

selection program, reflects this shift from basic output protection to quality-centered, greener, and more branded rice development. In such a policy environment, high-quality rice production is best understood not as a niche activity, but as a mainstream direction for local grain agriculture.

The local rice landscape around Mashan combines relatively open paddy fields with infrastructure suited to mechanized operations. Level rice fields, irrigation ditches, road access along the field edge, testing plots for quality varieties, and nearby drying and service facilities. Full-process mechanization depends on field conditions, access roads, service dispatch capacity, and post-harvest facilities just as much as it depends on the machines themselves. In regions where fields are physically operable and service centers are close enough to dispatch machinery rapidly, the organizational value of mechanization increases sharply. This point is broadly consistent with studies showing that land conditions, service access, and operation scale jointly affect machinery utilization and production efficiency in Chinese rice systems (Wang et al., 2023).

2.2 Construction of mashan agricultural service center

Mashan Agricultural Service Center is located in Mashan Village, Shangyu District, and was built and is operated by the Shaoxing Shangyu Mashan Grain Specialized Cooperative. The project covers 6.73 mu and includes a drying center of 2,400 square meters, a seedling cultivation center of 1,888 square meters, and a machinery shed of 200 square meters. Total investment exceeded RMB 6 million. The center was designed with relatively clear functional zoning, including repair rooms, machine sheds, processing rooms, storage rooms, drying rooms, and training or meeting spaces. The same materials state that the center has seven fixed workers, around 100 sets of agricultural machinery and equipment, machine assets valued at roughly RMB 8 million, and a 100% licensing rate among machinery operators.

This basic profile matters for two reasons. First, it shows that the center is not a symbolic public building; it is a working service platform built around operational capacity. Second, it demonstrates a familiar but important principle in agricultural modernization: service centers succeed when they combine physical infrastructure, machinery, people, and organizational routines, rather than treating mechanization as a matter of equipment ownership alone. Zhejiang's 2024 policy on modern agricultural service centers explicitly stressed the need for coordinated functions such as full-process mechanized operation, centralized seedling cultivation, drying and processing, technical services, and training, and the Mashan center closely matches that policy logic in built form (Figure 1).



Figure 1 Aerial view of Mashan Agricultural Service Center and surrounding paddy landscape (Photoed by Xinfeng Ren)

The aerial image of the center reinforces this interpretation. The service buildings are embedded directly within a rice-producing landscape, with easy road access and visible proximity to operational fields. This spatial arrangement is part of the center's practical value. A center that sits close to its service area can move seedlings, machines, and harvested grain quickly, which is essential during narrow operation windows and emergency weather periods. That operational closeness is also consistent with Zhejiang's larger goal of building a