project, Suining City has always examined the centralized planning, arranged as whole, and implemented infrastructure construction and industrial development in the reservoir resettlement area in accordance with the principle of priority. In this process, the rights of option and determination on later-stage supporting projects are handed over to the resettlers, and the resettlers' democratic decision-making mechanism is further perfected, so that the later-stage supporting project comes from resettlers, goes to the resettlers and serves the resettlers. The first is democratic discussion and preliminary drafting of project. At the beginning of each year, the project village convenes a meeting of the two village committees according to the fund amount of the later-stage supporting project and the plan for the construction of new socialist countryside and regional development. Based on the full investigation and study, the annual later-stage resettlement supporting project is preliminarily drafted through democratic discussion. The second is to extensively solicit public opinion to decide the project. The project village promptly convenes villager assembly or resettler, villagers' representative conference to extensively solicit opinions, focus on the discussion of the project implementation plan put forward by the two village committees, in which the representatives fully express their opinions, and all the participants conduct democratic vote to finally confirm the annual implementation

plan of the later-stage supporting project and form a decision, then the participants sign and seal. The third is the scientific examination and approval of the project. The annual project plan discussed by the resettler, villagers' representative conference shall be submitted to the township where the project is implemented for examination and approval, compiled and summarized by the resettlement department of the county (district), and approved by the people's government of the county (district) before being implemented. The planning projects and implementation plans of all counties (districts) shall also be submitted to the Municipal Poverty Relief & Resettlement Office and the Municipal Finance Bureau for record and for future reference, to ensure the scientificity of the project planning. The later stage support project planning of Mukongba Village, Taiyu Town, Luosichi Power and Navigation Reservoir is initially proposed as "combining with the construction of Luohu Lake Scenic Area, implementing resettler housing style project". During the discussion in the villagers' representative conference, some resettlers believed that the project did not benefit a wide area, so they fully used the right of project decision and vetoed it. Everyone took the long view and re-selected the road construction project for resettler villages, which was supported by the majority of resettlers and local people. At present, the village has built more than 10 kilometers of village roads and commune cement roads, and the cement road network has been basically completed in the whole village, the traffic conditions in the reservoir area have been greatly improved, and resettlers' enthusiasm in development of production and self employment has been more adequate, and the village also turns from village with frequent petition to a harmonious civilized resettler village.

B. To Democratically Elect "Council"

The "council" is democratically elected by resettlers, and the later-stage supporting project is built and managed by the resettlers on themselves. The implementation of later-stage resettlement support project should benefit every resettler as much as possible, and satisfy the masses. The resettlers also strongly demand that "they should do their own thing with their own money". However, in actual operation, it is unrealistic to let every resettler directly participate in the project construction and management. In order to reassure the resettlers and the people in the reservoir area, the project council is democratically elected in each village, to implement and manage the project on behalf of resettlers and the masses, and achieve the goal of satisfying the overwhelming majority of the masses. Firstly, the project "council" is democratically elected by the resettlers. Open voting is conducted in the resettler, villagers' representative conference in project villages to elect the project council, in which 3-5 resettler representatives, villager representatives and party member representatives who are highly respected, unselfish and enthusiastic about public welfare activities are democratically elected as members of the council, to undertake project planning, formulate implementation plans, strengthen fund supervision and project quality supervision on behalf of the general resettlers and the masses in the reservoir area. The list of the council members is publicized together with the project condition, and is subject to the supervision by the resettlers and

