

Using the wisdom of *MONOZUKURI* to create happiness.

Thailand—the “Land of Smiles.”

Most of the small and medium enterprises and community enterprises that play such an important role in Thailand’s economy only survive for around 2–3 years before going out of business.

“We want to build Thailand up from the grassroots.”

Toyota Motor Thailand (TMT) and Toyota dealers in Thailand have been integrating the “wisdom of *MONOZUKURI*” with local community leaders’ initiatives.

The result has been not just increased efficiency, but also, and more importantly, an increase in human happiness.

A new society is starting to develop.

TOYOTA Social Innovation



Saithip (right), who set up a rice cracker factory in Khon Kaen Province, a largely rural area in northeast Thailand. “My goal was to be able to live at home with my family,” she says, with a smile of contentment on her face. Saithip, together with her husband (left) and daughter (center).



- ① When she left her beloved son behind to go and work in Japan, Saithip would look at the photos of him every day and make an international phone call almost every week.
- ② The rice crackers, which are made using Saithip's own unique recipe incorporating traditional herbs, are crispy on the outside and soft on the inside, with a wonderful fragrance. As a healthy, organic snack food, there has been a steady stream of people making a special trip to the factory to buy them directly from the producer.
- ③ Vassana has been working at the factory ever since it was founded. Although she started work after finishing junior high school, she says that "I want my children to be able to continue with their studies to support themselves in the future."
- ④ Every morning, the work at the factory begins by steaming large quantities of glutinous rice, which is the raw material for the rice crackers.
- ⑤ Saithip comments that "When I was working in Japan, I learned the importance of being kind to others from the Japanese people I was working with." Saithip is a devout Buddhist and visits the local temple regularly to pray.

No more being a migrant worker. Live in the hometown with my family.

In Bangkok, the capital of Thailand, a taxi driver explains that "Every year for 30 years, since I was 16, I have worked as a farmer in my home community during the rainy season, and then gone off to work as a migrant worker in the dry season... We can't make enough money growing rice." Income levels in the city are six times higher than they are in rural areas. "Bangkok is only good for making money." Many people who would prefer to live at home with their family are unable to do so because they need to leave home to find work.

Saithip was one of these people. Saithip was born around 50 years ago into a rice-farming household near the city of Khon Kaen. Her family was one of the poorest in the village, and her school uniforms were all hand-me-downs that other children didn't need anymore. She liked working in the fields, but she felt uneasy about the idea of spending the rest of her life doing the same things over and over again. Around the time when she finished elementary school, her village suffered severe flooding, and people were saying that the rice-fields were so badly damaged that it would be 10 years before they could hope to get a decent crop from them again. "If I don't take action, nothing is ever going to change."

Clutching the small sum of money that her grandmother had given her, and carrying a change of clothes in an old fertilizer sack, the 12-year-old Saithip got on the bus to Bangkok, and began what turned out to be a long period as a migrant worker. She got married at the age of 22,

and gave birth to a healthy little boy, but because she was having trouble making ends meet, she was forced to ask her parents to look after her son while she went off to work in Japan. Seven years later, when a global recession struck, she had to return home. Finding that there were still no jobs in her home community, she left home once again. It seemed as though her children were doomed to have to live the same kind of life again in the future. Feeling very strongly that "I don't want any of us to have to work as migrant workers anymore," Saithip returned to her hometown.



The fields that surround the rice cracker factory.

Creating jobs in the community. Generating ideas for improvement together.

"After all, we've got plenty of rice." Inspired by the example of an acquaintance's factory, Saithip decided to set up her own rice cracker factory. Rice crackers are a traditional Thai confectionery product made by steaming glutinous rice, molding it into shape and then leaving it to dry before frying it. Saithip came up with the plan because she wanted to be able to live at home with her children, and to help other people to avoid the misery of having to leave home to become a migrant worker. However, she didn't know much about managing a business enterprise. With no formal production planning, she and her employees often ended up working until late at night to meet delivery deadlines. Sales growth was slow, and Saithip had to travel round the area on foot, taking her young daughter with her, to try to drum up business. When anything went wrong, her employees just waited for Saithip to tell what to do; she was the only person making any effort to really think about things.

It was just at this time that Saithip started to receive support from Toyota Motor Thailand (TMT), thanks to an introduction from a Toyota dealer. When Toyota Production System (TPS) trainer Chaikun visited Saithip's factory, his first impression of the place was that "There was a lot of waste." Over time, he was able to persuade Saithip and her workers to make incremental KAIZEN.

When employees are handling the steamed rice, some of the rice grains stick to their hands. Up until then, they had just been rinsing these



grains of rice off, but now a mesh screen is installed under the tap, so that they could collect the grains; this reduced wastage by 6 kg of rice per day. Another issue was related to the variation in size of the rice crackers. By using molds to ensure that the crackers were all the same size, it was possible to measure daily production volume more precisely, and this in turn eliminated unnecessary overtime work. The factory was also able to increase employees' daily wage, from 200 Baht to 400 Baht. Vassana, one of Saithip's employees, smiles as she notes that "In the past, we sometimes had to get up for work in the middle of the night, but now I get to spend plenty of time with my two children. Since we adopted the KAIZEN continuous improvement approach, I have learned to be more proactive and to think about how to solve problems by myself, which I think is great."

