



## Improved Thai fruit juice quality for international markets



### Why did we initiate the project?

Thailand is one of the leading exporters of pineapple juice to the global market. However, a few major challenges exist:

- Juice quality does not meet the recognized global standard;
- Factories lack knowledge in proper raw material selection, hygiene awareness, production techniques, and lab analysis methods.

### What did we do to improve the situation?

- ✓ Selected the pilot factories that are willing to improve their fruit juice safety and quality.
- ✓ Used SGF quality standard measures to audit the factories.
- ✓ Visited the factories for pre-audits to identify the problems that each factory faces.
- ✓ Provided onsite guidance of how each problem can be solved.
- ✓ Provided consultation by phone (where necessary).
- ✓ Monitored improvements.
- ✓ Collected fruit juice samples to check product hygiene and safety.
- ✓ Shared experiences among the pilot factories.

**Location** Thailand  
**Partner** SGF International e. V.

### WHAT ARE THE RESULTS?

- ✓ 100% acceptance of products in foreign markets
- ✓ Reduction of production costs
- ✓ Reduction of maintenance costs
- ✓ Pleasant working environment
- ✓ Confidence gained due to improved production quality
- ✓ Local SGF auditor trained on the job

### WHICH FACTORS MADE THE PROJECT A SUCCESS?

- > Factories saw the benefits of improving the quality and standard of their fruit juice products.
- > Factories were willing to comply with the advice given to improve the quality and standard of their production.
- > SGF provided comprehensive information including guidance and consultation.
- > Through on-the-job training practices, factories experienced the identified problems first-hand, and learned precisely what to improve, where to improve, and how to improve their quality and safety.

### What could be done to improve the project?

- ✓ Involve the government authorities to be one of the partners in the project to work with the private sector in finding solutions on the issues and challenges the farmers and manufactures had and develop the project activities together.

### What is the long-term outlook?

Fruit juice from Thailand is internationally recognized for its quality and safety.



**Ms. Lookjeb Yimnoi and Mr. Amornthep Phummun, Pineapple Farmer Couple**

"The factory asks if we are interested in learning about good agricultural practices, and we are. So, my wife goes back to school and enrolls in a local agriculture college for three years with financial support from the factory. Since then, we have experimented in applying what she learns from her classes to the knowledge passed down to us from our parents and grandparents. On the same plot of land we produce more pineapples but at lower costs. We get better quality fruits and reduce unnecessary chemical inputs. The soil quality has improved and we do not have to worry too much about the chemical exposure"



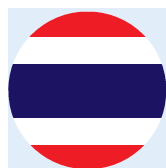
**Ms. Napaporn Rattanamettha, SGF auditor**

"I'm happy and proud that I can take part in improving the Thai fruit juice industry and help the Thai factories who are looking to find solutions for their production problems in getting the answers in improving their products. My answers make me sound like a beauty queen, but I am not. I am just the fruit juice auditor."



**Mr. Jirawat Lotharuckpong, Managing Director of Takerng Pineapple Industrial Co., Ltd.**

"This SGF standard requires all every minor details from the selection of raw materials to production and quality control and assurance to be thoroughly checked, fixed and treated. At start it was very exhausting, but it is all worth it as our customers are happy with our products."



## New learning concept strengthens farmer groups and improves their livelihoods



### Why did we initiate the project?

Majority of Thai Rice farmers are below the poverty line, especially northeastern rice farmers who depend on rain are facing low yields. The Thai Rice Department has developed Community Rice Centers (CRCs) to support rice farmer groups. These groups are led by a 'smart farmer' who is trained in general agricultural practices to coach and support the farmer group. Despite this useful initiative, some challenges still persist.

To support and leverage the situation, the Better Rice Initiative Asia (BRIA) engaged farmers to use new cultivation techniques and new learning concepts to improve the income and living condition of Thai Rice Farmers in northeast Thailand.

### What did we do to improve the above-mentioned situation?

- ✓ The Better Rice Initiative (BRIA), the public private partnership cooperation between GIZ, the Thai Rice Department, Bayer, BASF and Olam selected approximately 10,000 farmers from 200 Community Rice Centers (CRC) from 4 provinces in northeast of Thailand.
- ✓ BRIA trained selected (Smart) Farmers (Representatives of each CRC) for the Training Transfer Model. This teaches farmers how to analyze the strengths and weaknesses of their groups, proper rice cultivation knowledge, and how to improve their existing activities.
- ✓ A "Smart Farmer training concept" was developed by BRIA which places the learners at the centre. They are mostly farmers aged 50+. The training approach was thus tailored to the participants' learning needs, taking into account in particular the aspects of adult learning.
- ✓ BRIA has established and extended the CRC network, which enables farmers to exchange information in real time via Information and Communication Technology (ICT).



