What can ASEAN learn from Thailand's Rice Insurance?

Thailand is a major exporter of rice and other agricultural products (fish and fish products, cassava, rubber, grains and sugar) and competed with Vietnam as the 2nd world's largest exporter of rice in 2021 (S & P Global, 25 November 2021). This is how important rice production is for Thailand.

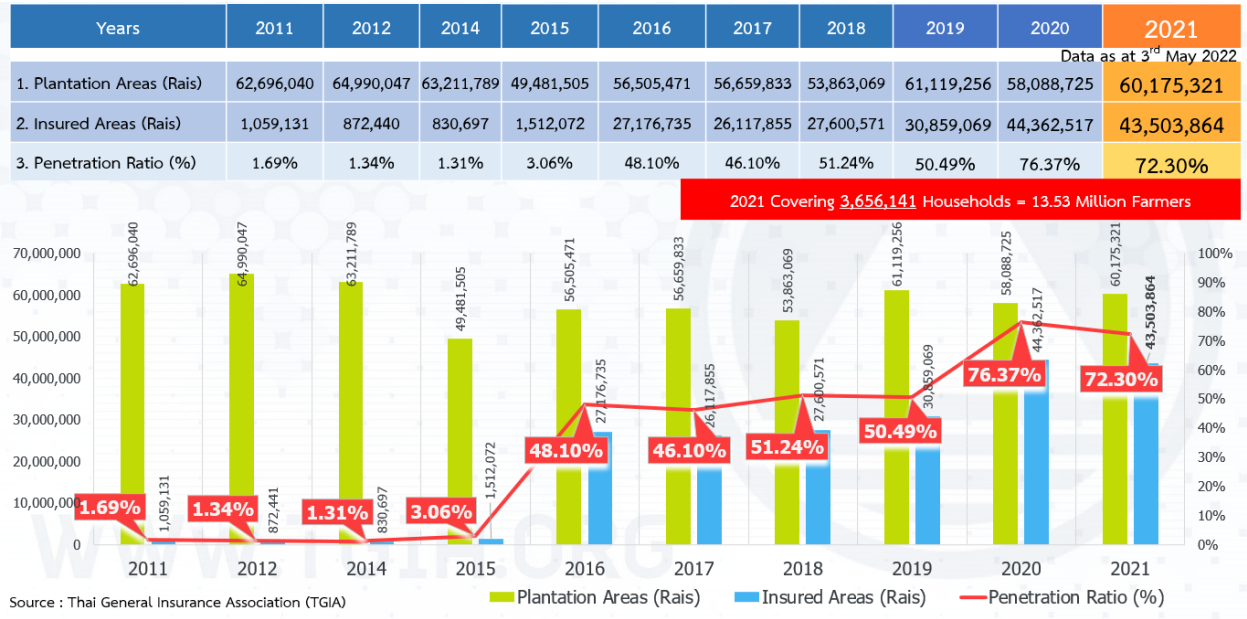
Thailand has a total agricultural area of 112.8 million rais* or 18 million hectares which is equivalent to 35.1% of total area of the country. The Thai agriculture sector employs 30% of the total workforce or 6.4 million households but its share of the GDP is only 10% in 2019 (UN Thailand, 2 December 2020).

According to Udomkerdmongkol, M. and Chalermpao, N. (UN Thailand, 2 December 2020), the agriculture sector faces a lot of challenges including poverty, debt, ageing farmers, limited landownership and access to water resource, small-size farms and limited farming portfolio. They encouraged "where appropriate – public-private partnerships for R&D that have public goods outcomes."

The problems mentioned above may be compounded or brought about by natural disasters. In a related way, this is where Thailand's Rice Insurance Top Up Scheme offered a solution. Rice Insurance Top Up Scheme was first introduced in 2011. It is a Public and Private Partnership (PPP) Initiative that has reached insurance coverage of 7 million hectares of rice fields in 2020. This represents 76% insurance coverage of the total plantation areas planted with rice in Thailand. In 2020, more than 12.68 million farmers benefited from this program (from 3.4 million households). In 2021, the number of farmers benefited has increased to 13.53 million farmers (from 3.6 million households). Refer to Figure 1 below.

