Rural area government purchases "safe drinking water project" obstruction and sustainable planning

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Abstract. When we open the webpage to search for “China Water Resources”, we can see such a data: China’s total freshwater resources account for 6% of the world’s total freshwater resources, and its per capita possession is only 2,400 cubic meters, which is 13 poverty-stricken waters worldwide. One of the countries. China is a country with extremely scarce water resources. Water has always been one of the important factors in urban and rural construction. With the rapid development of the national economy, the shortage of water resources has increasingly become a problem. In 2002, China launched a large-scale South-to-North Water Transfer Project, which solved the water problem of more than 400 million urban populations, and the urban water use plan has become more perfect. The “Guiding Opinions on Improving the Living Environment of Rural Areas” (2014) pointed out that by 2020, the basic conditions of rural housing, drinking water and travel in the country have improved significantly, and the problem of safe drinking water in rural areas has gradually entered the public management line of sight. However, in rural areas, especially in remote mountainous areas, lack of water resources, scattered living, and limited infrastructure construction funds, it is not only difficult to achieve centralized water supply, but also trigger a series of grassroots disputes. It is hoped that by analyzing the implementation effect of the "safe drinking water project", exploring the difficulties and obstructions of rural water resources development, in-depth "anatomy" of the problem, clarifying the "pathogenic source", in order to solve the problem, and strive to reduce ecological damage on the basis of sustainable development. Rationally plan and use water resources to achieve smooth progress in rural safe drinking water projects.

1. Background of safe drinking water project in rural areas

1.1. The current situation of water scarcity in rural areas
The rational use of rural water resources has always been one of the key points of China's water conservancy construction. According to statistics, the penetration rate of rural water supply in the country at the end of the 20th century is about 40%, and 24 million rural people in the country have difficulty drinking water. Since the beginning of construction, dredging and drafting to ensure the basic water use in rural areas to rural small-scale farmland water conservancy infrastructure, and promote rural economic development, China's rural water resources from extensive development to
intensive management. The development of township water supply, providing production and domestic water for counties, townships and villages is an important task for rural water conservancy. The state has funded the development of a series of Huimin projects for the construction of the side ditch and the water resources utilization rate has been greatly improved. In 2005, the township water supply penetration rate reached 80%, and the rural population's drinking water difficulties were all solved. In 2015, the township water supply penetration rate reached 90%, and the water supply project achieved a benign operation. Governments at all levels set up water service studios, built networked management, and actively carried out water conservancy project safety monitoring and safety evaluation work, which made the water conservancy project management gradually embark on the track of legalization, standardization, scientific and modernization. However, these tasks are only preliminary. There is still a considerable gap between the new rural areas that truly realize “everyone has water and safe water”. In addition to various water policy and safe drinking water policies, the state has again proposed “checking and filling gaps”. "Safe Drinking Water Project", special funds are allocated for the construction of "dispersed water rafts" to solve the problem of water use in areas where water supply cannot be concentrated.

1.2. Construction of safe drinking water project
In the mountainous area of the northwest of Hubei Province, there are many mountains and water shortages, water resources are scarce, villagers live in scattered areas, drinking water is mostly soil puddles dug by themselves, puddles open-air, piles of fallen leaves and other sediments, health problems are difficult to guarantee, while puddles The amount of water storage is limited. In the years when precipitation is low, it is necessary to eat far water or even drought, and it is difficult to guarantee basic water use. In 2016, Z Township responded to the National Safe Drinking Water Project and started basic research in Area A to carry out demographic and topographic surveys and conduct preliminary planning for safe drinking water projects. In July 2018, the village issued a total of 120,000 yuan bidding documents to the society. Through the bidding, the director of the village A and the contractor Y signed the contract for the “outsourcing of the A village to check and fill the safe drinking water project” and completed the construction on schedule. The population of Village A is scattered, and the construction of a safe pool is to share one pool for every two households. However, the policy of benefiting the people and the people will be stopped shortly after the start of the project, and disputes will continue. The villager Hu said that the pool site was built after Yang’s house far from where they lived, until the pool construction was more than half, the village party secretary and the director told Hu that the pool was Yang, Zou, Gan, Hu. A certain 4 households share. Hu immediately expressed disagreement. The reasons include: (1) After the pool was built in Yang’s house, the neighboring relationship between the four households in the shared pool was not harmonious. There were more than 30 years of complaints about droughts, and other causes caused direct physical conflicts. twice. And Ganmou and Humou insisted that there is a pool construction quota under their name, and they are not willing to take water from the pipeline; (2) the pool is built on the top of the mountain, there is no natural water source, even if the water surface is increased, it is also the same as “building a pool to install the sun. "The built with water specifications for each household are shared by 4 households. Not only is the water insufficient, but it will also bury hidden dangers for future neighborhood disputes. (3) Half of the pool construction will inform Gan and Hu that the pool is 4 households. The villagers shared, did not know the whole process of site selection, transportation of raw materials, and construction. Gan Mou and Hu Mou were extremely dissatisfied with the status quo of the pool construction. They repeatedly went to the township to petition. During the period, Yang spurred Gan and Hu to verbally stimulate the contradictions.
2. Safe drinking water project obstruction

