



A staff at the Research Institute for Energy and Mines assesses the quality of dried corn as part of a technology pilot for solar drying methodology. Vientiane, Lao PDR.



Solar Drying as a Catalyst for Agricultural Sustainable Growth in the Mekong Region

Laos, much like many other Mekong countries, primarily relies on agriculture, with the majority of the population residing in rural areas engaged in farming activities. The increasing demand for food and the challenges posed by climate change have made traditional sun drying methods less effective. The conventional open sundry techniques, while cost-effective and straightforward, present contamination risks, uncertainties related to weather, and result in poor-quality dried products. This has a direct impact on the income of farmers and SMEs, especially during the rainy season.

Rice noodle and banana production, crucial elements of Laotian agriculture, suffer during the rainy season, leading to reduced incomes and post-harvest losses due to the longer days required for open sundry techniques. Recognizing the need for sustainable solutions, the project on Solar Drying,

supported by the Mekong-Republic of Korea Cooperation Fund (MKCF), initiated a transformative project led by the Lao Research Institute for Energy and Mines. This project aims to reshape the agricultural landscape by applying innovative solar drying technology.

Focusing on the prolonged preservation of agricultural products, such as corn, bananas, and rice noodles under the One District One Project (ODOP) initiative, the project introduces solar drying techniques. This includes the creation of solar dryers equipped with auxiliary heat sources, providing a beacon of hope for farmers and medium-sized enterprises (SMEs) in three targeted provinces. Training programs and the installation of several dryers not only address the initial issues of sun drying but also ensure easier access to technical support, making this sustainable solution more affordable for farmers and SMEs.

The development and promotion of solar

Solar drying enhances product quality, reduces post-harvest losses, opens new market opportunities, and promotes sustainable agricultural practices.

dryers for agricultural and ODO products can result in improved product quality, extended shelf life, increased value, reduced losses, energy savings, market opportunities, and the adoption of sustainable agricultural practices. It also emerges as a beacon of hope for rural communities in the Mekong as a whole and this initiative holds the key to a prosperous and environmentally friendly agricultural sector not only in Laos but also in the region.