* 1 Baht = approximately US\$0.03



The workshop was established on the orders of Her Majesty Queen Sirikit in order to safeguard Thailand's traditional handicrafts. The facility is open to all, and teaches craft techniques and knowledge free of charge.



"Previously, the materials in this warehouse were scattered all around. With the new racks, and having tied everything up, things that used to take two days or more can be done in just 30 minutes," explains Mali.



The KAIZEN production process improvement at which Toyota excels is perfectly suited to the inherent value of the products being made, and to the producers' vision.

Preserving the tradition of bamboo handicrafts. A future more than just making profit.

Adopting the Toyota Production System (TPS) has also opened up a new future for a workshop making bamboo handicraft products in the city of Chonburi (near Bangkok) which has been operating for around 40 years. Of the factory's 83 employees, 70 work at home. Komkrit, the factory president, explains the reason for adopting this approach: "When people are forced to leave factory jobs in the city, it can be difficult for them to find a new job. That is the problem which we have tried to address. Here, these people can learn new skills, and we provide them with stable, long-term employment opportunities." The factory has combined traditional bamboo handicraft skills with modern design, and has been working to develop distribution channels both in Thailand and overseas. When the factory increased its workforce in order to boost production volume, it found that quality standards started to get worse. "We couldn't work out what the problem was. I started to think that we needed to get someone to help us," explains Komkrit. By adopting the TPS approach, the factory was able to identify a problem with materials management. Depending on the source of the raw materials, the bamboo used to create the handicraft products varied a great deal in terms of coloration and thickness, with several dozen different types to deal with. Working in the hot, humid materials sorting warehouse was challenging, and it took employees more than two days to fill one bag of materials. By installing racks and arranging the raw materials neatly by type, the factory was able to reduce the

time needed to fill one bag to just 30 minutes. When we asked Mali, who is seen as a leader by other employees, about the results that had been achieved through the adoption of the KAIZEN continuous improvement approach, she noted that "I am able to buy extra side dishes to take home for our family dinner in the evenings. We don't have to work excessive amounts of overtime. Although we aren't rich, we have enough to get by." Komkrit comments that "The teaching of His Late Majesty King Bhumibol Adulyadej that 'we should know when to be satisfied with what we have' means more than just accepting the status quo; in order for everyone in society to be able to live happier lives, it is important to safeguard tradition, but also to let tradition evolve and grow."



Komkrit and the workshop's employees.

Sharing knowledge and benefits to create a society in which everyone can live happily.

Kamolpong, the Vice President of Toyota Khon Kaen (Dealer) who introduced the rice cracker factory to TMT, explains the meaning of TOYOTA Social Innovation (TSI): "We want to be able to transform society from the grassroots upwards. The economy is important, but it is also important to build a society in which people can live happily, by sharing knowledge and benefits with others."

The YOKOTEN Center opened in 2018 inside the premises of Saithip's factory. Study sessions are being held there to introduce TPS and Saithip's own experience and philosophy; almost immediately after the sessions were announced, around 1,000 people had booked to visit the Center. Montri, a local district head, commented that "It shows us a way to help rice farmers to make a decent living, by increasing the value that rice provides. Everyone wants to produce rice now." Recently, the value of the bamboo handicrafts produced by Komkrit and his factory has been widely recognized, and the enterprise is expanding its sales to include overseas markets such as Japan and Europe. More than just revolutionizing traditional handicrafts, by providing its exquisitely-made products, the factory is spreading awareness of the appeal of Thailand throughout the world. TPS trainer Chaikun emphasizes that "The wisdom of MONOZUKURI can change people's thinking and how they act. As the effects spread, it can transform communities for the better."

Thanks to strong commitment from leaders, combined with the "wisdom of MONOZUKURI" that embodies pride in one's region and in one's traditions, a new kind of society is emerging that allows people to choose their own lifestyles. The adoption of KAIZEN continuous improvement at Saithip's rice cracker factory and at Komkrit's bamboo handicrafts workshop shows how "giving shape to happiness" can help communities to chart a course into the future.



Saithip's son has completed graduate school at a Royal university and is now working as a teacher. "People that come back to our hometown from Bangkok turn to my mother first for help. I also want to be able to use what I have learned in the city to help people."



TPS Trainer Chaikun. "The employees have started to identify problems for themselves. One of their ideas was to bring music into the factory, to create a more pleasant working environment."

[TOYOTA Social Innovation]

TOYOTA Social Innovation is a program that Toyota Motor Thailand (TMT) has been implementing since 2013. TMT has been making effective use of the Toyota Production System (TPS) to support the initiatives of community leaders. It is anticipated that, by 2022, the implementation of the TOYOTA Social Innovation will have been extended to include every one of the Thailand's 77 provinces. As one TMT employee comments, "We want people to view problems as opportunities."



(Above) "I am a rice farmer myself, so it would be great to be able to create products made from rice," says one of the visitors to the YOKOTEN Center, with a smile. At the Center, Saithip explains her unique recipe to visitors.

(Left) Saithip transmits what she has learned from her own personal experience at the YOKOTEN Center. "By transmitting my experience, I can help people to choose their own lifestyle. If the region as a whole can become more prosperous, then all of us can live happier lives."