2.1. Soil water storage capacity decreased
Insufficient rural water resources development and management, and facing pollution problems, the first thing is that chemical fertilizers and pesticides invade the soil with rainwater and then enter the soil puddle, resulting in water pollution. One of the factors affecting soil water storage and purification capacity is vegetation. Vegetation cover can increase water storage and reduce evaporation, helping to purify water. During the extensive development period, the rural areas experienced excessive land reclamation and deforestation. In addition to over-exploiting forests, over-exploiting slopes and cutting down low-lying shrubs, the problem of soil erosion was highlighted, and the amount of water immersed in the puddle after natural filtration of the soil followed. If the total amount of water storage in the puddle is reduced, it will cause hidden dangers for drinking water in autumn and winter. In 2018, the village A has less precipitation in summer and a large amount of evaporation. The construction of the “distributed pools” has no sufficient water source to cause insufficient water storage. After the fall, the shortage of drinking water began to appear. The government had to spend an additional 100,000 yuan. Transporting water resources from the field to guarantee basic water use and over-expenditure funds is likely to delay the next phase of the “safe drinking water project”.

2.2. Grassroots indicator disputes
The “Check for Leakage and Safe Drinking Water Project” is also called the “distributed pools” construction project. It is started in the form of government procurement of public services. It involves three main bodies: government, contractor and citizen. It is easy for the government to avoid accountability and government search. Rent, corporate rouge and other phenomena. The demand for “dispersed water rafts” is large, but the number of places is limited, and the disputes arising from the issue of quota allocation are numerous. In response to the survey on the most controversial issue, several villagers said that they had seen the publicity list on the Internet. Hu’s name did have a quota for building a pool (Hu is a precise poverty alleviation), and the village committee director gave a reply: There is no quota allocation table said by the villagers, rural households are scattered, and the construction of the is based on local conditions. It may be because most of them are two households and one pool, and the villagers have evolved. The leaders went to the countryside twice to listen to the opinions of both sides and put forward solutions. In the second villager symposium, the head of the village pointed out: "The matter of pool construction is first responsible for the fact that the cadres are not doing a good job of telling the work. If the pool construction is for the benefit of the villagers, the villagers should be informed; in addition, the pool project is made by the state. Investment and construction cannot let the people contribute money. The workload of the villager Yang in the previous stage was discounted by the contractor Y boss to the villager Yang.” And the solution was put forward: “The first four households share a pool, and then add one more. Collect rainwater, increase water supply, and if possible, fight for a pool place; if there is any problem, please report it to the village and the village.” Although the leader has a deep understanding of the act of causing harm, the result of the damage is "courageous" to bear the "honorary responsibility". But it is only a verbal statement, avoiding responsibility, and not seeing effective actions or measures. The "short check" given, with the unknown next batch of places to appease the rights of the affected villagers, in fact, the pool is not healthy one day, then Hu did not receive substantial fairness on a certain day.
2.3. Capital investment abuse

The contractor Y boss negotiated privately with the farmers, clearly stated that he was unwilling to pay the villagers’ discounted wages, and proposed a solution of “equal replacement for work”, that is, the other half of the villagers invested the same amount of work in the latter half of the work, and on the grounds of technical work, it is recommended that the villagers should offset the work of the previous investment in the form of agricultural work. Yang disagreed with "work to work" and proposed that "the job change is impossible. According to 200 yuan per day, each household must give 600 yuan to use the pool. Otherwise, it will be from the sky." Accept, the second adjustment failed. Driven by the "economic man hypothesis", the company is not willing to lose its own interests to resolve conflicts, and the proposed au pair will gradually push back the results of coordination to the original point. After many unsuccessful negotiations, the case was finally abandoned by Hu Mou. Throughout the whole incident, it is not difficult to find that the government's appeals against the damage of the interests of the villagers are "acting", and the result of “acting” is not whether to solve the problem, but whether it can “block”. The mouth of the villagers. As the contractor's Y boss, the purpose of bidding and taking over the whole project is to make a profit. At this time, there is a very obvious public welfare change: the state makes the benefit of the people reasonable, and the contractor makes the benefit of the people contrary to its own profitability. Therefore, in the case, the Y boss refused to pay Yang's salary, which indirectly led to coordination failure. At the same time, the whole incident involved fewer individuals and did not cause widespread concern. Therefore, when Hu was still defeated by various means such as villagers' petitions and cadre mediation, he had to endure the fact that the interests were damaged and chose to abandon the national policy. To make the final silent rebellion, it is in line with the government’s act of letting the villagers “shut up”. So the government thought that the problem was solved, the contractor continued construction, Yang’s pool was completed on time, and all the indicators were successfully completed. As for Gan and Hu, it was a small episode in the whole process and will soon be annihilated in the project. The praise of the completion.

