

Article

The Causes and Sustainable Management Mechanisms of "Valuing construction and despising management" in Rural Human Settlements Environment Governance

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Abstract: Optimizing the living environment in rural areas is a task in rural revitalization. In practical operation, most villages generally "attach importance to construction but do not attach importance to management", which affects the long-term and stable effectiveness of governance. Field investigations have found that although the vast majority of villages have built sewage treatment and public toilet related construction projects, they lack management and maintenance in the future. Many villages' sewage treatment systems, public toilets and other facilities are either idle or broken, which leads to poor environmental quality in the village. The main reasons for the problem are: the lack of a long-term management and protection mechanism in top-level design, unclear responsible subjects, inadequate supervision, management and assessment, most of the funds are one-time, stable and effective maintenance funds are few, and there is little participation from the masses. The lack of environmental protection concept and "ownership" consciousness has led to the proposal of "building management integration" system, specialized management and protection funds, intelligent management platforms and strengthening the villagers' deliberation and incentive systems provide reference for establishing long-term management and protection mechanisms for rural living environments.

Keywords: Rural living environment; value construction and despise management; Sustainable management; Governance mechanism; Public participation

1. Introduction

Improving the living environment in rural areas is a key task in implementing the rural revitalization strategy, closely related to the core well-being of numerous farmers and the civilization and harmony of rural society (Büchs, 2021; Liu et al., 2020). In recent years, with the continuous deepening of important projects such as the national "Thousand Village Demonstration" and "Ten Thousand Village Improvement", the infrastructure and public service level of rural areas have been significantly improved, and the overall appearance of villages has undergone historic changes (Millward-Hopkins et al., 2020). However, behind this magnificent development process, a common and persistent problem is gradually emerging, which is the governance dilemma of "heavy construction, light management". The sewage treatment facilities built in numerous areas with a large amount of funds have ultimately become "idle and useless projects". Next to the newly designed garbage classification and collection points, garbage still accumulates in large quantities like small mountains. After renovation, the newly renovated public areas quickly become dilapidated due to lack of maintenance and return to a chaotic state. This "imbalance between construction and management" not only leads to great waste of public financial resources and damages the construction effectiveness of rural revitalization, but also reduces the sense of gain and happiness of farmers, which is a significant obstacle to achieving sustainable development in rural areas (Di Felice et al., 2021).

Due to the current situation, the goal of the research work involved in this article is to deeply analyze the fundamental reasons for the phenomenon of "valuing construction and despising management" in the process of rural living environment governance, and actively construct a practical and effective management mechanism based on this. The central question ultimately drawn is: what factors have led to the path dependence of "valuing construction and despising management" at the institutional, financial, and social levels? How to break through the current "sports style rectification" and truly move towards a long-term governance with endogenous motivation and resilience? At the same time, it provides valuable answers in ensuring the effective connection between expanding poverty alleviation achievements and rural revitalization, and improving the modernization level of rural governance system and governance capacity, which has certain practical significance and theoretical value.

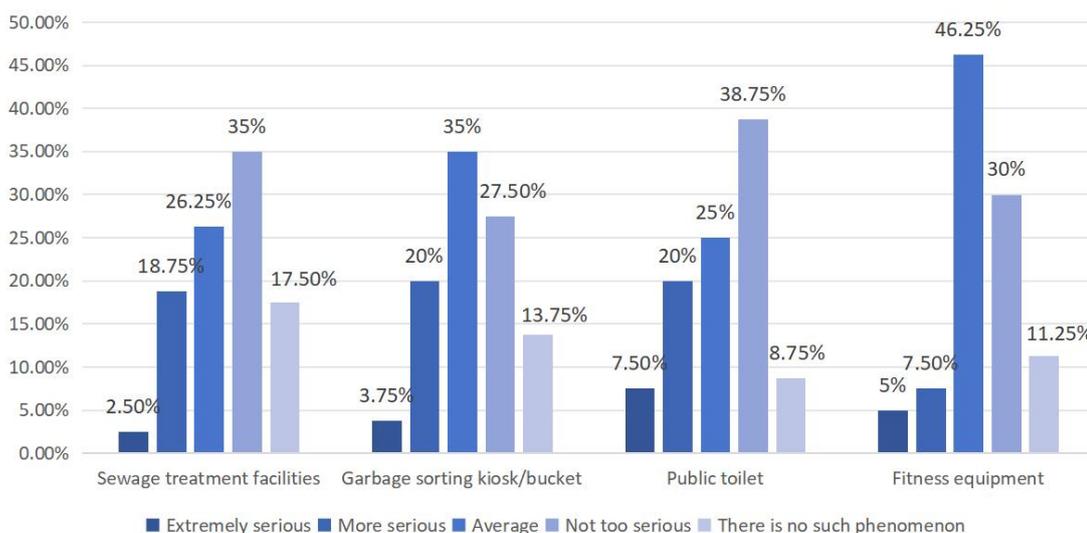
2. The current situation and performance of "valuing construction and despising management" in rural living environment governance