**Mr. Vadsana Aphaikot, President of Bua-Ngam CRC, Bua Ngam Community Rice Center:**

Before we joined the project, we only produced rice day by day. We didn't actually expect anyone to help. Today, we gather, we help each other, and we learn from mistakes. Aside from farming techniques, what we need now is to do accounting so that we know how to make profits and cover the loss.



**Mr. Danai Ay-tobutr, Vice President of Klang CRC, Klang Community Rice Center**

I was able to apply knowledge received from BRIA training to my rice field. BRIA intervention assured me that I have a guaranteed market. When we apply an appropriate fertilizer formula, I can see the result better than before.



**Mrs. Lampai Na-Ngam, Member of Bua-Ngam CRC, Bua-Ngam Community Rice Center** After joining the programme, I applied my knowledge received from BRIA and RD experts to my rice field. I could notice the differences. In the past, I had zero knowledge on how to put fertilizer properly and never knew how to deal with diseases.

**Location** Northeast of Thailand  
**Partner** Thai Rice Department, Bayer, BASF, OLAM

### WHAT ARE THE RESULTS?

- ✓ Almost 10,000 farmers from 200 different CRCs were trained through smart farmers. This led to a transformation of their agricultural practices which are now more sustainable in terms of environmental, economic and social issues.
- ✓ Farmers were encouraged to share information via Information Communication Technologies (ICT) such as Line, which enables them to exchange ideas and share farming techniques as well as consult experts from the Rice Department.
- ✓ Smart farmers support their group members regarding fertilizer and nutrient management, planting methods, quality seed management, etc. As a result, farmers successfully applied their knowledge gained from the BRIA Training to improve their crops, production and livelihoods.
- ✓ The implementation of demonstration plots by the CRCs showed that by applying the new techniques, the income of farmers could be increased by 20%. Seeing which cultivation techniques are more productive and likely to increase their yields was an eye opener for the farmers and stimulated the application of these techniques.
- ✓ Through the organizational consult of BRIA, the CRCs could set-up well-organized organizational structures within their CRCs. For example, chairpersons are being elected within each CRC which allows farmers to vote and voice their concerns.

### WHICH FACTORS MADE THE PROJECT A SUCCESS?

- A strong network and a tight cooperation between the key stakeholders (Rice Department, BAYER, BASF, and Olam) and the farmers has allowed BRIA Thailand to effectively organize the smart farmer training courses and adapt the training process. This was made possible thanks to the expertise and commitment contributed by the stakeholders as well as farmers.
- The traditional training concept was adapted to the needs of farmers. This was supplemented by new learning methods.
- Selected smart farmers were trained as know-how multipliers to pass on the gained knowledge and findings to the other farmers.
- The trust between stakeholders was built due to the positive results of the project like the improved rice quality, better yields and higher incomes of trained Smart Farmers. Interest from other farmers was caught by word-of-mouth. They then became eager to participate in the trainings and joined the project.
- CRCs with improved organizational structures are thus enabled to support farmers with important information and foster the exchange of knowledge and experience.

### What could be done to improve the project?

- ✓ A better use of new technologies, i.e. the Database Management System, would make it easier to collect each farmer's data. Users could then use existing data to analyse what they need for their farms, which would also help farmers to locate and identify issues and solutions. However, privacy law would restrict access to other farmers' data. Only authorized government officers would be able to access, analyze and provide advice to farmers. BRIA Thailand, RD and Olam are developing a new mobile application to collect data based on the Sustainable Rice Standard, developed by IRRI and UNEP, Data Collection Sheet. This application will enable authorized government and BRIA staffs to easily assess and monitor the standards for farmers.
- ✓ The local government's engagement in the training process should be promoted, i.e. we should better involve them in the process as key stakeholders. As to the new extension model for smart farmer training, this involvement should take place from the very beginning to allow local governments to participate in disseminating the modules and feel ownership of the extension model.

### What is the long-term outlook?

- ✓ By applying the newly learned farming techniques, awareness and acceptance of these techniques will be raised amongst farmers. The increasing confidence thus created will lead to more and more farmers deciding to integrate this knowledge into their traditional agricultural systems – which will ultimately help them to improve their own living conditions on a lasting basis.