The 12th Bilateral Conference between National Pingtung University of Science and Technology and Kasetsart University

"From Sustainable Agriculture to One Health





Thai Swine Industry after African Swine Fever Outbreak in 2022

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ASF Situation in Thailand







Department of Livestock Development (DLD) announced in January 2022 the confirmation of ASF in pet pigs in Bangkok.



A total of 114 outbreaks have been reported in 35 out of 77 provinces/special administrative area were reported during the epidemic.



The latest reported outbreak occurred in Luang Nuea Village, Doi Saket District, Chiang Mai Province in June 2024.

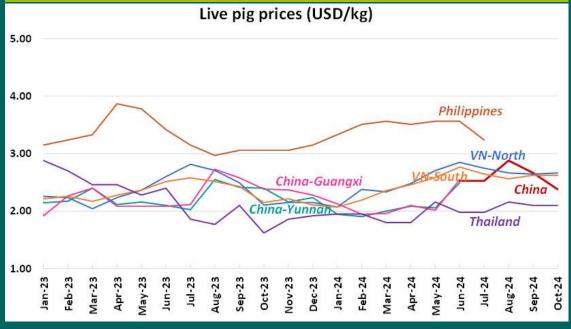
DLD Thailand actions





- 1. DLD implements ASF contingency plan with clinical practice guidelines while the provinces monitor and follow-up the situation in accordance with the guidelines.
- 2. DLD is promoting the improvement of disease prevention systems and biosafety on farms according to media and also raising awareness and strengthening border control to stop illegal import of pork products from affected countries.

Live pig prices in China, Viet Nam, Cambodia, the Philippines and Thailand (USD/kg)

