Practice and Reflection on Party-Building Brand Development Driving the Advancement of Agricultural Scientific Innovation and Technology Services

Lixian CUI, Jinli LIU

Changli Institute of Pomology, Hebei Academy of Agriculture and Forestry Sciences, Changli 066600, China

Abstract Based on the core principles of General Secretary Xi Jinping's important speech on July 9th, this article explores the relationship between Party-building and scientific innovation/technology services in research institutions. Combining practical cases from Changli Institute of Pomology under Hebei Academy of Agriculture and Forestry Sciences, it proposes practical implementations and reflections on how Party-building brands can drive scientific innovation and technology services. The study demonstrates that Party-building brand development can effectively promote deep integration between Party-building and professional work, providing strong political assurance and organizational support for agricultural scientific innovation and technology services.

Key words Party-building brand, Agriculture, Scientific innovation, Technology services

0 Introduction

General Secretary Xi Jinping's important speech on July 9th emphasized that the key to addressing the relationship between Party-building and professional work, and resolving the "two separate layers" issue, lies in identifying convergence points to promote mutual reinforcement between institutional Party-building and operational work. Party groups (Party committees) of all departments should focus on central tasks to strengthen Party-building, leverage Party-building to boost scientific research, and persist in integrating Party-building with professional work through coordinated planning, deployment, implementation, and inspection, ensuring all measures are mutually supportive in both design and execution.

In the agricultural sector, the integrated development of Party-building with agricultural scientific innovation and technology services is particularly crucial. This not only determines the development direction of agricultural research institutions but also significantly impacts China's agricultural modernization process and the effective resolution of issues related to "agriculture, rural areas, and farmers". In recent years, agricultural research institutions nationwide have actively explored new approaches to integrate Party-building with professional work, with Party-building brand development emerging as a key driver for promoting dual advancement.

1 Mutual promotion between Party-building and agricultural scientific innovation/technology services jointly driving agricultural development

- 1.1 Party-building providing guidance and safeguards for agricultural scientific innovation and technology services
- **1.1.1** Directional guidance. Party-building ensures that agricultural scientific innovation and technology services consistently align with national agricultural development strategies and farmers'

practical needs. Through in-depth study of national policies and field research in rural areas, Party organizations can accurately grasp the overarching goals of agricultural modernization, guiding researchers to focus on key areas for scientific innovation. This ensures research outcomes practically serve agricultural production, such as conducting scientific work centered on national strategic priorities including food security assurance, agricultural product quality improvement, and ecological agriculture development.

- 1.1.2 Cohesion building. Party organizations demonstrate strong mobilization and organizational capabilities in the agricultural science and technology sector. On the one hand, Party organizations enhance researchers' sense of mission and responsibility through various activities, attracting outstanding talents to agricultural science and technology undertakings while pooling human resources from diverse sectors. On the other hand, Party organizations coordinate collaborations between different departments and institutions, integrating material resources such as research equipment and funding. This provides solid human and material foundations for agricultural scientific innovation and technology services, facilitating the smooth implementation of major research projects and extensive coverage of technology service networks.
- 1.1.3 Policy guarantee. Party organizations actively promote the formulation and implementation of relevant policies. Regarding research funding support, Party organizations secure increased financial investment for agricultural research through communication and coordination with government departments, ensuring the continuous advancement of research projects. Simultaneously, they promote the introduction of preferential policies in areas such as research achievement transformation and technology service incentives, creating favorable policy environments that stimulate researchers' enthusiasm and creativity, thereby facilitating the smooth progress of agricultural scientific innovation and technology services.
- 1.2 Agricultural scientific innovation and technology services as key vehicles for Party-building serving the "agriculture, rural areas, and farmers"
- **1.2.1** Manifestation of core purpose. The concrete manifestation

of the Party's fundamental purpose of serving the people whole-heartedly in the "agriculture, rural areas, and farmers" lies in its commitment to solving practical problems in agricultural production. Agricultural scientific innovation develops more efficient planting and breeding techniques, cultivates superior varieties, and enhances agricultural productivity and quality; technology services directly transfer these innovations to farmers, helping them increase income and improve livelihoods. For instance, promoting new irrigation technologies and green pest control technologies has not only reduced agricultural production costs but also improved crop yields and quality, delivering tangible benefits to farmers.