At present, the goal of rural revitalization is being achieved by changing and improving the appearance of villages, such as road surfaces and greening. When seeing the specific construction results, it is found that there is a phenomenon of "some people building but no one managing" throughout the process. Specifically manifested in:

Many public facilities are built but used less, and no one takes good care of them, making it difficult to provide good services to villagers for a long time. According to a survey questionnaire, the highest number of villagers are dissatisfied with sewage treatment facilities. 21.25% of villagers feel that these facilities are either unused or severely damaged, and the situation is "very serious" or "quite serious". Many of the sewage treatment equipment that was built with money may not have been able to operate normally for a long time (Narang et al., 2024; Wang et al., 2023).

The same situation is also reflected in places of daily life, such as public toilets, garbage disposal points, etc. 27.5% of villagers believe that the damage to public toilets is relatively serious, and 23.75% of villagers believe that there are more incidents of garbage sorting points being damaged or idle. Therefore, it leads to a situation where on the one hand, better hardware equipment is built for the convenience and benefit of the people, but on the other hand, villagers rarely or not know how to use it, resulting in a shorter service life and low efficiency of the equipment.

Figure 1. Bar chart of investigation results on idle or damaged public facilities



Secondly, it is difficult to maintain the environmental hygiene of villages, which can lead to a cycle of "rectification rebound re rectification"(Deng et al.,2019;Li et al.,2022;Tao&Wu,2023).According to the survey results, most villagers are not satisfied with whether the public toilets are clean, whether garbage is promptly cleared, and whether the roads are clean and tidy.Inadequate management of areas that require long-term effort for cleaning; Moreover, the participation of most villagers in the village is relatively low, with only 1 to 2 instances of environmental remediation in the past year.More than half of the villagers have only participated in environmental remediation work once or twice in the past year, indicating that the work of villagers in maintaining the environment is more of a formality, a "big cleaning" that a few people strive for, rather than a daily or habitual work that involves the participation of the majority of villagers in maintenance. There is a lack of sufficient time and space supervision and long-term stable mechanisms, which makes it easier for environmental hygiene to deteriorate again after remediation.

Figure 2. Line chart of survey results on villagers' satisfaction with their living environment

