Study on New Strategies of Strengthening Management of Water Conservancy Project Construction

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ABSTRACT. In recent years, China's water conservancy industry has developed rapidly, and water conservancy projects have become an important part of the national infrastructure construction. The construction of the projects determines the sustainable development of water conservancy, so the requirements are stricter. To ensure the sustainable development of water conservancy project, there are a lot of work to do. Management of water conservancy project construction should be well done to build a complete management system, and the cost management of projects should be planned well. In addition, the schedule of planned project should be reasonable, and the comprehensive quality of management personnel should be improved to ensure the quality of water conservancy project construction.

KEYWORDS: Water conservancy project, Construction management, New strategy

1. Introduction

Water conservancy projects are mainly used for drainage, water supply and flood control, which can ensure social stability and promote the rapid development of China's economy. It can be seen that water conservancy project plays a significant role in the development of national economy. However, in recent years, with continuous expansion of the scale of water conservancy projects, there are some problems in construction management, affecting the quality of the projects. It is necessary to analyze management affairs in detail, formulate targeted solutions and improve management efficiency.

2. Significance of Adopting New Strategies in Water Conservancy Project Construction Management

The water conservancy project itself both belongs to public welfare and business operation, and occupies a very important position in the national economy. Reasonable management can guarantee the quality of the project, ensure the smooth connection of all procedures, and solve problems in the project in time. In addition, it can also ensure that water conservancy projects give full play to flood control, drainage, power generation and water supply, so as to provide more convenient services for people, improve the social security system and promote the stable development of social economy. At the same time, it can also protect the ecological environment and relieve the environmental pressure.

3. Problems in the Construction and Management of Water Conservancy Projects

3.1 Weak Management Awareness and Backward Management Concept

In some water conservancy projects, the person in charge of the project has no sense of management, pays too much attention to the progress of the project and ignores the management of the overall construction. The backward management concept in the management and the defects in the established management system have led to low efficiency in the management work and affected the progress of the whole project.

3.2 Defects of Management Mechanism

In some water conservancy construction projects, the management mechanism is rigid and inflexible, which makes the managers lack of effective basis to carry out their work and can not implement efficient management according to the regulations. In the management mechanism, there is no incentive system and division of responsibilities. The responsibilities of managers are not clear and easy to be confused, which affects the implementation of work. Moreover,
the water conservancy project both belongs to public welfare and business operation, which is relatively comprehensive and difficult to distinguish in the management work, affecting the efficiency of the management work [1].

3.3 Insufficient Funds

The amount of money invested in the construction of water conservancy projects is insufficient. Most of the money is used in the early stage of the project, and there is a lack of investment in the maintenance work in the later stage. Most of the equipment used in the later period was damaged and aged, and the funds were not enough to carry out regular maintenance of water conservancy projects. In the early stage of construction, the cost control work is unreasonable, resulting in a waste of funds.

3.4 Low Comprehensive Quality of Management Personnel

In construction management, managers need to have all kinds of professional knowledge of the project construction, including economics and management knowledge, so the requirements for professional skills of managers are very strict. However, in order to save money, most of the project units are not strict in the selection of management personnel and lack of high-quality talents. Most of the management personnel do not have professional knowledge, and the overall comprehensive quality of the management team is not high, so it is difficult to carry out efficient management [2].

3.5 Problems Existing in Construction Management

The management of on-site construction determines the construction quality of the project. However, there are many problems in some on-site management: there is no reasonable division of management departments according to each procedure of construction. The failure to implement the responsibility system and unclear division of responsibilities have led to frequent problems in site management, and it is difficult to find the potential safety hazards and construction quality problems in time, resulting in huge potential safety hazards after the subsequent projects putting into use.

3.6 Management Problems in Inspection

After the completion of the construction, a special department is required to carry out multiple acceptance of the project to determine whether the quality of the project construction meets the standards. However, the management of inspection is not strict at all, and the lack of attention to the qualification of the inspectors leads to the lack of effective guarantee for the quality of inspection work.