- 1.2.2 Enriching Party-building connotations. Party organizations' active participation in agricultural scientific innovation and technology service activities has significantly enriched the content and forms of Party-building work. By leading Party members to engage deeply in rural grassroots communities through technical training and on-site guidance activities, Party organizations have transformed Party-building work from traditional theoretical study and organizational routines into practices closely aligned with rural realities. These practical activities have not only strengthened the cohesion and influence of Party organizations in rural areas but also enabled Party members to better understand rural needs and enhance their capacity to serve the public.
- 1.2.3 Enhancing Party member competence. In terms of improving Party member competence, participation in agricultural scientific innovation and technology services enables Party members to develop multifaceted capabilities. They must integrate professional knowledge with practical production to solve farmers' technical challenges, a process that elevates Party members' professional expertise and practical skills. Simultaneously, close interactions with farmers deepen Party members' understanding of public needs, strengthen their service awareness and capabilities, thereby better exemplifying vanguard roles and maintaining the Party's advanced nature and purity.

2 Practices and reflections on agricultural research institutions under the guidance of Party-building brands

The Party General Branch of Changli Institute of Pomology, Hebei Academy of Agriculture and Forestry Sciences has meticulously developed the "Changli Pomology Spirit · Party Flag Red" Party-building brand under Party-building guidance. This serves as a vivid practice of Party-building leading scientific innovation and technology services, representing an essential pathway for research institutions to achieve high-quality development in the new era.

2.1 Party-building brand guides standardized Party branch construction to strengthen Party leadership The Party General Branch of Changli Institute of Pomology has scientifically established Party branches by embedding Party groups within innovation teams. Emphasizing laboratory and Party group development with a clear "all work extends to Party branches" orientation, it implements a "one branch, one characteristic; one branch, one brand" approach. By integrating Party group theme day activities with scientific innovation services, including guidance at demonstration

bases and leading enterprises to resolve technical challenges, the Institute has made Party-building a genuine catalyst for scientific research, enhancing the visibility of the "Changli Pomology Spirit • Party Flag Red" brand.

- 2.2 Party-building brand drives scientific innovation to activate Party member teams With over 90% of researchers being Party members, Changli Institute of Pomology established "Party Member Scientific Pioneer Positions" to stimulate members' enthusiasm and creativity in innovation, encouraging them to lead major research projects. A scientific research incentive mechanism was created to recognize and reward Party members achieving outstanding research results. Strengthening research team development, it fosters communication and collaboration between Party members and non-members, cultivating an excellent research environment. For example, in chestnut research projects, Party member researchers led teams into mountainous areas for long-term resource investigations, overcoming technical challenges to develop multiple superior chestnut varieties. In 2024, the project "Exploration of Premium Chestnut Resources, Innovation in Efficient Breeding Technologies, and Application of New Varieties Development" was awarded the Hebei Provincial Science and Technology Progress First Prize, advancing the chestnut industry's development.
- 2.3 Party-building brand guides technology services to energize Party member teams To enhance technology services, Changli Institute of Pomology established a Party Member Technology Service Vanguard Team that regularly visits rural grassroots areas and orchards to provide face-to-face technical assistance for fruit growers. Collaborating with local governments and agricultural enterprises, it has built technology demonstration bases to promote advanced fruit tree cultivation techniques and management practices through model-driven approaches. Utilizing modern information technology, the Institute conducts online technical training and advisory services, expanding the coverage of technology services.

In 2024, the Institute demonstrated its self-developed new varieties (strains) and conducted rootstock-scion combination regional trials for superior lines across 47 new agricultural entities and enterprises in 16 provinces/municipalities/autonomous regions nationwide. It showcased 22 new varieties/superior lines, promoted 12 innovative technologies, with demonstration areas expanding by approximately 200 ha compared to the previous year. Conducting over 120 technical guidance sessions on pruning, cultivation techniques, green pest control, and disaster response, it trained 8 200 fruit growers and technicians, distributing over 3 000 technical manuals.

2.4 Party-building brand enhances institutional influence to elevate agricultural science image The Party General Branch prioritizes institutional influence enhancement with the goal of "strengthening internal capabilities and enhancing external image". It designs media campaigns focusing on major achievements, key projects, talent development, and "agriculture-rural-farmer" technology services to amplify the voice of agricultural science. In 2024, 12 self-produced popular science short videos on orchard management techniques were published on the "Learning Power Platform", accumulating over 16 000 views. These measures have continuously elevated the Institute's social influence,

garnering increased support and attention for agricultural research innovation and technology services.

3 Prospects

In future development, Changli Institute of Pomology will deepen Party-building brand development, keeping its banner aloft in scientific innovation and technology services to guide greater intellectual contributions and continuous breakthroughs. It will strengthen the deep integration of Party-building with professional work while exploring innovative operational models and methodologies. For scientific innovation, increased investment in cuttingedge technology research will cultivate high-quality talents and achieve more groundbreaking results in key fields. Regarding technology services, it will expand service coverage, improve quality, and strengthen ties with farmers and agribusinesses to address practical agricultural challenges. Simultaneously, enhanced promotion of the Party-building brand will exemplify leadership, providing references for other agricultural research institutions to jointly advance China's agricultural scientific innovation and technology service development.