Figure 1: Implementation of Rice Insurance Top Up Scheme 2011 – 2021

Years	2011	2012	2014	2015	2016	2017	2018	2019	2020	2021
										Data as at 3rd May 2022
1. Plantation Areas (Rais)	62,696,040	64,990,047	63,211,789	49,481,505	56,505,471	56,659,833	53,863,069	61,119,256	58,088,725	60,175,321
2. Insured Areas (Rais)	1,059,131	872,440	830,697	1,512,072	27,176,735	26,117,855	27,600,571	30,859,069	44,362,517	43,503,864
3. Penetration Ratio (%)	1.69%	1.34%	1.31%	3.06%	48.10%	46.10%	51.24%	50.49%	76.37%	72.30%

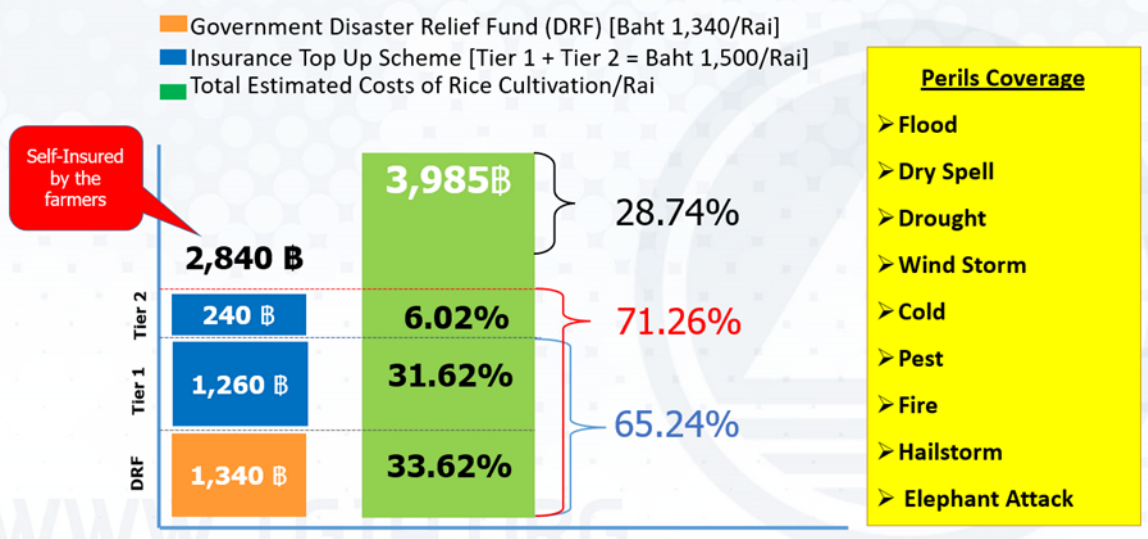


Source: Thai General Insurance Association (TGIA) as at 3rd May 2022

The coverage of perils for rice insurance top up scheme includes the following: flood, dry spell, drought, wind storm, cold, hailstorm, fire, pest, and wild elephant peril.

When natural disaster occurs and damages rice crops, the Thai government provides relief funds to farmers who are affected. Figure 2 shows the amount of 1,340 Baht per rai provided by the Thai Government in the form of disaster relief fund, which is around 30% of the total cost of rice cultivation per rai base on the guidelines from the Ministry of Finance. On average, the average cost per rai for rice cultivation is 3,985 baht. Farmers are provided with insurance for Tier 1 by the government which subsidizes 60% of the premiums including Stamp duties and Value-added Tax (VAT); while 40% is subsidized by Bank for Agricultural Cooperatives (BAAC) for those farmers who avail of loans. Farmers only pay for additional coverage, if they want to. This is referred to as Tier 2. So, if a disaster strikes on the insured farmer's rice fields, 71.26% of the losses will already be compensated in the form of government relief fund and Tier 1 and 2 insurance coverage.

Figure 2: Indemnity of Thai Rice Structure: 2021/2022



Source: Report Submitted by Thai General Insurance Association (TGIA) to AIC Agricultural Insurance Working Group (AIC AIWG)

Detailed information regarding the premium/price to be paid for farmers who avail themselves of loans (BAAC) and those who don't (Non BAAC) is presented in Figure 3. Likewise, the sums insured for Tier 1 and Tier 2 are provided according to the type of peril/disaster that causes damage to rice crops.

