

The Zhejiang policy framework is especially notable for two reasons. First, it emphasizes service proximity and regional coverage. The idea of a local service radius is crucial in rice production because time-sensitive operations lose value if machinery, seedlings, or drying capacity arrive too late. Second, the policy ties service center construction to broader goals of agricultural modernization, green development, emergency capacity, and digital management. This means the service center is expected to do more than dispatch machines. It is expected to act as a local platform for coordinated agricultural support.

Shangyu District reflects this provincial direction at the district level. The district's 2024 early-rice machine-transplanting subsidy scheme explicitly aimed to raise machine-transplanting rates, stabilize grain production, and strengthen production capacity through targeted support for transplanting operations. Meanwhile, Shangyu's 2024 development statistics continued to frame grain production, high-standard farmland, and agricultural modernization as strategic tasks rather than residual rural issues. Zhejiang's 2024 notice on leading agricultural varieties and major promoted technologies likewise signals that modernization in the province is expected to combine better varieties, better organization, and better service support.

For rice production specifically, this policy environment matters because it legitimizes service integration. It allows a service center to combine nursery work, machinery operation, drying, and technical assistance within one operational system instead of treating each as a separate administrative line. That is one reason why Zhejiang is a particularly useful province for examining how modern agricultural service centers function in practice.

2.4 Relationship between agricultural service centers and agricultural modernization

Agricultural service centers are closely tied to agricultural modernization because they provide a way to modernize production without assuming that all producers will become large-scale owner-operators. This is an important institutional point. In many Chinese regions, modernization is not happening through the disappearance of smallholders. It is happening through new arrangements that allow smallholders, cooperatives, and service organizations to operate together within a more professional and standardized system (Li et al., 2024; Zeng et al., 2025).

From a production perspective, service centers support modernization in at least four ways. First, they improve continuity across production stages. Modern agriculture depends not only on advanced inputs, but on correct sequencing. A service center can connect pre-production, in-season management, and postharvest handling more reliably than a set of disconnected providers. Second, service centers make technology more accessible. Farmers who cannot afford their own dryers or nursery systems can still benefit from them through service purchase. Third, service centers reduce coordination failures. A field may not need more theory; it may simply need seedling delivery, machinery dispatch, and drying capacity to arrive in the right order. Fourth, service centers make aggregation possible. By bringing together enough service demand, they make investment in equipment, training, and postharvest infrastructure more economically reasonable.

Modernization also has an organizational side that is sometimes overlooked. A service center does not only modernize the field. It modernizes routines: booking, scheduling, team management, maintenance, training, storage, quality records, and in some cases digital traceability. This is why the institution itself deserves attention. Mechanization without organization can remain partial and unreliable. Organization is what turns individual technologies into a functioning production system.

3 Organizational Structure and Operational Functions of Mashan Agricultural Service Center

3.1 Basic construction and functional layout of the service center

According to the case materials supplied with the manuscript, Mashan Agricultural Service Center is located in Mashan Village, Shangyu District, and is operated by the Shaoxing Shangyu Mashan Grain Specialized Cooperative. The center occupies 6.73 mu and was designed as a working service platform rather than as a symbolic demonstration building. The reported original construction included a 2,400 m² drying center, a 1,888 m² seedling cultivation center, and a 200 m² machinery shed, with total project investment exceeding RMB 6 million. The internal layout also included repair rooms, storage rooms, dryers, processing areas, and training or meeting space (Figure 1).