References

 ZHANG JL, ZHUANG Y. Grasping the direction of agricultural science and technology innovation to lead the new normal of agricultural science

- and technology management; practices and reflections on strengthening scientific research and management at the Chinese Academy of Agricultural Sciences [J]. Journal of Agricultural Science and Technology Management, 2016, 35(1): 18 20. (in Chinese).
- [2] LIN W, ZHAO QW, ZHANG YT, et al. Practice and exploration on the integrated development of party building and technology service in prefecture-level agricultural research institutes; A case study of Jiangsu Lixiahe Regional Institute of Agricultural Sciences [J]. Journal of Agricultural Science and Technology Management, 2020, 39(3): 94 – 96. (in Chinese).
- [3] DING WR, AI YC, JIANG GL. Discussion on issues and countermeasures of integrating party building innovation with scientific innovation in agricultural research institutes [J]. Journal of Agricultural Science and Technology Management, 2017, 36(6): 93 96. (in Chinese).
- [4] LU MX. Strategies to enhance the integration between party building work and scientific innovation in agricultural research institutes [J]. Agricultural Science & Technology and Equipment, 2021(3): 84 – 85. (in Chinese).
- [5] WANG W, WU H, WANG GL. Enhancing technology service support capacity of party member experts in grassroots public agricultural research institutes: A case study of Huaiyin Institute of Agricultural Sciences in Xuhuai Region, Jiangsu [J]. Rural Economy and Science-Technology, 2023, 34(17): 241-244. (in Chinese).
- [6] ZHANG F, WANG DW. Focusing on improving the effectiveness of party building in scientific research institutions in the new era[J]. Journal of Political Work, 2023(7): 18-20. (in Chinese).

(From page 29)

biological control, and physical/chemical lure control technologies. Research should be conducted on precision application techniques for biological pesticides to establish a green control technology system centered on ecological regulation supplemented by scientific pesticide application. This system should be widely promoted and applied in production to achieve efficient, ecological, and green control of diseases, insect pests, and weeds in the Z-bungeanum industry, thereby reducing the industry's dependence on and usage of chemical pesticides.

4.3 Strengthening training, publicity and pesticide supervision and law enforcement During key stages of Z. bungeanum production such as garden clearing, pre-germination water-fertilizer management, and fruit expansion stage management, agricultural management departments and Z. bungeanum industry R&D teams should actively organize farmers, large-scale growers, and grassroots agricultural technicians to conduct technical training on scientific pesticide use and production management techniques. This includes pesticide variety selection, application methods, frequency of use, dosage for Z. bungeanum, aiming to enhance practitioners' understanding of pesticides and scientific cultivation levels while reducing excessive pesticide use. Through online platforms, newspapers, magazines, and other media, scientific pesticide application, agricultural product quality and safety, and green control concepts should be actively promoted to strengthen growers' awareness for scientific pesticide use. In addition to strengthening pesticide supervision and law enforcement to strictly investigate illegal activities such as trafficking counterfeit and substandard pesticides, provincial agricultural and rural departments should actively organize personnel to formulate and implement interim pesticide use measures based on local Z. bungeanum production realities. This involves guiding the adoption of multiple measures to control Z. bungeanum diseases, insect pests, and weeds, further reducing pesticide residues, improving quality and efficiency, and promoting the healthy development of the Z. bungeanum industry.

References

- [1] YANG JZ, YIN XW, YUAN J, et al. Identification and screening fungicides of the pathogen of Zanthoxylum bungeanum brown spot [J]. Acta Phytopathologica Sinica, 2023, 53(6): 1065-1071. (in Chinese).
- [2] WANG B, HE J, WANG XJ, et al. Toxicity test on different fungicides against prickly ash gummosis in vitro[J]. Journal of Gansu Agricultural University, 2018, 53(5); 87 – 92. (in Chinese).
- [3] YAN WT, QIU GS, SUN LN, et al. Brief introduction of seven new acaricides for fruit tree [J]. South China Fruits, 2014, 43(3): 124, 130. (in Chinese).
- [4] WANG W, XIE LJ, ZHONG YP, et al. Screening of effective pesticides for control of important diseases and insect pests of double cropping rice in Jiangxi[J]. Plant Protection, 2022, 48(1): 312 – 319. (in Chinese).
- [5] YANG XP, LI RM, HUANG DX, et al. Effects of PBO and Fuxing treatments on Calyx Removal and Fruit Quality of "Xiangnan Pear" [J]. South China Fruits, 2014, 43(6): 97-99. (in Chinese).
- [6] LI FG, DENG FS, YANG J, et al. Current status and prospect of pesticide application risk management on minor Crops[J]. Modern Agrochemicals, 2022, 21(5): 1-6. (in Chinese).