Practical Logic and Pathways for Cultivating Socialized Service Subjects for the Livestock Industry in Jiangxi Province

Liyan Chen[1,2], Yuxi Pan[1,2], Yulin Chen[1,2], Tingting Guo[1,2], Xia Qiu[1,2]

[1] College of Engineering, Jiangxi Agricultural University, Nanchang 330045, China

[2] Research Center for Agricultural Mechanization Development, Jiangxi Agricultural University, Nanchang 330045, China

Funding: This study was supported by the National Key Research and Development Program of China (2022YFD1600600).

Abstract: The livestock industry links the "vegetable basket" of urban and rural residents with farm household income, and has long occupied an important position in the agricultural and rural economy of Jiangxi Province. To address the weak connection between smallholder farmers and modern animal husbandry, Jiangxi, based on the 14th Five-Year Plan for Agricultural and Rural Modernization and the implementation opinions on high-quality development of the poultry industry, formulated the Accession Specification for Service Subjects of Rural Characteristic Industries (Livestock and Poultry), specifying requirements in four dimensions: materials and equipment, premises, personnel, and service content. Taking this specification as the entry point, and combining the five-category service framework (production, agro-technology, agricultural inputs, information, and marketing) with local practices such as the Ningdu yellow chicken industry, this paper analyzes the practical logic and prominent contradictions in cultivating livestock service subjects in Jiangxi. It identifies problems including fragmented service links, shortage of specialized personnel, mismatch between supply and demand, and loose interest linkages, and proposes pathways from the perspectives of classified cultivation, whole-chain service provision, and policy and interest linkage, so as to provide a reference for the high-quality development of animal husbandry in Jiangxi.

Keywords: Livestock Service Subjects; Rural Characteristic Industries; Whole-Chain Services

1. Introduction

Industrial prosperity is the foundation of rural revitalization. As in many other parts of China, livestock farming in Jiangxi has long been characterized by the coexistence of smallholder farms, family farms, and scaled operations. A large number of small and medium-sized operators cannot independently complete breed improvement, feed formulation, disease prevention and control, mechanized operations, and product marketing. Centralizing these tasks that "cannot be done or are not cost-effective" and entrusting them to professional organizations is a practical choice for connecting smallholders with modern animal husbandry. Against this background, Jiangxi, in implementing the General Office of the State Council Document No. 31 of 2020 and the Ministry of

Agriculture and Rural Affairs Document No. 6 of 2019, formulated the Accession Specification for Service Subjects of Rural Characteristic Industries (Livestock and Poultry) in light of local conditions, specifying requirements for materials and equipment, premises, personnel, and service content. This specification is not only the operational yardstick for cultivating livestock service subjects in Jiangxi but also an observation sample of how an underdeveloped agricultural province can channel scattered farming into modern animal husbandry.

2. Practical Logic for Cultivating Livestock Service Subjects in Jiangxi

The service-oriented transformation of the livestock industry has its own specific policy lineage and industrial foundation in Jiangxi [2]. From the policy perspective, the national level has long placed the improvement of animal husbandry mechanization and the development of socialized services in a prominent position [6]. Jiangxi subsequently translated this top-level requirement into local context: through the 14th Five-Year Plan for agricultural and rural modernization [7] and the implementation opinions on high-quality poultry development [8], the province explicitly plans to build a number of livestock service subjects. In other words, the Jiangxi accession specification does not start from scratch but converts national guidance into registrable, assessable, and supportable conditions.

From the industrial perspective, livestock farming in Jiangxi is dominated by small and medium-sized operators, while the technical thresholds and environmental requirements for breed improvement, disease control, environmental management, and manure treatment continue to rise, and farmers often cannot cope on their own. Through specialized division of labor such as feed processing, mechanized operations, disease prevention, technical training, and product marketing, socialized service subjects can achieve cost reduction and efficiency improvement without changing the operating status of farm households, which is also a common practice for organically connecting smallholders with modern agriculture [4-5]. The approach to cultivating the yellow chicken industry in Ningdu County is representative: family farms focus on farming, farmer cooperatives strengthen services, and leading enterprises develop markets. In 2025, the county slaughtered approximately 100 million yellow chickens, and the output value of the whole industrial chain exceeded 5 billion yuan, in which service subjects played an irreplaceable bridging role.