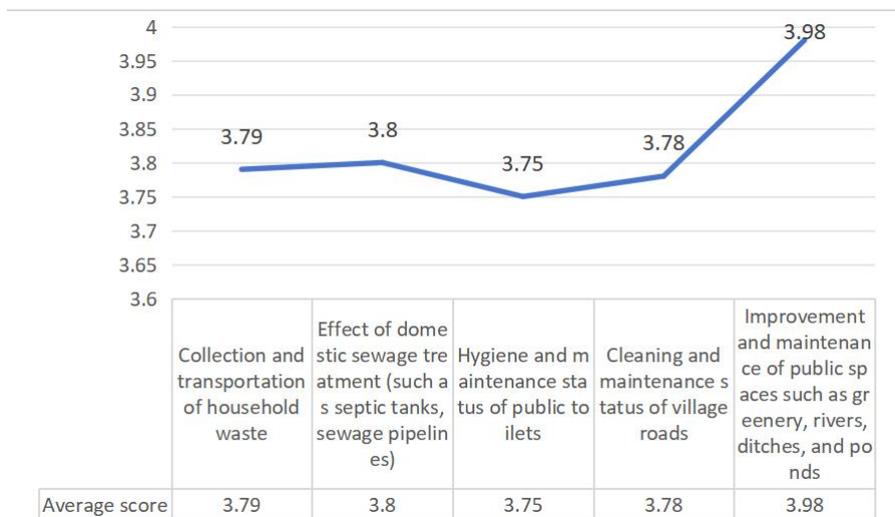
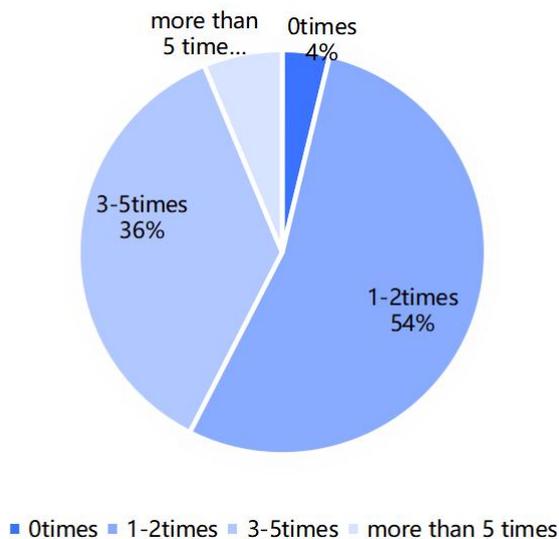
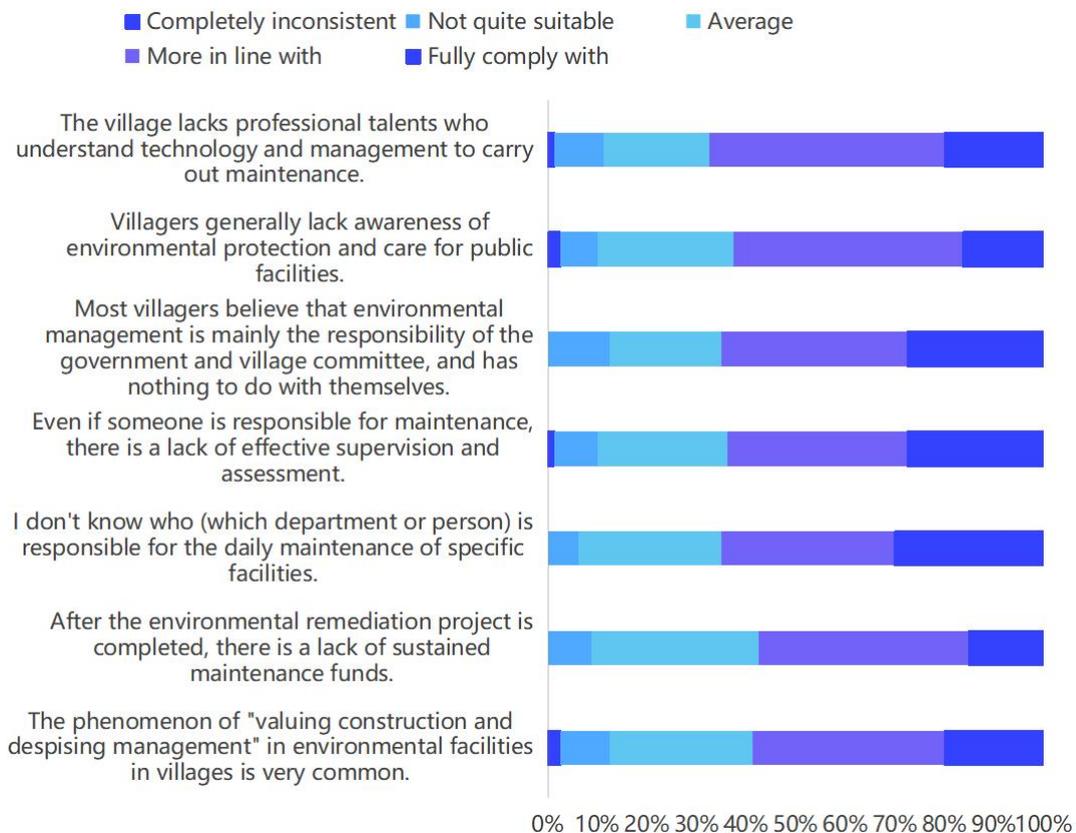


Figure 3. Pie chart of the number of times villagers participate in environmental remediation activities organized by village organizations



Finally, villagers often behave as if they don't know who should take care of them, which means that the responsibility for management and protection has not been implemented on specific individuals. According to the survey, among the reasons behind the phenomenon of "valuing construction and despising management", "not knowing who (which department or person) is responsible for the daily management and maintenance of specific facilities" was chosen the most, indicating that although many places know that management and maintenance work is multi headed or multi headed, they actually do not know who is responsible.

Figure 4. Bar chart of investigation results on the causes of the phenomenon of "valuing construction and despising management"



At the same time, more than 60% of the villagers agreed with the view that "even if there are special personnel in charge of management and protection, no one will check". Without supervision, it will become coping management; The vast majority of villagers also realize that the management and protection are first and foremost the work of the two committees of the village, but their attitude of consciously assuming the management and protection responsibility as the master of the village is relatively weak. As for this "subjective" identity, compared with the previous long-term loss of control of village roads, it has not changed much, because the actual situation of management and protection is absent, which will inevitably lead to the lack of a broader and solid mass foundation for the long-term mechanism.

In summary, the phenomenon of "valuing construction and despising management" not only results in the waste of public financial funds, causing many good village renovation and construction projects to fail to achieve their expected long-term benefits, but also hinders the fundamental and sustainable improvement of village environmental sanitation, and even to some extent undermines villagers' sense of identity and achievement in rural construction achievements(Wang,2019).

