

Rail heralded as future for Thai logistics

Has low emissions and costs less to run

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Experts have backed rail to transport agricultural products over long distances following a successful trial, which saw a 13-fold lowering of carbon emissions when compared to air freight. It was also cheaper.

The trial was conducted by Thailand Science Research and Innovation (TSRI), which used high-efficiency mobile refrigerated container trains to transport the Royal Project's fresh merchandise from the north to the south of Thailand.

According to the project's environmental researcher, Asst Prof Charnarong Puchongkawarin, the trial yielded impressive results, not only in terms of product quality comparison but also in terms of environmental aspects.

He said railway logistics had the lowest carbon emission rate compared to land and air freight.

Trains emit 0.06kg of carbon dioxide per tonne of products, while airplanes emit 0.7-0.8kg and road logistics emit 0.36kg, he said.

"Changing to rail helps reduce greenhouse gas emissions. The

reduced emissions means you can generate income by selling your carbon credits," Asst Prof Charnarong said.

In the future, policies regarding carbon allowances will be taken more seriously, and a carbon tax may be enforced. "This will add more value to carbon credits and organisations will be more alert," he said.

Asst Prof Kanda Boonsothornsath, director of the Logistics Innovation Research Centre at King Mongkut University of Technology Thonburi and the research team leader, said the products delivered in the trial remained fresh and undamaged despite the three-day journey across the country.

The cost was also cheaper, down from 14 baht/kg by road to four baht/kg by train, she said.

Meanwhile, the Chinese government, through the Lancang-Mekong Cooperation Special Fund (LMCSF), donated 25 million baht to support three research studies by Thailand's National Science and Technology Development Agency (NSTDA).

The projects include two by the National Centre for Genetic Engineering and Biotechnology (Biotec) — one on edible mushrooms and cordyceps in the Mekong savanna and the other concerns cassava disease control and remedy.

The National Metal and Materials Technology Centre (MTec) is also conducting a study on the technological capacity of domestic industries and preparing to draft product standards for high-speed rail freight.

Ekarat Wainit, director of the modern rail system and transportation technology research at MTec, said people in the Lancang-Mekong industrial sector still lack the skills and technological understanding to develop high-standard products ready for high-speed rail infrastructure.

So, upgrading the technological capabilities of the countries where the construction of the high-speed rail project is underway needs immediate attention.

This would also help create economic sustainability and long-term cooperation for countries in the Lancang-Mekong region, he said.

MTec is directed by the National Science and Technology Development Agency (NSTDA).

Ma Minggeng, an adviser on science and technology with the Chinese Embassy of Thailand, said both countries had signed a memorandum of understanding (MoU) on science and technology in 1978.

He said the LMCSF Project has funded more than 1,000 research projects since then.