

Research on Collaborative Supply of Public Sports Services in Changsha County

Jianhua Guo*, Haojie Luo

Changsha Normal University, Changsha, Hunan, China

**Corresponding Author.*

Abstract: With the release of "Healthy China 2030", people's attention to comprehensively promoting sports has continued to increase, and public sports services have also received increasing attention. To better explore the supply of public sports services in Changsha County, a comprehensive analysis is conducted from the perspective of "collaboration". The research mainly focuses on the current situation, existing problems, and collaborative development of public sports services in rural areas of Changsha County. The results of the collaborative supply of public sports services in Changsha County are obtained, and the operation mechanism and improvement path of the collaborative supply of rural public sports services in Changsha County are proposed.

Keywords: Changsha County; Rural Public Services; Sports Governance; Sports Public Services; Collaborative Supply

1. Introduction

With the increasing importance of agriculture, rural areas, and farmers, China has for the first time explicitly stated the need to implement the strategy of rural revitalization with Chinese characteristics, accelerate rural modernization, and mobilize the entire society to promote rural revitalization [1]. The provision of public sports facilities and sports programs in rural areas plays a crucial role in promoting social harmony, improving people's quality, and enhancing national strength. The provision of these facilities and sports programs helps to improve the well-being of society and promote people's physical and mental health. At present, China is in the initial stage of building a modernized country in a comprehensive manner during the 14th Five Year Plan period [2]. Agriculture is related to social stability and the happiness index of people's lives. The

social problems of agricultural farmers are essential issues related to the current national plan and people's livelihood [3].

In recent years, Changsha County has taken building itself into a "sports strong county" as its overall goal, striving to adapt to the strategic position of China's economic strong county, comprehensively promoting the modernization of public sports services, promoting the vigorous development of the sports industry, increasing the interest of the people in sports, cultivating good habits of regular exercise, and forming the concept of "barbaric physique and civilized spirit". Changsha County has achieved outstanding results in the "Leading Unit of Public Sports in the Province", and has not only been awarded the "Leading Unit of Public Sports in the Province" by the Sports Bureau of China. It has also won the provincial and municipal sports leading unit and the national fitness project best organization award. At present, there are still shortcomings in the supply of rural public sports services in Changsha County, including a lack of supply resources [4], uneven distribution of supply resources [5], single supply forms, low utilization rate of supply resources, and lack of management. Through in-depth research on public sports services in Changsha County, we have identified some issues that hinder our further exploration of the basic theories of rural public sports services and lay the foundation for us to create a sports model with regional characteristics.

2. Research Objects and Methods

2.1 Research Objects

The study focuses on the collaborative supply of rural public sports services in 13 towns in Changsha County, including Huangxing Town, Huanghua Town, Jiangbei Town, Chunhua Town, Guoyuan Town, Lukou Town, Gaoqiao

Town, Jinjing Town, Fulin Town, Qingshanpu Town, Ansha Town, Beisha Town, and Kaihui Town.

2.2 Research Methods

2.2.1 Questionnaire survey method

The questionnaire mainly starts from two aspects: "supply" and "give", obtaining the most authentic data from villagers in Changsha County, including the layout of sports facilities, villagers' participation interest, and so on. The questionnaire is confidential and the personal information of the respondents is fully protected [6].

2.2.2 Field interview method

Using the way of discussion, the development of public sports services in 13 towns in Changsha County was investigated on the spot to consolidate the survey data.

2.2.3 Mathematical statistics method

The comprehensive processing of data mainly includes the number, types, and activities of rural sports venues in Changsha County, providing detailed data support for the research on collaborative supply of public sports services in Changsha County.

