

From Asian Fields to Africa Future: Knowledge Co-Creation Institutional Foundations for Rice Productions – Experience shared from Japan

Rice production in Japan has a long history. Wetland rice cultivation is believed to have started around the 10th century BC. Rice has not only been a staple food, but has also played a central role in shaping local communities, taxation systems, rural society, and food culture.

The development of rice production in Japan was not achieved solely through technology or infrastructure. Institutional arrangements, public policy, producer organizations, marketing systems, and research and extension services also supported it. Recent Japan's rice production (milled rice) is approximately 7.79 million tonnes with 1,425,000 ha (Ministry of Agriculture, Forestry and Fisheries, Japan, 2025) — a figure achieved not through expanding cultivation areas, but through the institutional depth described in this article.

1. Policy Framework to Protect Rice as a Staple Food

In Japan, rice has long been regarded as the country's staple food and a core element of food security. For this reason, the Government has treated stable rice supply and price stability as important policy priorities. A major turning point in Japan's rice policy was the enactment of the "Law for Stabilization of Supply-Demand and Price of Staple Food" in 1994. This law marked a shift from the post-war system of direct government control over rice distribution and prices to a system that placed greater emphasis on private-sector distribution, while maintaining government functions related to supply-demand outlooks, public stockholding, purchase and sale operations, and stable supply. Through this transition, rice in Japan moved from being a commodity under comprehensive government control to a staple food supported by public policy while incorporating market mechanisms. Later, in 2018, the administrative allocation of rice production targets was abolished, and Japan further shifted toward demand-oriented production.

This experience shows that for countries in Africa seeking to expand rice production, institutional design is as important as the increase in production itself. Market demand, price stability, food reserves, distribution systems, and policy coordination all need to be considered together. For CARD member countries, this provides an important lesson. Through the implementation of National Rice Development Strategies, it is essential to define a clear policy direction, design appropriate institutional mechanisms, and strengthen administrative functions that can translate policy objectives into concrete actions on the ground.

2. Agricultural Cooperatives as the Institutional Platform of the Rice Value Chain

Another important institutional foundation of Japan's rice production has been the role of agricultural cooperatives, known as JA (Japan Agricultural Cooperatives). JA has developed as a mutual-support organization that assists farmers in both farming activities and rural livelihoods. As of 2025, there are 496 JA cooperatives across Japan's 47 prefectures, indicating the continued nationwide presence. Expanding rice production requires more than technical support to individual farmers. It also requires organized systems that connect farmers to markets, finance, agricultural inputs, and extension services. Japan's experience shows that farmer organizations and cooperatives can serve not only as producer groups, but also as institutional platforms linking farmers to the wider rice value chain.

The effectiveness of JA has also been supported by trust, mutual assistance, and collective action within rural communities. In this sense, Japan's rice production system has been strengthened not only by formal institutions but also by a long-standing culture of cooperation at the community level.

For CARD member countries, this offers a constructive perspective. Many countries are already working to strengthen farmer groups, cooperatives, private-sector engagement, and public institutions within the rice value chain. By further enhancing coordination among these actors and creating an environment in which farmers can more easily access inputs, technologies, finance, and markets, efforts to increase rice production can become more sustainable.

3. Research, Extension and Administration-Working as One System

Japan's rice production has also been supported by close collaboration among research institutions, local governments, and extension services. After the Second World War, agricultural extension services played an important role in providing farmers with technical guidance and support for farm management improvement, while the central and local governments shared responsibilities in operating the system.

A key feature of this extension system was that it did not simply transfer research results to farmers in a one-way manner. It also helped identify farmers' needs and challenges, and fed them back into research and policy processes. In this way, the extension system functioned as a bridge between the field and policy.

For CARD member countries, such linkages are also highly relevant in advancing NRDS implementation. Connecting research, extension, administration, farmer organizations, and the private sector is essential for turning policy objectives into practical results. The development of rice production requires not only technologies themselves, but also institutions, organizations, and policy implementation mechanisms that enable farmers to use those technologies continuously and effectively.

In conclusion, Japan's experience does not suggest that its institutional model should be directly replicated in other countries. Rather, it provides a useful case for considering how each country can strengthen its own administrative functions, farmer organizations, extension systems, market linkages, and trust-based collaboration among stakeholders.

CARD member countries and CARD initiative continue to move forward steadily toward the common goal of increasing rice production, while addressing country-specific challenges and building stronger institutional foundations for sustainable rice sector development.



Paddy farm after seedling transplantation



Paddy farm before harvest