

Mae Moh community offers new agriculture and economic model

The small community in Lampang province is growing organic produce with the support of EGAT.



Kale, frillice iceberg and other species of lettuce are among the vegetables that are being cultivated and harvested at the Mae Moh agriculture community in Lampang province and showcasing the potential of smart farming.

The community in Ban Dong subdistrict of Mae Moh district is located near the mountains and has long been considered unsuited to agriculture.

However, with modern technology like indoor vertical and organic farming, as well as with the collaboration of the younger generation, residents are now able to cultivate crops, boost crop yield and generate income.

From horizontal to vertical farming



Under the “Mae Moh Smart City” project launched in 2023, the Electricity Generating Authority of Thailand (EGAT) has shifted the community’s farming method from horizontal to vertical through a plant factory startup known as Distar Fresh.

Vertical farming is a cultivation method conducted inside closed and clean plant factories. Farmers can grow their crops vertically on shelves, while controlling water, nutrients and light-emitting diodes (LED).

The main advantage of this cultivation method is space saving as the factory requires only 40 square metres. Moreover, it enables locals to grow crops all year round and mitigates the risk of natural disasters, extreme weather, plant diseases and natural pests.

To prevent crops from external contamination throughout the cultivation, harvest and packaging process, farmers are required to wear personal protective equipment while inside the factory.

Currently, the community has a vertical farming capacity of up to 1 tonne per month, the highest in the North of Thailand.

Fresh vegetables for consumers

Although high-quality vegetables are popular among consumers who pay attention to their health and generate high income for farmers, marketing to boost product recognition can be difficult.

Apart from crop distribution to Distar Fresh, Mae Moh agriculture community is also selling their crops via the Mae Moh Fresh online platform. This plays a crucial role in stimulating the local economy

Sustainable organic farming

Apart from vertical farming, EGAT has collaborated with the community networks and locals on developing six greenhouses for cultivating organic vegetables, such as lettuce species of red coral, frillice iceberg, red oak, green oak and baby cos.



Greenhouses funded by EGAT were developed with insect screens, water control systems and tabletop vegetable plots which allow farmers to cultivate crops without a need for chemicals.

This move aims to promote the community as a model for organic agriculture and agritourism while generating income for the farmers and creating jobs.

Currently, farmers in the community can produce 3-5 tonnes of organic crops per month.

Road to mass market

The Farmbook platform is acting as an organic vegetable market which connects farmers and customers. The platform also allows farmers to plan their cultivation to meet customer demand and offers a guarantee that their crops will be sold.

Currently, all organic crops from Mae Moh agriculture community are being distributed nationwide under the brand Aro by hypermarket chain Makro, considered a success for the community.

Next steps

Although the Mae Moh agriculture community has not yet achieved success in terms of investment and cost-effectiveness, the new agricultural and economic models are resulting in a better quality of life for the residents.

Under the slogan “taking care of every process to offer good health”, the community networks and locals plan to increase the number of organic greenhouses and improve the production process to reduce greenhouse gas emissions.

The community also aims to set up a social enterprise to ensure sustainable income generation from crop distribution.

Anyone interested in buying fresh, clean and safe vegetables from the community can visit Mae Moh Fresh Line official account, or contact 08 0747 7599.

Source: The Nation Thailand on 27 August 2024

<https://www.nationthailand.com/sustainability/esg/40040907>