3. Result and Analysis

3.1 Situation of Rural Public Sports Venues in Changsha County

3.1.1 The quantity and types of rural public sports venues in Changsha County

As of the end of 2023, under the continuous high attention of people to "Healthy China 2030", Changsha County has built a national fitness center - Xingsha National Fitness Center, with nearly a thousand fitness paths and an increasing number of sports venues. The data provided by the Changsha County Radio, Television, Tourism, Culture and Sports Bureau regarding the number and types of rural public sports venues in Changsha County is shown in the table above:

From Table 1, it can be seen that as of 2024, the level of public sports services in Changsha County has been improved, with Kaihui Town having the largest number of venues, with 231; Next, we arrived at Ansha Town, 203; Huangxing Town, 195; 112 in Jiangbei Town; 156 in Huanghua Town; 164 in Chunhua Town; 133 Orchard Towns; 66 in Gaoqiao Town; 177 in Jinjing Town; 103 in Fulin Town; 92 towns in Qingshanpu; 153 towns in Beishan; The

town with the least number of venues is Lukou, with 60. Overall, there are significant differences among the towns.

Table 1. The Total Number and Types of Rural Public Sports Venues in Changsha Country

Town name	Total amount of various venues	Site type
huangxing town	195	11
Huanghua	156	11
Jiangbei	112	9
Chunhua Town	164	10
Guoyuan	133	8
Lukou	60	7
Gaoqiao Town	66	7
Jinjing	177	13
Fulin Town	103	11
Qingshanpu Town	92	8
Ansha Town	203	13
Beisha Town	153	10
Kaihui Town	231	14

In summary, the overall level of sports services in Changsha County has been improved, which is related to the national strategy of national fitness and the promulgation of "Healthy China 2030". [7] The Changsha County government deeply implements the instructions of higher authorities, regards the completion rate of national fitness as an important indicator for the development of Changsha County, and implements the construction of basic sports facilities. However, there are still differences between different regions. For example, Kaihui Town has 230 public sports venues, while Koukou Town only has 59, a difference of nearly four times. It is speculated that due to different levels of economic development in different regions, there are 33 industrial enterprises in Kaihui Town, with a relatively developed economy; The intersection town is relatively remote and has a slow economic development; Secondly, due to transportation reasons, Kaihui Town is located at the border between Changsha County and other counties: it borders Xiangjia Town in Pingjiang County to the east, Lijia Town in Miluo City to the west, and Miluo City to the north; Most young people in the intersection town go out to work, with low foot traffic and low demand for sports. Therefore, there are differences in the construction of public sports venues among different regions [8].

From Table 1, it can be seen that the types of sports venues in different towns of Changsha County are different. Kaihui Town has the most types of venues, with 14 types; Next are Ansha Town and Jinjing Town, with 13 types; 11 species in Huangxing Town, Huanghua Town, and Fulin Town; 10 types in Beihua Town and Chunhua Town; 9 species in Jiangbei Town; 8 types in Guoyuan Town and Qingshanpu Town; There are 7 types in Gaoqiao Town and Lukou Town. The sports venues in Changsha County mainly include basketball courts, table tennis factories, badminton courts, and some towns also have tennis courts. There is not an absolute positive correlation between the number and types of sports venues in various towns of Changsha County, so there is still room for improvement in the diversity of sports venues in Changsha County [9]. While increasing the number of venues, attention should also be paid to building different types of venues to better meet the different sports needs of villagers.

3.1.2 The quality of rural sports venues in Changsha County

(1) Villagers believe that there are problems with sports facilities

Villagers have used sports venues, so they are the most direct reviewers of the quality of sports venues. Through interviews with villagers and filling out survey questionnaires, the following data can be obtained:

Table 2 shows that the main problems with public sports venues in rural areas of Changsha County are: 15.5% of villagers believe that the number of sports facilities is insufficient; 22.2% of villagers believe that the types are not diverse enough; 12.5% of villagers reported that the facilities were outdated and unsafe; 35.5% of villagers

believe that the utilization rate of sports facilities is low or occupied; 8.1% of villagers expressed that the proportion of indoor and outdoor sports facilities is unreasonable; The remaining 5.9% of villagers indicate that there are other types of problems. Among them, the low utilization rate or occupation of sports facilities is particularly prominent; It is easy to see sports venues and facilities used for various non-sports related activities in rural areas, such as drying clothes, drying grains, parking, and so on [10].