2.4. Quality is difficult to pass

After field research, more than half of the “dispersed mink” safe drinking water projects have certain problems in quality. Due to the limited funds allocated to the village, the construction team invited by the tender has only the basic skills of the contractor, and the other workers are mostly young and middle-aged laborers in the village. It is difficult to grasp the quality string from the ideological consciousness, and learn from the gourd painting. Construction, the quality of the project is inevitable. The quality inspection of the so-called quality inspection can only get the quality inspection of the construction. It only stays in the visual inspection. If there is a pool, it can be accepted. It does not check whether the water pool has insufficient water supply, water leakage and water storage. It lacks advanced testing equipment and instruments. And testing talent. About 8 of the 12 “dispersed” constructed in the A village in 2018 have different quality problems, and the pass rate is as low as 58%. As a result, the villagers enjoy the policy but cannot enjoy safe water. But I can't use water. It can be
seen that in the context of the country’s vigorous support for rural “checking leaks and filling up safe drinking water projects”, farmers still want to eat clean and rest assured that water is still a long way to go.

| years | total | Leaking water | No water storage | Qualified | Pass rate |
|-------|-------|---------------|------------------|-----------|-----------|
| 2016  | 6     | 2             | 0                | 4         | 0.66      |
| 2017  | 15    | 5             | 2                | 8         | 0.53      |
| 2018  | 12    | 4             | 1                | 7         | 0.58      |

3. Safe drinking water project management

3.1. Clarify existing contradictions
Establish a water resources management system and scientifically divide the quota. Drawing on Chairman Mao’s proposal of “cleaning the house and then treating the guests”, the village cadres should first clarify the existing problems and crack them one by one in a targeted manner to lay a solid foundation for the next step. The biggest controversy is the issue of quota allocation. The demand for “dispersed water” is large, but the number of places is limited. The disputes arising from the issue of quota allocation are numerous. The existing classification criteria are tailored to local conditions, but local conditions are by no means the only standard. Governments at all levels should learn and draw on the management model of precise poverty alleviation on the basis of mastering the overall situation, classify the actual situation of villagers according to the degree of water shortage, and allocate quotas to the families with the most difficult water use. At the same time, the cadres are responsible for the arrival of the household, who is responsible for the problem, and the leadership team is too hard to drive the project. References are cited in the text just by square brackets [1]. Two or more references at a time may be put in one set of brackets [3, 4]. The references are to be numbered in the order in which they are cited in the text and are to be listed at the end of the contribution under heading references, see our example below.

3.2. Introduction of training technicians
The introduction of professional and technical personnel is the key to improving the quality of engineering construction. Whether it is advanced construction technology or advanced equipment and equipment, professionals are required to supervise and use. Most grassroots water organizations integrate design, supervision, construction, supervision and other functions. They should pay attention to human resources development, strengthen skills education, strictly control quality, and maintain continuous maintenance, and establish a technical team suitable for their own situation. It is easier to introduce college students into the grassroots of the community and enter the rural grassroots. Therefore, it is more practical to train their own technical personnel at the grassroots level in rural areas. They can not only form a stable work team, but also help farmers to strengthen their skills and get rich. Under the support of “safe drinking water”, we will gradually cultivate relevant technical personnel in farmland water conservancy, soil and water conservation, geology and water resources, and strive to form a virtuous cycle of water resources use.

3.3. Multiple Governance Simultaneous Development
The “check and fill the safe drinking water project” is not only the development and utilization of water resources, but also the management and protection of water resources. If human beings owe environmental debts, they need to “repay debts”, implement the policy of returning farmland to forests and prohibit forest harvesting policies, and control soil erosion; encourage the use of farmyard manure and forest defoliation to increase fertilizer, reduce the use of chemical fertilizers and pesticides, and detect water quality. Avoid pesticide pollution of drinking water sources; rationally use water conservancy irrigation resources to avoid land salinization caused by unreasonable flood irrigation.
Strengthen the knowledge and skills training of grassroots people, and actively carry out mass quality management and rationalization proposals.

3.4. **Grasping strict outsourcing**

The construction of “dispersed water rafts” is carried out in the form of public service outsourcing. It should be strictly controlled from the start of project bidding, and all indicators and documents should be open to the public to ensure fairness and justice in the outsourcing process. Local governments should actively organize the masses to participate in the project construction and give full play to the project. The guiding role of government funds to prevent government rent-seeking behaviors and corporate rotting behaviors, to overcome the uneven development impact of the central-edge phenomenon. We will strive for special funds from local governments, carefully calculate costs, reduce costs, and put an end to the special funds for the misappropriation of rural “checking leaks and filling up safe drinking water”. Increase the supporting water infrastructure construction projects to meet local development requirements.

4. **Conclusion**

"Safe Drinking Water Project" is an important guarantee for the economic and social development of the vast rural areas. In the process of promoting the development and utilization of rural water resources, we must adhere to local conditions and sustainable development, comprehensively consider the factors of benefiting the people, and firmly establish innovation, coordination, greenness, and openness. Shared development philosophy. Doing a good job in rural water resources management, ensuring its safe operation, perfecting supporting measures, and exerting its due benefits are of great significance to the construction of a new socialist countryside.

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