Figure 3: Price, Coverage and Sum Insured of Rice Insurance 2021

Source : Report Submitted by Thai General Insurance Association (TGIA) to AIC Agricultural Insurance Working Group (AIC AIWG)

Zone	Tier 1 Price (Baht/Rai)		Tier 2 Price (Baht/Rai) Farmer Paid
	BAAC	NON BAAC	
Low	96 (100% Subsidy) Government @ 60% BAAC @ 40%	55 (100% Subsidy)	24
Medium		210 (Subsidy 55 Baht/Rai)	48
High		230 (Subsidy 55 Baht/Rai)	101
Coverage Perils	Flood, Dry Spell, Drought, Wind Storm, Cold, Fire, Hailstorm, Elephant Attack		Pest
Sum Insured of Tier 1	1,260 Baht/Rai		630 Baht/Rai
Sum Insured of Tier 2	240 Baht/Rai		120 Baht/Rai

The PPP between the Thai government and the private sector was initiated by the Fiscal Policy Office (FPO) under the Ministry of Finance. The ministry is in the forefront to assist farmers in managing the risks of the natural disasters, with the assistance of other institutions, both from the government and private sectors. These institutions with their corresponding contributions are:

1. Department of Agricultural Extension (DOAE), Ministry of Agriculture and Cooperatives: supporting on farmers on registration and acting as a national loss adjustor;

2. Department of Disaster Prevention and Mitigation (DDPM), Ministry of Interior: responsible for disasters declaration and risk mitigation;

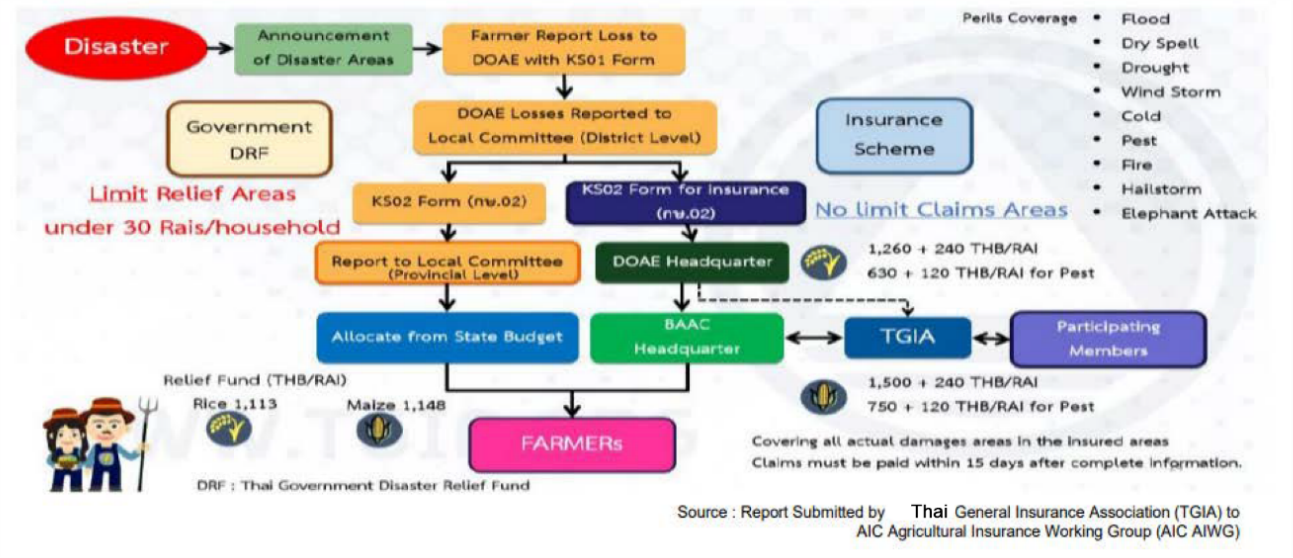
3. Office of Insurance Commission (OIC): approving rice insurance Top Up policy wordings and premium pricings;

4. Bank for Agriculture and Agricultural Cooperatives (BAAC): acted as a distributor in selling rice insurance to their rice loanees as well as the non-loanees; and

5. Thai General Insurance Association (TGIA): Thai Rice Insurance Top Up Scheme administrator and managing the program on behalf of its participating TGIA Members.