Table 2. Investigation on the Main Problems of Rural Sports Facilities in Changsha County (N=135)

Existing issues	Number of persons	%
Lack of sports facilities	21	15.5
Diverse types of sports facilities	30	22.2
Old sports facilities	17	12.5
Low utilization rate or occupation of sports facilities	48	35.5
Unreasonable proportion of indoor and outdoor sports facilities	11	8.1
other	8	5.9

(2) Satisfaction of villagers with sports venues in Changsha County

While enjoying high-quality public services, villagers should also actively supervise their satisfaction with sports venues, which can reflect the quality of sports venues. At the same time, venue facilities are the main guarantee for rural residents' physical exercise in Changsha County. Through the investigation of villagers' satisfaction with rural public sports venues and their own fitness needs in Changsha County, the following data were obtained:

Table 3. Satisfaction Level of Villagers in Changsha County with Sports Venues (N=135)

Site	Satisfied%	Relatively satisfied%	General%	Dissatisfied%	I have not been in contact with it%
Stadium	20.0	31.5	33.6	8.6	6.3
Outdoor sports field	9.7	28.7	38.9	15.6	7.1
Fitness path	18.5	40.0	30.8	5.9	4.8
Fitness equipment	16.5	33.8	36.5	7.8	5.4

According to the data in Table 3, "satisfaction" accounts for 20% of the total number of respondents; The fitness path and fitness equipment were the second most satisfactory, accounting for 18.5% and 16.5% respectively; The satisfaction rate of outdoor sports venues is the lowest, accounting for only 9.7% of the

total surveyed population, while dissatisfaction also accounts for 15.6%. It can be seen that outdoor sports facilities in rural public sports venues in Changsha County are not as good as other venues, and cannot meet the sports needs of villagers in Changsha County very well.

According to the data in Table 4, 15.7% of

villagers believe that the existing fitness facilities in Changsha County "can meet" their own sports needs; 45.7% of villagers believe that the existing fitness facilities in Changsha County "basically meet" their own sports needs; 30.5% of villagers believe that the existing fitness facilities in Changsha County "cannot meet" their own sports needs; In addition, 68 villagers "do not care" whether their original fitness facilities can meet their own sports needs. From the above analysis, more than half of the villagers stated that fitness facilities can meet their sports needs, indicating that the sports venue supply of Changsha County Government has played a certain role. Villagers who love sports can use the existing sports venues to exercise and enjoy the fun of sports.

3.2 The Situation of Sports Social Organizations

3.2.1 Development of rural sports activities in Changsha County

Through interviews, it was found that there are currently 10 main sports activities in rural areas of Changsha County, including basketball, winter swimming, chess, Tai Chi, badminton, air volleyball, football, frisbee, table tennis, and long-distance running; There are also sports activities such as mountain climbing and dragon and lion dance, but the

number of participants is relatively small. It can be seen that there are currently a wide variety of sports activities in rural areas of Changsha County, with various types.

3.2.2 The organizational form of villagers' participation in public sports activities in Changsha County

There are various ways for villagers in Changsha County to participate in fitness activities. According to Table 5, it can be seen that 22.9% of villagers participate in fitness activities through spontaneously formed sports teams; 49.6% of villagers participate in fitness activities by joining sports clubs; 21.4% of villagers participate in fitness activities through sports organizations established by the village committee; the remaining 13.3% of villagers participate in fitness activities through other means. Nearly half of the villagers participate in fitness activities through community organizations. There are various sports clubs and associations in Changsha County, and there are many sports projects for villagers to choose from; in the club, many people with similar sports interests gather, creating a strong atmosphere. At the same time, the club has professional sports coaches to guide the villagers, making the club organization the main channel for villagers to participate in fitness activities.