3. Analysis of the causes of the problem of "valuing construction and despising management"

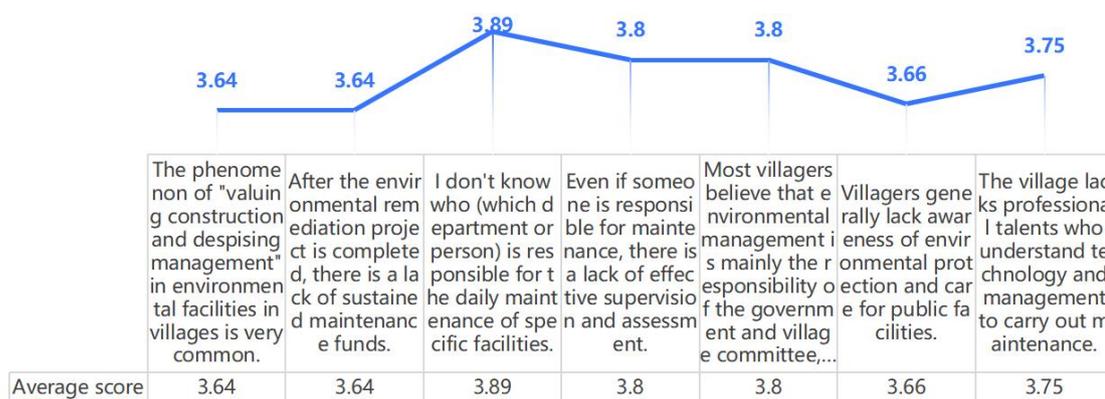
The survey data clearly indicates that the phenomenon of "valuing construction and despising management" is not accidental, but the result of the interweaving of multiple levels of issues such as institutional policies, funding resources, and participation awareness.

3.1 At the institutional and policy level

The current management system and policies have made the situation of "valuing construction and despising management" more obvious. In some assessments, more attention is paid to the visible hardware achievements such as how many facilities are built and how much village space is beautified. Whether these facilities can be used normally for a long time and how they are maintained afterwards have not been given enough attention or effective assessment. Therefore, the focus of grassroots work is on hardware facility construction.

In fact, objectively speaking, the key is that there is no responsible party or person for management and protection, and there is no responsible party or person to hold accountable. From the survey, it can be seen that the option of "not knowing who (which department or person) is responsible for the daily maintenance of specific facilities" received the highest recognition in the questionnaire survey (score of 3.89, out of 5 points), and more than 60% of the villagers believe that the phenomenon of "even if someone is responsible for maintenance, there is no way to supervise and assess" is widespread (see Figure 4). The combination of the above two factors has resulted in situations where there is no one or it is difficult to undertake maintenance tasks, that is, the situation of "not following orders and regulations" exists, where there are empty promises of maintenance but no implementation of management.

Figure 5. Line chart of the investigation results on the causes of the phenomenon of "valuing construction and despising management"



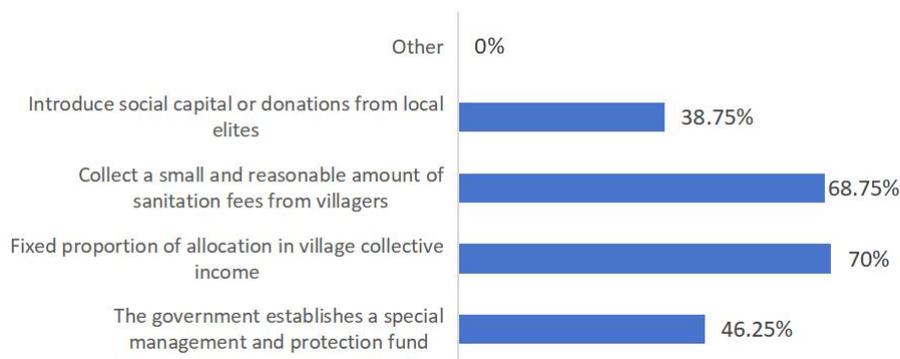
3.2 At the level of funds and resources

To achieve long-term effective management and operation, it is necessary to have stable sources of funding and strong team strength as a backing, both of which are obvious weaknesses at present.

The most direct issue is the lack of sufficient management and maintenance funds. Based on the above, about 60% of the villagers feel that there is a lack of management and maintenance funds. Therefore, many villages have experienced a situation where facilities cannot be repaired in a timely manner after they break down, and only become abandoned and unused, ultimately leading to their elimination.