masses. Resettlers and people in the reservoir area participate in the construction and management of later-stage supporting projects through the project council. The second is to check the later-stage resettlement supporting project budget at various levels. In order to achieve the goal of saving investment, high quality and quick results, professionals are invited to prepare and optimize the project design plan before the project is implemented, so as to seek a realistic budget for the project construction and investment. County (district) Financial Review Center assess the amount of budget investment, which is the main basis for bidding (comparison and selection), to avoid resettlement funds from "running, emitting, dripping and leaking". Finally, the council completes the bidding and design work. The third is to let the masses involve in the entire process of supervision project implementation. During the implementation of the project, the council organizes a group of resettlers or people in the reservoir area who are high-minded, fair, honest, daring to speak up and have professional expertise to supervise the project construction, including material model selection and material proportioning, to control in various links and supervise everything to ensure good quality of project construction. The project council and project contractor work together to improve project site record, project schedule, material inspection report, scene debit record, project amount calculation sheet and other project information to be legal and complete, as the basis for the final accounts and audit of the project. Fourthly, the resettlers themselves participate in the completion and acceptance of later-stage supporting projects. After the completion of each later-stage supporting project, the council shall organize the project contractor and resettler representatives to carry out self-examination, and notify the contractor to rectify the problems found in time until the resettlers and the representatives of the masses sign and approve, and then report to the county (district) supervisory bureau, resettlement authorities, industry authorities for review and acceptance. Relevant information is reported to the Municipal Finance Bureau, Municipal Poverty Relief & Resettlement Office for the record.

C. To Improve the Process Monitoring Mechanism

The whole process of the implementation of the later-stage supporting projects is publicized, so that they will be open, sunny, transparent and completely eliminate the concerns of the masses. During the implementation of later-stage supporting projects, the whole process of project implementation is carried out in an all-round and open manner. Fair, impartial and sunny operations are carried out. The resettlers and masses in the reservoir area are well aware of the whole project implementation information, which completely eliminates their concerns, effectively resolves conflict, and ensures the smooth implementation of the project. Firstly, publicize the basis for determining the project. At the beginning of each year, after the later-stage supporting project openly solicits opinions and before the implementation of the project, the project council will publicize the voting result, minutes, signing list, project name, place of implementation and capital quota of the villagers' representative conference by pasting in conspicuous place, and the publicity period is not less than 7 days, to make it widely known. Secondly, publicize project bidding. It is one of the issues most concerned by the

resettlers to openly and fairly determine the project contractor, and the "three openness" system has effectively solved this problem. The first is open bidding. After the project is determined, the council publishes the announcement of bidding for project construction. The announcement period shall not be less than 7 days. When the announcement expires, the council organizes the comparison and selection of applicants. The second is open supervision. County (district) Supervisory Bureau, the Resettlement Office (Bureau), industry authorities, Township Commission for Discipline Inspection, and resettler representatives directly participate in the bidding, and the whole process is supervised. The third is to publicize the bid results. After the bidding is finished, the council publishes the minutes of the meeting, the signing list, the project agreement and the winning bidder, etc., to accept social supervision. Thirdly, publicize project's engineering content. Every project should put up "Project Construction Publicity Card" in conspicuous place on the construction site, to publicize the project owner, implementation time, project scale, construction standard, fund raising, use arrangement, design unit, construction unit, construction technology, quality supervisor, and reporting telephone, etc., to accept supervision by the resettlers and masses. Fourthly, publicize project acceptance results. After the implementation of the project, the Project Council will announce the completion of the project, the capital income and expenditure, and the preliminary acceptance results in the village affairs column and will be responsible for answering the questions raised by the resettlers and the masses. The opinions of the masses will also be summarized and reported to the inspection and acceptance team.

D. To Integrate Department Advantageous Resources

Advantageous resources of relevant industries and departments are actively integrated to strive to increase the enthusiasm of the resettlers in participating in economic and social construction in the reservoir resettlement area. All along, Suining City has been conscientiously implementing the work concept of "truly care for the resettlers, concerned about resettlers, serve resettlers", all levels of departments integrate resources, plan as a whole, coordinate and promote, to create a good atmosphere for the implementation and management of later-stage supporting projects, and the enthusiasm of the resettlers in participating in project construction and management continue to rise. Firstly, after receiving the written consent of most resettlers and villagers, the project village uniformly planning and setting out, unify labor input and unify quality standards for the project land, economic compensation and other infrastructure projects with ample involved aspects and great coordinating difficulty, the land required for the project is self-adjusted, the woods are self-cut, and the contradictions are self-eliminated, which form "three unify and three self", so that the project is open and fair, avoiding people from comparing with and dismantling each other, ensuring project construction standards and quality, reducing construction and disputes in projects contradiction, speeding up the progress of the project. Secondly, projects are bundled for multi-investment. In view of the current situation that the per capita resources of resettlers in the reservoir area are small, income sources are single, problems of "five