Table 4. Satisfaction of Sports Needs of Villagers in Changsha County (N=135)

Satisfaction	Can meet	Basic satisfaction	Unable to meet	Not caring
Number of people	21	62	41	11
percentage	15.7	45.7	30.5	8.1

Table 5. Organizational Modes of Villagers' Participation in Fitness Activities in Changsha County (N=135)

Organizational form	A spontaneous sports team	Club organizations	Village committee sports organizations	others
number of people	31	67	29	18
%	22.9	49.6	21.4	13.3

3.2.3 The difficulties faced by rural mass sports organizations in Changsha County
From Table 6, it can be seen that 16.2% of villagers believe that they will face a lack of funding when organizing mass sports activities; 20.0% of villagers believe that there will be a lack of venues and facilities when organizing mass sports activities; 25.9% of villagers believe that there is a lack of professional guidance when organizing mass sports activities; The remaining 37.7% of villagers believe that organizing mass sports activities will face other problems. There are many

villagers participating in public sports activities in rural areas of Changsha County, so the problems faced by mass sports organizations are diverse. We can learn from other successful cases and prepare plans, imagine various problems and solutions in advance when organizing mass sports activities, so that villagers can better participate in various public sports activities and make full use of sports resources.

3.3 Sports Event Organization Situation

3.3.1 Organization of rural sports events in

Changsha County

Changsha County will host nearly 80 sports events of various types in 2023, with more than 10000 participants. Including provincial competitions and various mass sports events. At the same time, the second "Yuedong Xingsha" Changsha County People's Volleyball Tournament also came to a successful conclusion in the same year, attracting 44 teams and more than 500 famous volleyball enthusiasts from the whole county.

Table 6. Difficulties Faced by Rural Mass Sports Activity Organizations in Changsha County (N=135)

Problem	Lack of funding	No venue or facilities	Lack of personnel guidance	other
Number of people	22	27	35	51
%	16.2	20.0	25.9	37.7

3.3.2 The situation of villagers in Changsha County obtaining sports event information

With the rapid development of the Internet, the sports industry has also entered the digital era. Changsha County Sports Bureau has proposed the concept of "digital+sports" to promote the spread of sports related information. Nowadays, it is more and more convenient for

Table 7. Changsha County Villagers' Understanding of Sports Events (N=135)

Understanding level	Very familiar	More familiar	General understanding	Do not understand
Number of people	46	44	33	12
%	34.0	32.5	24.4	8.8

From Table 7, it can be seen that 34.0% of villagers have a very good understanding of sports events; 32.5% of villagers have a good understanding; 24.4% of villagers expressed general understanding; 8.8% of villagers stated that they do not understand. Overall, rural villagers in Changsha County have a relatively good understanding of sports events, with a large number of villagers belonging to the category of "relatively familiar" or above, indicating that Changsha County's promotion of sports events is relatively mature; But there are still a small number of villagers who do not pay attention to sports events, which may be related to their own interests and hobbies.

3.4 Training Situation of Social Sports Instructors in Changsha County

The public sports services provided by the government should include the training of social sports instructors. When villagers engage in sports activities, a large number of high-quality social sports instructors are the leaders of correct exercise for villagers. The training of social sports instructors is related to

This competition is an important representative of sports competitions in Changsha County and an important practice of resolutely implementing the "Healthy China 2030" planning outline. Generally speaking, sports competitions can be defined as a form of activity that showcases and compares athletes' skills, physical fitness, and willpower through competitive means, while promoting emotional communication and team spirit. It has a certain scale and regularity.

citizens to obtain sports related information, including various APPs and official official account. The attention of villagers to sports events can indirectly reflect the publicity efforts of Changsha County towards sports events. Through interviews and surveys with villagers in Changsha County, the data on their understanding of sports events are as follows:

the level of national fitness services in Changsha County. The data provided by the Changsha County Cultural Tourism Radio and Television Sports Bureau for the training of social sports instructors at the Changsha County Cultural and Sports Center in 2024 is as follows:

Table 8. List of Social Sports Instructor Training in Changsha County in 2024

Training name	Number of participants
Training for volleyball referees	150
Badminton referee training	150
Basketball coach training	200
Training on Prevention and Handling of Sports Injuries	150

Note: The data is sourced from the Changsha County Bureau of Culture, Tourism, Radio, Television, and Sports

As shown in Table 8, in 2024, the Changsha County Cultural and Sports Service Center mainly carried out training for social sports instructors in various projects such as badminton, volleyball, basketball, etc. The

training levels include multiple stages of first level, second level, and third level. In order to comprehensively promote the comprehensive development of mass sports in Changsha County, vigorously promote the smooth implementation of various sports activities, and improve the level of national fitness services, the urgent task is undoubtedly to strengthen the construction of the sports instructor team and train more professional instructors and coaches.

4. Conclusion

(1) From the aspects of capital investment, construction and expansion of venues, event organization, and training of social sports instructors, public sports services in Changsha County have developed rapidly in recent years. Most villagers are satisfied with the venues and can enjoy good public sports services, which is in line with the requirements of "Healthy China 2030".

(2) Although Changsha County has made some efforts to promote national fitness, it still faces the problems of insufficient public sports facilities and unreasonable allocation. Despite measures to provide free access to school sports facilities and the existence of many social sports venues, the allocation of venue facilities has not taken into account the varying levels of development in different regions and the sports needs of special groups.

(3) Despite various sports activities being organized, such as rural sports games, there is still a phenomenon of low village participation in sports activities in rural areas as a whole. This may be related to the accessibility and attractiveness of sports facilities, as well as residents' perception of sports activities.

(4) Although the promotion of sports events in Changsha County has improved compared to the past, there are still villagers who have not been informed about sports events, which is not conducive to their interest in sports projects.

Acknowledgement

The research was supported by 2024 Hunan Provincial Social Science Achievement Review Committee General Topic: Research on the Accessibility of Public Services for Rural Fitness in Hunan Province under the Digital Background (XSP24YBC445).

References

- [1] Xu Chunlei Vertical Intervention: Hierarchical Collaboration, Implementation Mechanism, and Intrinsic Logic of Public Sports Service Governance. *China Sports Science and Technology*, 2024, 60 (03):83-88.
- [2] Liu Haiyang, Zeng Nannan, Wang Yongxiang Research on the Collaborative Supply of Multiple Subjects for High Quality Development of Sports Public Services in Zhejiang Province Sports Perspective, 2023, (12):21-23.
- [3] Peng Meiling Research on the Supply Model of Public Services for National Fitness in Nanshan Road Smart Sports Community, Chongqing. Southwest University, 2024.
- [4] Lu Renjie Research on the Effective Supply Mechanism of Public Sports Services in Smart Communities. Jiangxi Normal University, 2024.
- [5] Wang Qifu, Wu Zhenwen. On the Sports Rights of Landless Farmers in the Process of New Urbanization in China. *Sports Technology*, 2016, 37(04):71-72+75.
- [6] Chen Jie, Wang Qifu Research on the Construction of Rural Public Sports Service System in Hunan Province under the Background of New Urbanization. *China High tech Zone*, 2017, (18):226-227.
- [7] Chen Jiexin Multi subject collaborative mechanism and countermeasures for the supply of science popularization education services in public sports museums. South China University of Technology, 2023.
- [8] Li Yang, Fang Hui, Wang Suifang, Tao Lin Policy network coupling and collaboration of integrated sports and medical services: analysis of demand, supply, and environment. *Journal of Shenyang Sport University*, 2023, 42(01):57-63.
- [9] Xu Ting Exploration of Diversified Supply of Community Sports Public Services in the Central Urban Area of Chengdu. Chengdu Sport University, 2022.
- [10] Wang Qifu, Wu Zhenwen. Validity analysis of sports participation of displaced farmers. *Sports Technology*, 2015, 36(05):79-82.