4. New Strategies for Water Conservancy Project Construction Management

4.1 Cost Control of Project Construction

The cost control mainly involves the preparatory work in the early stage. According to the specific requirements, application functions and capital investment of the water conservancy project construction, the cost control is carried out to ensure that the capital invested in the early stage can be used reasonably, to design the optimal construction scheme, and to select the materials with high cost performance for the project construction. To plan well in the cost management, the managers need to start from the preliminary preparation, mastering the engineering design, measurement data, bidding documents. Besides, they should summarize and analyze in time, and formulate an efficient management plan. In addition, managers need to communicate with designers, cost control departments and construction companies to discuss the feasibility of cost control scheme, find out the existing problems in time, solve them and improve the feasibility of the scheme, so as to carry out efficient cost management and improve the utilization rate of funds. Last but not least, the managers also need to go deep into the market to master the prices of various materials, select materials according to the project requirements, and put forward some reasonable opinions and suggestions for the cost control scheme.

4.2 Improve the Management System of Water Conservancy Projects

The management system includes the management rules, management concept and objectives of the project construction. The project unit shall pay more attention to the management, adjust on the basis of the original system according to the actual situation, add incentive mechanism and responsibility system, and constantly improve the
management system of the water conservancy project. In terms of management rules, it is necessary to make clear the rights and responsibilities, standardize the work behaviors of managers, and enable managers to have rules to follow and carry out efficient work. In terms of the management rules, the main responsibilities of each department shall be clarified, the responsibility system shall be implemented, and the sense of responsibility of the management personnel and staff shall be strengthened [3]. At the same time, the establishment of the incentive mechanism will fully stimulate the management consciousness and enthusiasm of the management personnel, and ensure the smooth operation of the management. In terms of management objectives, the project unit and the construction unit shall have a unified understanding and thought, make clear the key points of management objectives, reasonably plan the construction progress, formulate different construction plans and strict management standards according to each procedure of construction, and improve the management of water conservancy projects.

4.3 Improve the Comprehensive Quality of Management Personnel

The leaders of the project units should pay more attention to the personnel management, increase the investment and training, introduce high-quality management talents, inject “new blood” into the management team and integrate advanced management means and concepts. It is necessary to carry out regular training for management personnel to penetrate professional knowledge and management philosophy. At the same time, they should update their traditional cognition to keep pace with the times. Managers should also actively participate in the training work, enrich their knowledge preparation and improve their comprehensive quality, so as to build a high-quality management team. They will have innovative management ideas, actively participate in daily management, innovate management means and improve work efficiency. In addition, a competition elimination mechanism can be established to regularly assess the management personnel, and those who fail to pass the assessment will be discharged. The daily performance and innovative ideas of managers should be included in the assessment, so as to select high-quality talents, divide human resources reasonably, and constantly strengthen the ability and quality of management team.

4.4 Strengthen the Management of the Construction Process

Leaders of the project should pay attention to strengthen the supervision and management of the construction process to ensure the construction safety and quality. In terms of construction safety management, supervisors shall supervise the construction unit to implement safety education and training, and improve the safety awareness of construction personnel. In the process of construction, safety precautions shall be taken and construction equipment and technology shall be used reasonably to avoid safety accidents caused by operation errors. It is necessary to pay more attention to material management, since the material is the basis of engineering quality. Whether it is the procurement and transportation in the early stage or the storage after putting into use, it is necessary to manage well to ensure the quality and performance of materials, and then guarantee the quality of the project. After the materials are inspected, they need to be kept according to their storage conditions, and the use of materials should be recorded to avoid material waste. In the construction site, attention should be paid to the transition of all procedures. Managers should fully connect the supervision unit to work together, timely find out the common quality problems and potential safety hazards in the construction and timely stop for rework to ensure the construction quality of the project [4]. The management department should be reasonably divided into groups. Each group needs to report the management results every day and assess the performance of the group. In addition, supervision departments should be set up to inspect the site and ensure the smooth implementation of various management systems.

5. Conclusion

All in all, in order to achieve sustainable development of water conservancy in the new era, we need to pay more attention to the quality of water conservancy project construction. The management needs to be done well, the management mechanism needs to be improved, the management talents should be introduced, and the cost control of the project should be well planned. These can effectively solve the problems in the management, build an efficient management team, solve the problems in the project construction in time, so as to ensure the quality of water conservancy project construction, promote the stable development of national economy, and accelerate the overall development process of water conservancy.

References