difficulties" are prominent and the later-stage supporting fund is limited, full play of "hemopoiesis" is given to the project fund, and resettlers are educated and guided not to wait for or depend on others, but to live on the hump. Under the premise of fully respecting the resettlers' willingness, diversified methods for investment in project construction such as "state subsidies, resettler raise and society donate" are taken to actively guide the resettlers to devote their funds to infrastructure construction such as water, road, drainage and housing so that resettlers can "see and touch" benefits. Thirdly, clarify the rights and responsibilities, and strengthen management and protection. The management and protection of project in latter stage are important parts of long-term benefits of the project. After the project is completed, the property rights of the project shall be promptly transferred to the project village according to the principle of "who owns, who manages" as the collective assets of the village. All project villages determine the project council or village committee as main body of management and protection according to the reality, make clear the management and protection measures in the villagers' convention, to realize the self-protection and self-service of resettlers in the latter stage of the project.

IV. SUGGESTIONS FOR COUNTERMEASURES

Through the above analysis, the current later-stage supporting project management has achieved remarkable results, but there are still some prominent problems. In order to solve these prominent problems and adapt to the new situation of economic and social development, the policies need to be adjusted and perfected.

A. To Improve the System of Institutions

In terms of later-stage support projects for large and medium-sized reservoir resettlement, the building unit, construction unit, supervision unit and government departments must supervise the use of funds, strengthen the management of the project quality, ensure the strict implementation of project quality and capital utilization, and implement relevant responsibilities. The implementation of the project legal person's responsibility is the basis for ensuring that the later-stage support project management can be carried out smoothly. The construction work is supervised, the supervisory unit's business expertise and management advantage are made full use of, to enable them to serve and manage project. Implement project bidding system. The bidding must be conducted in strict accordance with the norms and may entrust professional bidding company to regulate the bidding behavior and strengthen supervision, so as to ensure fair, just and open bidding. Implement the contract management system. The contract management system will be implemented in all links of later-stage supporting project construction, infiltrating the contract management into all aspects of design, supervision, construction and safety; strictly abide by the payment and settlement procedures, and ensure the effective control of investment, quality and project progress. Strictly implement reporting system. The financial department is the accounting unit that exercises the later-stage supporting projects, and has the responsibilities of inspection,

supervision and acceptance; the resettlement management department is responsible for the management of projects and cooperating with the financial departments to ensure to strengthen supervision over the use of funds.

B. To Improve the Regulatory System

When carrying out the later-stage supporting projects, the quality responsibility system, safety responsibility system and management responsibility system should be strictly implemented to ensure that the later-stage supporting project management work is carried out effectively. During the implementation of the project, control of the raw materials should be strengthened, the incoming materials must be inspected, which must have the certificate of product conformity and shall be subject to sampling check before they can enter the construction site. The construction process should be carried out in strict accordance with the design requirements and the technology disclosure should be conducted before construction; the construction unit should check and accept every process, and the construction can be carried out only after they are qualified; the management and supervision of materials, progress, quality, equipment, safety and fund settlement shall be strengthened to ensure project quality and construction progress. Improve internal supervision, strictly enforce the internal audit system, audit the fund use for later-stage supporting projects, acceptance and final accounts; strengthen the management of project quality through accountability system, implement responsibility to the person avoid inferior projects. Implement financial supervision, under the current financial reporting system, in order to supervise the flow of funds, the resettlement management department needs to establish standing book for fund management and copy the accounting procedures and bills from the finance department for future checking. Strengthen departmental supervision, invite audit, finance, supervision, discipline inspection commission, water conservancy and other departments to supervise and inspect bidding process throughout the project, to avoid violations of law, fraud and so on. Expand the supervision of the masses. In the project implementation, every site and every village should have resettlement village cadres and resettler representatives as quality supervisors to supervise the project development on a 24/7 basis to ensure the transparency of the project.