Of course, service subjects can truly function only when development follows rules. In the early stage, problems such as irregular services, inconsistent standards, and undetectable quality are likely to emerge. The accession specification sets thresholds in four dimensions—materials and equipment, premises, personnel, and service content—both to prevent low-level duplicated construction and to provide a basis for project support and service evaluation. This means that Jiangxi livestock socialized services are shifting from "encouraging people to start first" to "working according to standards".

3. Current status and Prominent Contradictions Under the Accession Framework

3.1 The Five-category Service Framework

According to the specification, farmer (agricultural machinery) cooperatives, agricultural enterprises, family farms, and village collective economic organizations that wish to engage in socialized services for livestock production in Jiangxi may be admitted as long as they meet the conditions for one of five service categories: production service, agro-technical service, agricultural input service, information service, and marketing service. Production service covers feed (forage) processing, farming machinery, transfer and treatment of dead livestock and poultry, collection of

livestock products such as milking and egg collection, quality monitoring, packaging machinery, and on-site water and electricity facilities. Agro-technical service focuses on veterinary drugs and vaccines, quarantine and diagnosis premises, and breeding stock trials, and requires personnel with backgrounds in animal husbandry and veterinary medicine, animal quarantine, or food quality and safety. Agricultural input service concentrates on breeding stock, feed supply, and compliant retail outlets. Information service relies on integrated monitoring equipment and training classrooms to provide weather, quality monitoring, and product traceability information. Marketing service requires transport vehicles, storage premises, and qualified sales channels. The five categories generally cover the whole process from inputs to end markets. However, the threshold design of "meeting one category is sufficient for admission" also sows the hidden risk of single-link service provision.

3.2 Practical Contradictions

Judging from the actual implementation of the specification, Jiangxi livestock service subjects still face several prominent contradictions [1,3]. The most intuitive is the fragmentation of service links. Admission is based on the principle that "meeting one category is sufficient"; in practice, most subjects only perform a single link—feed sellers do not handle epidemic prevention, and machinery operators do not handle marketing. Comprehensive organizations that integrate production, agro-technology, inputs, information, and marketing are scarce, and farmers still need to deal with several separate providers, so transaction costs cannot be reduced. Accompanying this problem is the talent shortage: the specification explicitly requires professional backgrounds in animal husbandry and veterinary medicine, animal quarantine, or food quality and safety for agro-technical services, and requires familiarity with breeding, farming, disease, and processing knowledge for production services. Yet versatile talents who master both farming and epidemic prevention, and both technology and management, are rare at the grassroots level. Some cooperatives are even transformed from individual farmers, with limited standardized service capabilities.

A deeper problem lies in the supply-demand interface. Existing studies generally find that farming subjects have the most urgent demand for financial lending, disease prevention, and technical training, whereas current service provision in Jiangxi is concentrated on material sales and simple machinery operations, with insufficient supply of value-added services such as microcredit, agricultural insurance, centralized manure treatment, and quality traceability. In addition, the equipment of some subjects remains at a basic level, and the penetration rate of automatic feeding, environmental control, harmless treatment of dead livestock, and integrated monitoring is not high, making it difficult to support standardized farming. Moreover, the relationship between service subjects and farmers is mostly one-off transactions or labor relations, lacking close linkages such as orders, dividends, or trusteeship, so service quality and farmers' income remain unstable.

4. Pathways for Cultivating Livestock Service Subjects in Jiangxi

4.1 Improving Access, Exit, and Classified Cultivation Mechanisms

The accession specification is a bottom line, not an endpoint. On this basis, Jiangxi can establish a closed loop of "admission–evaluation–exit": at registration, clarify the service scope and quality commitments of subjects, and then tilt limited project funds toward cooperatives and agricultural enterprises that can provide whole-chain services through demonstration evaluation. For small subjects such as family farms and village collective economic organizations, they should be guided to

specialize in and excel at basic links such as production and input services. For leading enterprises and federated cooperatives, they should be encouraged to extend toward high-value-added links such as agro-technology, information, and marketing, so as to form a pattern of dislocation-based development among large, medium, small, and micro subjects, rather than everyone crowding into the same link and competing on price.