The investigation found that the methods of raising funds are relatively single, mainly relying on two channels: funding from superiors and collective income from villages. About 70% of villagers support squeezing out a portion of the village collective income to raise funds, while about 68.75% of villagers say that if they really want to pay for garbage classification, they will accept a small amount of sanitation fees. However, only 38.75% of them are willing to raise funds from private capital and local elites, indicating that the efforts of the government, collectives, villagers, and society are not enough. There is still a long way to go to overcome the difficulties of diversified investment mechanisms.

Figure 6. Bar Chart of Survey Results on Fundraising Methods



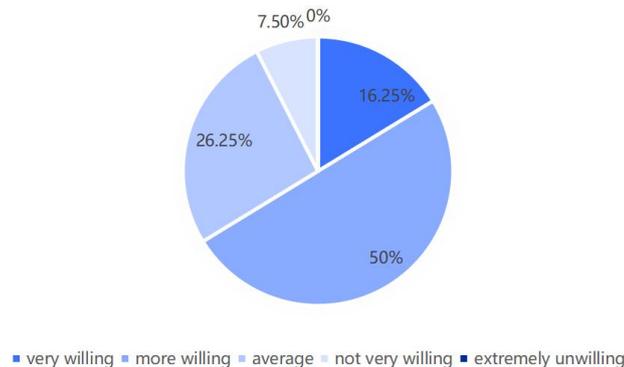
In addition, the lack of professional skills and talents has led to poor management and maintenance. According to the survey, 67.5% of people believe that "there is a lack of technical and managerial professionals in the village to carry out maintenance". Engineering projects represented by sewage treatment facilities require certain professional skills to manage and maintain well. Without specialized professionals to guide and operate, the long-term stable operation of such projects cannot be guaranteed.

3.3 Participation and consciousness level

For a long time, strict control and maintenance have been inseparable from human participation, but from the actual situation, the current villagers lack awareness of environmental protection and their awareness of environmental protection is still relatively weak.

Although 66.25% of people in the village are willing to spend their spare time contributing to environmental protection, the actual number of participants is far from enough. In the past year, less than half of the villagers have participated in the village environmental improvement actions organized by the village committee more than three times a year; About half of the people only participated 1-2 times (see Figure 3). The embarrassment of 'high aspirations, low actions' indicates that the villagers' so-called 'protagonist' consciousness has not yet evolved into their own behavior.

Figure 7. Pie chart of survey results on villagers' willingness to participate in monitoring the maintenance of the village environment



At the same time, villagers still have a strong dependence on grassroots organizations in terms of their sense of responsibility. 65% of villagers agree that "most villagers believe that environmental management is mainly the responsibility of the government and village committee, and has nothing to do with themselves" (see Figure 4). When most people believe that managing and maintaining facilities is only the responsibility of the government and village committees, it is difficult to form a consensus of shared responsibility and action.

Finally, some villagers' awareness of environmental protection and public responsibility is not strong enough. In this survey, 62.5% of villagers believed that "villagers generally lack awareness of environmental protection and public facility care" (Figure 4). Villagers' behavior of not caring for environmental protection and public facilities can lead to problems such as littering and human damage to public facilities, which will also bring certain difficulties to garbage management and the protection and management of garbage public facilities.

4. The Path to Building a Sustainable Management and Protection Mechanism for Rural Living Environment

To address the issues reflected in the survey and establish a long-term stable rural environmental management mechanism, it is necessary to work together from multiple aspects such as system, funding, technology, and participation to form a complete and effective management system.

4.1 Institutional Innovation

Firstly, it is necessary to change the inherent mode of "heavy construction and light management" from the perspective of institutional design, and the key lies in building a project management system that integrates construction and management (Li et al., 2025). This indicates that in the initial stage of planning for any environmental facility construction project, it is necessary to simultaneously clarify which entity will manage the project after completion, the sources of funds required for management, and the methods used for assessment and supervision. The management plan should be set as a necessary prerequisite for the project to pass, in order to prevent the unfavorable situation of "someone is responsible for construction, no one is responsible for management" from the root.

Secondly, clear division of responsibilities and tasks among all parties is necessary. During the survey process, as many as 65% of villagers expressed that they were "unclear about who would be responsible for the daily management and maintenance of specific facilities" (see Figure 4), which fully highlights the severity of the ambiguity of rights and responsibilities. Therefore, it is necessary to use forms such as village regulations and responsibility lists to clarify the specific responsibilities and behavioral norms of village level organizations, all villagers, and township governments in terms of management and maintenance, so that everyone can clearly know what they should do, thereby reducing the possibility of mutual shirking of responsibilities(Peng et al.,2023).