C. To Establish Guarantee System

As for the later-stage supporting projects, there are many aspects involved. In principle, it is required to carry out in the order of survival prior to development, the order of priority, and easy prior to difficult. Therefore, the implementation of the project should be investigated as early as possible, declared as early as possible, and prepared as early as possible, so that the implementation program of the project is planned, operational and forward-looking, and projects related to the livelihood and demand of the resettlers and restricting economic development should be focused on. Before the implementation of the project, the township and village groups where the project is located should provide convenience for the electricity, water and environment, etc. of construction, the resettlers should also maintain the spirit of arduous struggle and self-reliance, raise fund in multiple forms, multiple

channels and multiple levels, to input in project construction, and contribute to the later-stage supporting project. The resettlement management agencies must send staff to the construction site in project implementation, and manage from the aspects of construction quality and safety, so as to solve the problems arising in the construction process in time. Due to the small amount of funds, multiple points and wide range of resettlement projects, it is necessary to use various funds and strengthen communication and exchange with the departments of transportation, water conservancy, agriculture, finance, poverty alleviation, development and reform, and tobacco, to obtain related support for coordination, so that the reservoir area and resettlement area project can get more financial support.

D. To Standardize Management and Protection System

The later-stage supporting project management for large and medium-sized reservoirs resettlement start with planning preparation, and the management of the project still has to continue after the completion and handover of the project construction. Therefore, the resettlement management agencies should not only pay attention to the early-stage management of project, but shall also strengthen the attention to the operation and protection of the project. After each project is completed, the resettlement administrative agency shall notify the supervision, finance, auditing departments and representatives of township and village groups to set up project acceptance team to accept the project with the technicians; after the acceptance is passed, the facilities in the project area shall be handed over in time to the township and village groups for use and management & protection, to ensure that the effect of project implementation is consolidated, and exert the effectiveness of the project effectively, in long term, stably; the resettlement management agencies are required to regularly or irregularly visit and inspect the operation of the project, to monitor the benefit of project on one hand, summarize relevant experience from it and provides reference for the follow-up project on the other hand.

E. To Strengthen the Team System

For the later-stage supporting project management for resettlement, we should timely adjust the configuration of engineering and technical personnel in accordance with the actual work requirements, and replenish the management team with fresh blood in time, so as to ensure the improvement of the overall quality of the management team. Regularly or irregularly organize and manage personnel through learning and internal meetings, listen to the report of the on-site engineer in time, implement the relevant system in a timely manner, and collect the problems in project management timely. In order to improve the management ability and level of project management staff, all managers must be required to continuously learn and organize personnel to actively participate in learning and training organized by the relevant departments or higher departments, and purchase relevant management books for them to study, so as to further improve the operational capacity and management level of engineering and technical personnel, management personnel. At present, the later-stage resettlement support projects in our country is under development, and some achievements have been made,

the main reason for which is that the resettlement authorities pay more attention to this work and strengthen the guidance on related work. In addition, the staffs of resettlement management agencies take the work seriously and responsibly, unite and cooperate, and play a lead role of party members and cadres to further enhance the management level.

V. CONCLUSION

Since the implementation of the current later-stage supporting policies, remarkable achievements have been made in infrastructure construction, improvement of living environment and development of agricultural industry in reservoir areas and resettlement areas. Suining City, relying on the implementation of later-stage supporting projects, has solved the problems of income increase and weak infrastructure in reservoir area for most resettlers, maintaining the harmony and stability of the reservoir area. During the implementation of later-stage supporting project, a new model of project management and operation with unique local features has been explored, which deserves to be borrowed by later-stage supporting project management for resettlement in the country. However, there are also many problems, for example, the leftover problems of the already-built reservoirs are still in wide range and large amount, and the task is still heavy; as the price level rises, the benefits that the resettlers receive from 600 yuan are declining; the investment direction tends to infrastructure projects, and the investment in production and development projects as well as vocational skill training projects is insufficient; the supporting funds are allocated widely, dispersedly and inefficiently, like "spreading pepper seeds"; the stage-stage supporting management mode is unreasonable and the acceptance mechanism is imperfect. In the future project management, it still needs to continue studying and summarizing, on the one hand, on-site construction management still needs to continue increasing management efforts, to ensure the high-quality completion of project; on the other hand, the internal management personnel's personal quality still needs continuous improvement through learning, to improve the technical level and management level, and promote the effective implementation of later-stage resettlement supporting projects for resettlement.