4.2 Upgrading Whole-chain Mechanization and Informatization Services

To address service fragmentation, qualified subjects should be encouraged to shift from single material supply to comprehensive trusteeship covering "breeding and rearing, disease prevention, machinery operations, manure treatment, and product marketing". Making full use of agricultural machinery purchase subsidies, equipment such as automatic feeding, environmental control, epidemic prevention, and waste treatment should be included in the subsidy scope as required, so as to raise the mechanization level of key links. Information service subjects can take the lead in building integrated farming environment monitoring and product traceability platforms, linking weather early warning, safe use of inputs, quality inspection, and traceability information, and using digital means to reduce disease and quality safety risks.

4.3 Improving Policy Support and Interest-linkage Mechanisms

For subjects that meet the accession conditions, Jiangxi can provide preferences in facility land, credit guarantee, and premium subsidies, focusing on alleviating the financing difficulties and high risks of small and medium-sized service subjects. More importantly, farmers and service subjects should be bound together in one industrial chain: promote the model of "leading enterprise + cooperative + family farm", and through long-term orders, guaranteed purchases, profit return, or equity cooperation, allow farmers to share the value-added income from processing and circulation. At the same time, relying on the grassroots agro-technical extension system and vocational training, implement the personnel professional background requirements of the specification, and reserve talent for the sustainable development of service subjects.

5. Conclusion

Cultivating livestock service subjects is an important lever for Jiangxi to bring smallholders into modern animal husbandry and promote the revitalization of rural characteristic industries. The Accession Specification for Service Subjects of Rural Characteristic Industries (Livestock and Poultry) provides an operational yardstick for cultivation, but the vitality of a standard lies in its implementation. On the premise of holding the accession threshold, Jiangxi should, through classified cultivation, whole-chain services, and close interest linkages, push livestock service subjects from "whether they exist" toward "whether they are good", so that services truly reach the front line of farming and provide support for the high-quality development of animal husbandry and sustained growth of farmers' income.

References

[1] CASS Rural Development Research Team, Houkai Wei, Kai Cui, et al. Agricultural and rural modernization: priorities, difficulties, and promotion paths. Chinese Rural Economy 5, 2–20 (2024). DOI:10.20077/j.cnki.11-1262/f.2024.05.001.

[2] Yuan Li, Yixin Dou. Logical mechanism, main characteristics, and strategic priorities of agricultural and

rural modernization. Economic Review Journal 5, 87–94 (2024). DOI:10.16528/j.cnki.22-1054/f.202405087.

[3] Yangyang Xie, Hao Li. Promoting Chinese-style agricultural and rural modernization: realistic foundation, main challenges, and realization paths. Research on Technology Economics and Management 4, 134–139 (2024). https://link.cnki.net/doi/10.19747/j.cnki.1009-2463.2026.03.002

[4] Yinghui Li, Hong Chen, Xing You. Theoretical mechanism and empirical study of agricultural socialized services empowering high-quality rural development. Research of Agricultural Modernization 45(1), 79–91 (2024). DOI:10.13872/j.1000-0275.2024.0013.

[5] Yang Wang, Yingxin Xu, Yuqi Yang. Agricultural socialized service platforms empowering the organic connection between smallholders and modern agriculture: mechanism, challenges, and policy responses. Journal of Anhui Agricultural University (Social Sciences Edition) 35(3), 20–30 (2026). DOI:10.19747/j.cnki.1009-2463.2026.03.002.

[6] General Office of the State Council. Opinions on promoting the high-quality development of animal husbandry. Hunan Agriculture 1, 11 (2021).

[7] Jiangxi Provincial People's Government. Notice on issuing the 14th Five-Year Plan for agricultural and rural modernization of Jiangxi Province. Gazette of Jiangxi Provincial People's Government 7, 8–45 (2022).

[8] General Office of Jiangxi Provincial People's Government. Implementation opinions on promoting the high-quality development of the poultry industry. Gazette of Jiangxi Provincial People's Government Z1, 85–87 (2022).