Finally, it is necessary to introduce external evaluation and supervision, and then conduct internal assessment based on this. We should try to introduce third-party evaluation and dynamic supervision mechanisms, and invite third parties or people without any interests to regularly inspect the environmental management and protection of the village. The results of the inspection should be made public to the society, so that the environmental management and protection can always be maintained at the appropriate level, rather than just treating it as a formality to cope with(Bu et al.,2020;Cao et al.,2024).

4.2 Funding Guarantee

According to the survey, 57.5% of villagers believe that "lack of sustained maintenance funds" is the main problem (see Figure 4).To this end, a "Special Management and Protection Fund for Human Settlements Environment" can be established to ensure that maintenance costs have a fixed source, rather than being raised temporarily every year.

Additionally, in terms of fundraising, it is necessary to broaden channels and diversify the sources of funds. According to our research, villagers are more accepting of the two models of village collective income allocation and villagers paying a small amount of health expenses themselves. Therefore, in practice, we can actively promote the formation of a diversified investment model of "government subsidies, village collectives bearing some, and villagers contributing some"(Li et al.,2022;Peng et al.,2023;Sun et al.,2023).At the same time, a portion of the funds can also be used to reward excellent villages and village groups with certain amounts, in order to motivate everyone's enthusiasm(Miao,2024;Zeng et al.,2021).

4.3 Technical and Management Support

In the face of insufficient professional skills, it is necessary to strengthen technical empowerment and support at the talent level.In the relevant survey, 57.5% of villagers feel that there is a lack of maintenance personnel with professional skills in the village.In response to this situation, we can actively promote smart rural management platforms, such as developing easy-to-use mobile applications that allow villagers to take photos of any environmental issues they discover and report them to higher authorities at any time. This also enables management personnel to more efficiently arrange inspection and maintenance tasks, thereby improving management effectiveness(Zhang&Zhang,2020;Zhao et al.,2022).

At the same time, it is also necessary to strengthen the technical training of existing village level management personnel. In addition to providing universal training, targeted teaching of specific modules with high technical content such as sewage treatment is also needed to improve

their professional skills and problem-solving abilities(Peng et al.,2023).In addition, it is also possible to consider introducing professional social workers or environmental guidance personnel, who can introduce more cutting-edge environmental management concepts and methods to the village, to guide villagers on how to carry out garbage classification, resource utilization and other activities more properly, thus filling the gap in the professional strength of the village itself(Li et al.,2023;Zhang&Huai,2023).

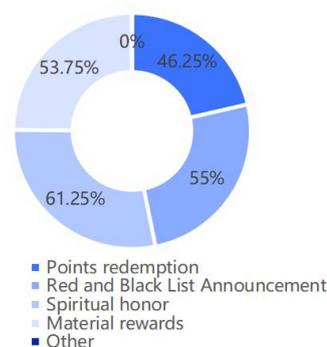
4.4 Villager Participation

The long-term effectiveness of the management and protection mechanism depends crucially on whether villagers can truly participate in the management and protection work. According to relevant data, although 66.25% of the residents in the village expressed willingness to participate in the supervision of environmental remediation activities (as shown in Figure 7), only 42.5% of the villagers had participated in three or more environmental remediation activities (as shown in Figure 3), indicating the need to build a convenient and effective platform for the public to participate.

Firstly, communities such as "village councils" and "environmental monitoring groups" can be established to provide opportunities for villagers to contribute to solving environmental problems, express their opinions, and participate in decision-making and monitoring in practice. This will enable villagers to become decision-makers in environmental governance work in a real environment(Peng et al.,2023;Qiu et al.,2022).

Secondly, incentive measures should be cleverly utilized. Relevant surveys have shown that giving spiritual honors is the most effective way to stimulate villagers' active participation. In addition, it is also possible to actively promote methods such as the "points system" and "red and black lists" to convert the specific behaviors of villagers participating in management and protection into corresponding points, which can be used to exchange prizes or obtain honors. At the same time, it is necessary to publicly praise outstanding advanced models and provide friendly suggestions for areas with shortcomings, in order to create a good atmosphere of "learning by comparison and catching up"(Zheng et al.,2023).

Figure 8. Statistical chart of the survey results on the most effective incentive methods



Finally, continuous promotion of environmental protection and capacity building are essential. 62.5% of villagers still feel that there is a general lack of environmental awareness among the public (see Figure 4). In view of this, it is still necessary to gradually cultivate villagers' environmental protection awareness and public responsibility through continuous promotion and organization of activities with environmental protection as the theme, and promote everyone to gradually shift from "I want to participate" to "I want to participate", ultimately building a new pattern of rural environmental governance that everyone cares about, invests in, and benefits from (Cao et al., 2024).