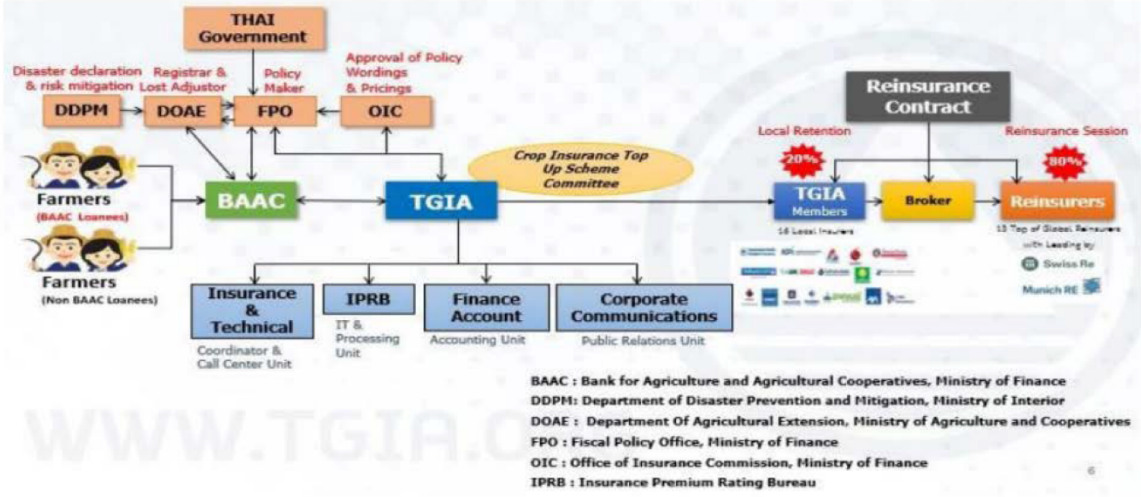
The PPP initiative is a combination of efforts of various sectors in assisting the farmers. It is a good model for other countries to follow. Figure 4 shows the flow of the claim process wherein which recipients may be paid within 15 days after submission of complete documents.

Figure 4: Diagram Displaying Claims Process of Thai Rice Insurance Top Up Scheme



Thai Rice Insurance Top Up Scheme on Figure 5 illustrates clearly the role each of agency in the PPP initiative performs. It is also used for cross-agency data delivery which is essential in speeding up payment to farmers.

Figure 5: Thai Crop Insurance Top Up Scheme Work Flow



The Thai Rice Insurance Top Up Scheme hopes to address some of the challenges faced by the agricultural sector mentioned earlier. With the government disaster relief fund (DRF) assistance and insurance coverage from the government and private sectors, the farmers are provided with a social safety net in a situation where natural disasters destroy their only source of income. This will help them avoid being in debt and falling in poverty because with the compensation they get from insurance, they will be able to afford the costs of the new planting season. In addition to this, the government purchases rice whenever there is oversupply from rural communities and sells them to the urban areas.

Another important contribution of the Thai General Insurance Association (TGIA) to the farmers is the building of the groundwater banks to increase green spaces, which addresses the problem of limited access to water source. This will eventually lead to an improvement in the farmers' quality of life.

What is noteworthy about this scheme is that it has led to a change in the farmers' perception regarding risk management. They will no longer be dependent on the climate in managing their farms, but will take a proactive role in securing financial stability in the face of disasters.

Moreso, not only is the scheme providing the farmers with rice insurance but also educating them and their communities about risk management. For example, mobile application (Named Double Jasmin) and website were designed to provide the farmers with the technology to report loss and damages by themselves. This led to the creation of a new breed of farmers with knowledge and skills of the latest technology. This is a good example of a PPP for R&D recommended by Udomkerdmongkol, M. and Chalermpao, N. (UN Thailand, 2 December 2020), that resulted in public good outcomes.

The Thai Rice Insurance Top Up Scheme is a good model for other ASEAN member states to emulate.

*(1 rai is equivalent to .16 hectare)

Notes:

Figure 1 Data from Thai General Insurance Association (TGIA) as at 3rd May 2022

Figures 2-5 were extracted from the Report of Thai General Insurance Association (TGIA) to AIC Agricultural Insurance Working Group (AIC AIWG).

Sources:

Thai General Insurance Association (TGIA)

Thailand's Agricultural Insurance Implementation, Thai General Insurance Association (TGIA), Excerpt from Agricultural Insurance in ASEAN, A Report Compiled by AIC Agricultural Insurance Working Group (AIC AIWG).

S & P Global, 25 November 2021 < https://www.spglobal.com/commodityinsights/en/market-insights/latest-news/agriculture/112521-thailand-in-tight-race-with-vietnam-to-be-2021s-second-largest-global-rice-exporter> accessed on 19 April 2022.

Udomkerdmongkol, M. and Chalermpao, N. (UN Thailand, 2 December 2020), <https://thailand.un.org/en/103307-thai-agricultural-sector-problems-solutions#:~:text=Agriculture%20sector%20in%20Thailand%20employs,force%20covering%206.4%20million%20households> accessed on 19 April 2022.

This article was written by Carolyn Baytion Sunaryo, AIC Executive Director