REFERENCES

- [1] Zhang Chunmei, Zeng Qinglian. Discussion on Establishing and Improving Later-stage Supporting Mechanism for Reservoir Resettlement [J]. Journal of Jiangxi Agricultural University, 2006 (1): 117-119.
- [2] MICHAEL MC. Compensation and benefit sharing: why resettlement policies and practices must be reformed [J]. Water Science and Engineering, 2008(1): 89-120.
- [3] State Council of the People's Republic of China. Opinions on Perfecting the Later-stage Support Policy for Large and Medium-sized Reservoir Resettlement [J]. Jiangxi Bulletin, 2006 (12): 7-10.
- [4] Shen Shousheng, Wang Bingju. Reflections on Fund Management to Support Production and Development Projects for Resettlement [J]. China Water Resources, 2000 (1): 49.
- [5] Wang Hong, Shi Guoqing. Involuntary Resettlement: Experiences in Large-scale Dams [J]. Journal of Hohai University: Philosophy and Social Sciences, 2002, 4 (4): 48-51.

- [6] Cai Yiping, Zhang Mengfang, Empirical Research on Diversification of Resettlement Modes of Water Resources and Hydropower Projects [J]. *Anhui Agricultural Sciences*, 2006,34 (5): 9961.
- [7] Gao Jianguo, Yu Guoxing, Li Shukai, Comparative Study of Resettlement Modes in Reservoir Area [J]. *Theories and Practice of Finance and Economics*, 1998, (3): 43-461.
- [8] Han Guanghui, Implementation of Non-agricultural Transfer is the Fundamental Way for Reservoir Area Resettlement [J]. *Journal of Peking University*, 1997, (1): 35-411.
- [9] Zhang Chunyan, Li Ling, Status Quo and Suggestions for Improvement of Large and Medium-sized Reservoir Resettlement Support Policy, *People's Yangtze River*, August 2016, Volume 47, Issue 15.
- [10] Wu Feifei, Research on Later-stage Supporting Project Management for Large and Medium-sized Reservoir Resettlement, *Water Conservancy Construction*, July 2016.
- [11] Zhang Chunmei, Wang Lijun, Gao Teng, Dong Yulan, Huang Hongkun, Approach and Effect Analysis of Later-stage Supporting for Reservoir Resettlement in Jiangxi Province, *People's Yangtze River*, February 2014, Vol.45 No.3.
- [12] Wang Shouwen, Li Lingyun, Research on the Basic Status Quo, Trends and Later-stage Supporting Strategies for the Resettlement in the Three Gorges under the New Normal Background, *Hubei Agricultural Sciences*, November 2016, Volume 55, No. 22.
- [13] He Hansheng, Yao Liang, Analysis of Reservoir Resettlement and Sustainable Social and Economic Development in Reservoir Area [J]. *People's Yangtze River*, 1997,30 (7): 331.
- [14] Zeng Jiansheng, the Trend of Resettlement of Modern Water Conservancy and Hydropower Projects [J]. *Guangdong Water Resources and Hydropower*, 2002: 22-231.
- [15] Zeng Jiansheng, Reservoir Resettlement Modes in the New Era [J]. *Finance and Economy*, 2006,14: 123-1241.
- [16] Liu Xiaoxian, Qian Renyu, Analysis of Information Exchange Pattern of Later-stage Resettlement Supporting Project Based on Concurrent Engineering, *Hubei Agricultural University*, January 2017, Volume 56, Issue 2.