5. Conclusions and Recommendations

This study, through research and analysis of the current situation of rural living environment governance, clearly demonstrates the universal characteristics of the phenomenon of "valuing construction and despising management" and the complex causes behind it. This problem not only leads to the waste of public resources, but also has an impact on the sustainability of the achievements of rural revitalization and the true feelings of villagers. To overcome this challenge, relying solely on short-term rectification actions or single measures is absolutely not enough. It is necessary to systematically establish a sustainable management mechanism with clear responsibilities and powers, stable funding supply, technical support, and village participation.

Based on our research findings, we propose the following suggestions: firstly, within the scope of the system, we propose to implement a project management model that unifies construction and management. At the initial stage of project planning, we should clarify the responsibility attribution, funding sources, and assessment criteria for subsequent management and protection. At the same time, we should use forms such as village regulations and agreements or responsibility lists to accurately divide the responsibilities that the government, village collectives, and villagers should bear, and introduce third-party supervision work to ensure that management and protection work can be effectively implemented; Secondly, in the field of funding, it is recommended to establish a "Special Fund for Human Settlements Environment Management and Protection", integrating various sources of funds such as government appropriations, village collective income, and health expenses paid by villagers. Villages or village groups that have achieved significant results in management and protection work should be rewarded to stimulate their internal motivation; Thirdly, in terms of technology and management, professional training for village level management personnel should be strengthened, especially for jobs with high technical requirements such as sewage treatment. At the same time, actively promote and utilize intelligent management tools such as simple mobile apps to improve management efficiency, and consider introducing professional social workers or environmental instructors to provide external support; Fourthly, at the level of village participation, it is necessary to establish platforms such as "village council" and "environmental supervision group", so that villagers have a way to participate in decision-making and supervision. In addition, we should vigorously promote "point system", "red and black list", "hygiene civilized households", etc., integrate spiritual incentives with material rewards, and gradually cultivate villagers' awareness of environmental protection and public responsibility through continuous publicity and education.

In summary, for the long-term management and maintenance of rural living environment, achieving the transition from "passive management" to "active maintenance" is our ultimate goal, in which the government, village collectives, and the masses should participate together. I hope this article can provide some ideas for solving the problem of "valuing construction and despising management", so as to better beautify, green, and purify our rural environment.

AUTHOR CONTRIBUTIONS

Yuanyuan Nie: Conceptualization; research design; methodology; data collection; investigation; formal analysis; data curation; statistical analysis; visualization; validation; writing – original draft; writing – review & editing; supervision; project administration.

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CONFLICT OF INTEREST STATEMENT

The authors declare that there are no commercial or financial relationships that could be construed as a potential conflict of interest.

DATA AVAILABILITY STATEMENT

The data generated and analyzed in this study are available from the corresponding author upon reasonable request. All data will be provided without undue restriction.

Reference

1. ABu,X.,Pu,L.,Shen,C.,Xie,X.,&Xu,C.(2020).Study on the Spatial Restructuring of the Village System at the County Level Oriented toward the Rural Revitalization Strategy:A Case of Jintan District,Jiangsu Province.*Land*,9(12),478.<https://doi.org/10.3390/land9120478>
2. Büchs,M.(2021).Sustainable welfare:How do universal basic income and universal basic services compare?*Ecological Economics*,189,107152.<https://doi.org/10.1016/j.ecolecon.2021.107152>
3. Cao,Z.,Yan,L.,Zhou,K.,&Lei,M.(2024).Willingness for Land Transfer and Coupling Coordination Analysis in Poverty Alleviation Resettlement Areas:A Sustainable Development Perspective.*Land*,13(12),2012.<https://doi.org/10.3390/land13122012>
4. Deng,D.,Song,Y.,&Zhou,X.(2019).Rural Environmental Governance Mechanism under the Rural Revitalization Strategy.*E3S Web of Conferences*,81,1018.<https://doi.org/10.1051/e3sconf/20198101018>
5. Di Felice,L.J.,Renner,A.,&Giampietro,M.(2021).Why should the EU implement electric vehicles?Viewing the relationship between evidence and dominant policy solutions through the lens of complexity.*Environmental Science&Policy*,123,1-10.<https://doi.org/10.1016/j.envsci.2021.05.002>
6. Li,Y.,Huang,Z.,Li,Y.,&Xu,P.(2022).Research on the Long-Term Governance Mechanism of Urban and Rural Living Environment Based on the Ordered Logistic-ISM Model in the Perspective of Sustainable Development.*International Journal of Environmental Research and Public Health*,19(19),12848.
<https://doi.org/10.3390/ijerph191912848>

