

Recognizing the potential for sustainable community development, Walailak University, under the leadership of the Center for Academic Services and in collaboration with the School of Agricultural Technology and Food Industry, has initiated a project to enhance and elevate the value of indigenous rice products. This initiative is part of a research program aimed at improving and developing local rice varieties to increase the value and income for farmers and communities within the Pak Phanang River Basin in Nakhon Si Thammarat Province. Nakhon Si Thammarat, having the largest cultivation area among the southern Gulf provinces, possesses great potential for rice production. Nevertheless, a major challenge lies in the low market value of the rice produced, despite nutritional studies revealing high levels of essential minerals in rice from this region.

To resolve this issue, the project seeks to develop products derived from indigenous rice, allowing community enterprises to process and market these products. The process of value-added development requires careful consideration of the product types, market feasibility, production technologies, complexity of production, and the capacity of local producers. The goal is to create products that can be produced by the community and are in demand in the marketplace, thus ensuring a sustainable income for the community.

Assist. Professor Dr. Tanong Aewsiri, a faculty member in the Food Science and Innovation Program at the School of Agricultural Technology and Food Industry, together with Mrs. Pinpetch Phakdewong and Ms. Ratchada Kochasaengsan from the Center for Academic Services, along with a team of research assistants from Walailak University, have conducted fieldwork in Pak Phanang and Hua Sai districts, Nakhon Si Thammarat Province. They have coordinated with relevant government agencies to seek solutions, focusing on the research and development of products from indigenous rice with the participation of interested community enterprises. Indigenous rice varieties, such as “Kha Dam” and “Yako,” have been developed into products including traditional rice crackers, crispy rolled wafers, and fermented rice wine in the food processing laboratory at Walailak University, Tha Sala district, Nakhon Si Thammarat.

A key factor in ensuring the long-term competitiveness of these community products is the emphasis on sustainability throughout every stage of production. By promoting the judicious use of natural resources and

implementing sound management practices to avoid excessive consumption, sustainability can be achieved not only for the products themselves but also for the environment and the community over the long term.

Moreover, the development of high-quality packaging is essential. Effective packaging serves not only to protect the products but also as a representation of the brand and the community's identity. Packaging designs that reflect local cultural heritage can create a unique selling point, distinguishing the products in the marketplace and attracting customers.

Sustainable development is not solely about the efficient use of available resources but also about fostering the knowledge and skills of the community. Leveraging the expertise of university faculty, the enthusiasm of students eager for practical learning opportunities, and the availability of well-equipped laboratories, the project has facilitated the community's development through training, consultation, and educational activities. This approach enhances the capacity of community members in the long term while simultaneously equipping Walailak University students with the knowledge and skills needed to collaborate effectively with local communities.