7. Li, Y., Ma, R., & Jin, B. (2023). Research on Rural Typology Based on the Symbiotic Model of Rural Revitalization and Basic Public Services. *Land*, 12(6), 1259. <https://doi.org/10.3390/land12061259>
8. Li, Z., Huang, Y., Pan, M., Pei, Y., & Li, X. (2025). Revealing the Priorities for Rural Infrastructure Maintenance Through Complex Network Analysis: Evidence from 98 Counties in China. *Land*, 14(8), 1688. <https://doi.org/10.3390/land14081688>
9. Liu, Z., Liu, S., & Song, Y. (2020). Understanding urban shrinkage in China: Developing a multi-dimensional conceptual model and conducting empirical examination from 2000 to 2010. *Habitat International*, 104, 102256. <https://doi.org/10.1016/j.habitatint.2020.102256>
10. Miao, N. (2024). Entropy-Based LogTODIM–MACONT Techniques for Satisfaction Evaluation of Rural Living Environment Governance with Interval-Valued Pythagorean Fuzzy Information. *International Journal of Fuzzy Systems*, 27(5), 1636–1650. <https://doi.org/10.1007/s40815-024-01863-4>
11. Millward-Hopkins, J., Steinberger, J. K., Rao, N. D., & Oswald, Y. (2020). Providing decent living with minimum energy: A global scenario. *Global Environmental Change*, 65, 102168. <https://doi.org/10.1016/j.gloenvcha.2020.102168>
12. Narang, D., Madaan, J., Chan, F. T. S., & Charan, P. (2024). Evaluating prioritization of strategic business model for efficient wastewater resource management system. *Journal of Cleaner Production*, 449, 141271. <https://doi.org/10.1016/j.jclepro.2024.141271>
13. Peng, Y., Peng, X., Li, X., Lu, M., & Yin, M. (2023). Effectiveness in Rural Governance: Influencing Factors and Driving Pathways—Based on 20 Typical Cases of Rural Governance in China. *Land*, 12(7), 1452. <https://doi.org/10.3390/land12071452>
14. Sun, Y., Ding, G., Li, M., Zhang, M., Agyeman, F. O., & Liu, F. (2023). The spillover effect of green finance development on rural revitalization: an empirical analysis based on China's provincial panel data. *Environmental Science and Pollution Research*, 30(20), 58907–58919. <https://doi.org/10.1007/s11356-023-26655-5>
15. Tao, Y., & Wu, Y. (2023). An Empirical Study on the Evaluation of the Implementation Effect of the Rural Revitalization Strategy in Chongqing Municipality, China. *Iranian Journal of Science and Technology, Transactions of Civil Engineering*, 48(1), 561–576. <https://doi.org/10.1007/s40996-023-01132-8>
16. Wang, T., Zhang, Y., Li, H., Xu, Z., & Jin, W. (2023). Policies on combined sewer overflows pollution control: A global perspective to inspire China and less developed countries. *Critical Reviews in Environmental Science and Technology*, 54(14), 1050–1069. <https://doi.org/10.1080/10643389.2023.2286956>
17. Wang, Z. (2019). Policy Suggestions on Government-led Rural Habitat Environmental Governance. *IOP Conference Series: Earth and Environmental Science*, 295(2), 12059. <https://doi.org/10.1088/1755-1315/295/2/012059>
18. Zeng, X., Zhao, Y., & Cheng, Z. (2021). Development and research of rural renewable energy management and ecological management information system under the background of beautiful rural revitalization strategy. *Sustainable Computing: Informatics and Systems*, 30, 100553. <https://doi.org/10.1016/j.suscom.2021.100553>
19. Zhang, X., & Zhang, Z. (2020). How Do Smart Villages Become a Way to Achieve Sustainable Development in Rural Areas? Smart Village Planning and Practices in China. *Sustainability*, 12(24), 10510. <https://doi.org/10.3390/su122410510>
20. Zhang, Y., & Huai, J. (2023). A Case Study of Farmers' Behavioral Motivation Mechanisms to Crack the Fractal Multidimensional Relative Poverty Trap in Shaanxi, China. *Agriculture*, 13(11), 2043.

<https://doi.org/10.3390/agriculture13112043>

21. Zhao, W., Liang, Z., & Li, B. (2022). Realizing a Rural Sustainable Development through a Digital Village Construction: Experiences from China. *Sustainability*, 14(21), 14199. <https://doi.org/10.3390/su142114199>
22. Zheng, S., Ye, C., & Bai, Y. (2023). Does Supervision Down to the Countryside Level Benefit Rural Public Goods Supply? Evidence on the Extent of Households' Satisfaction with Public Goods from 2005 to 2019. *Sustainability*, 15(11), 8438. <https://doi.org/10.3390/su15118438>

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