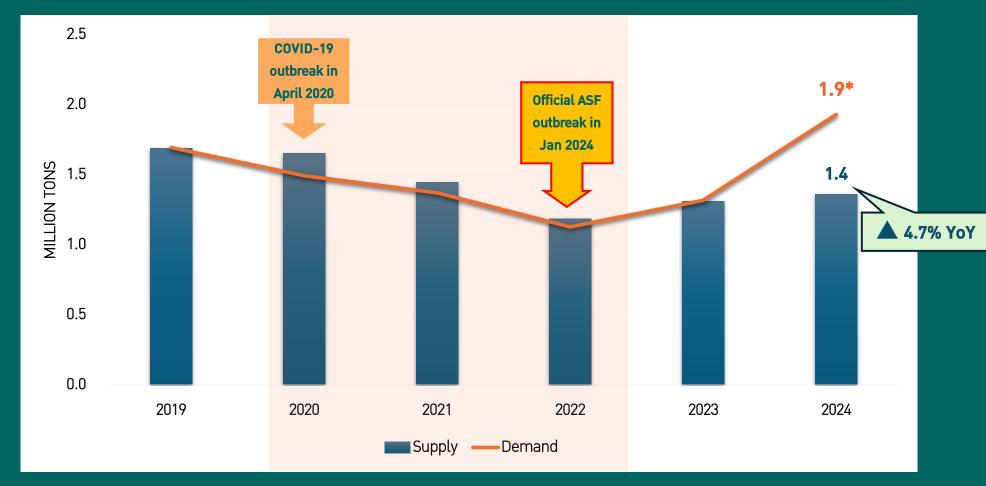


https://www.fao.org/animal-health/situation-updates/asf-in-asia-pacific/er

Thai Pork Supply VS Demand in 2019 - 2024





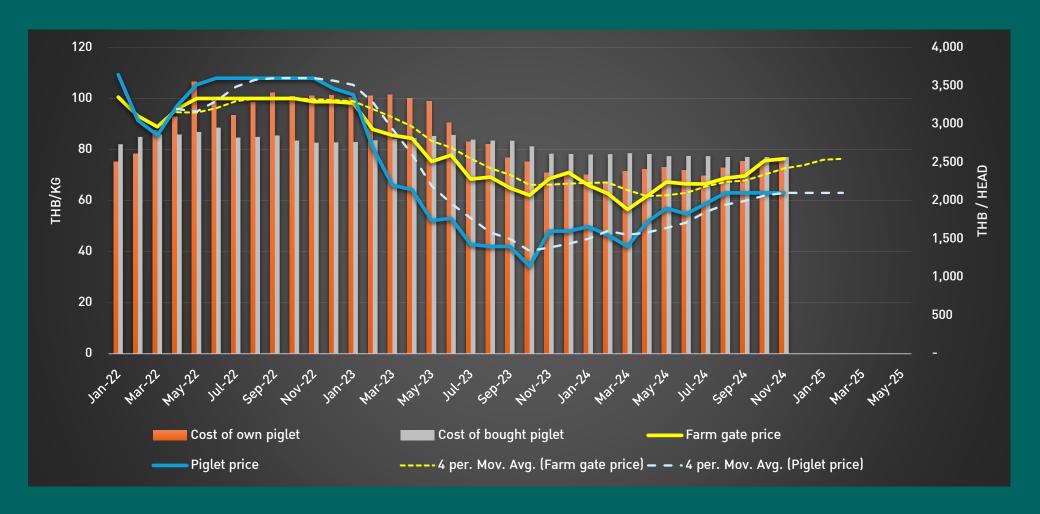


Sayruamyat. 2022. Thai Swine Industry during African Swine Fever Outbreak in Asia. FFTC-AP Link: https://ap.fftc.org.tw/article/3011

Cost and Price After the Outbreak 2022





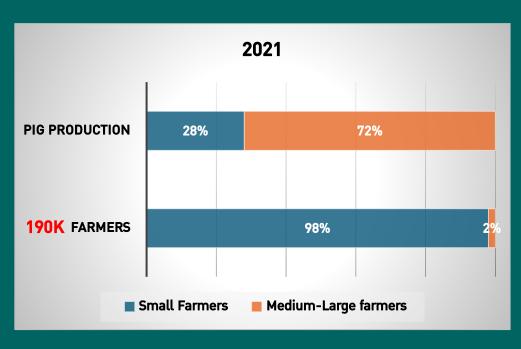


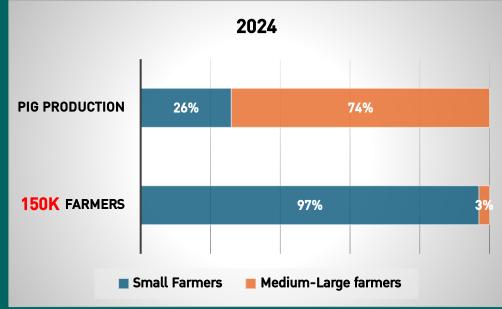
ASF outbreak in Thailand resulted in a 21.29% reduction in swine raisers from 2021.





- The number of smallholder farmers has decreased to 86% from pre-outbreak levels.
- Most of the supply comes from medium and large-scale farms.





Source: Kresearch (2024) and DLD (2024)

The number of medium and large farm size increase





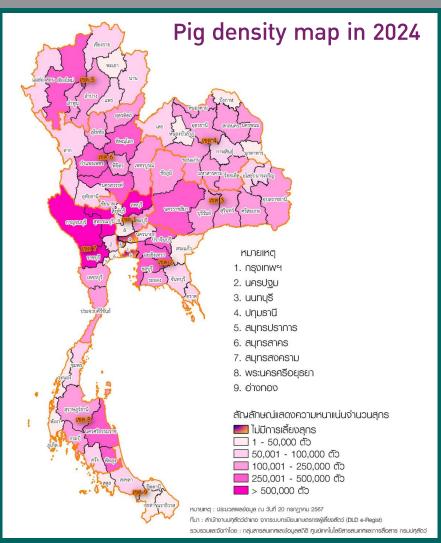
Farm size	2021 (Farms) (%)	2024 (Farms) (%)	% Change
Very small (1-50 heads)	172,528 (91.2%)	133,580 (89.7%)	- 22.6%
Small (51-500 heads)	12,477 [6.6%]	10,971 [7.3%]	-12.0%
Medium (501 – 5,000 heads)	3,856 (2.0%)	4,002 [2.7%]	3.79%
Large (5,001 heads and above)	291 (0.2%)	328 (0.2%)	12.7%
Total	189,152 (100%)	148,881 [100%]	

Source: DLD Thailand (2021, 2024)

Percent change in no. of farm size between 2021 and 2024







	Farm size					
	Very small	Small	Medium	Large		
Region 1	-44.5	-55.7	-7.9	114.3		
Region 2	-33.0	-40.3	-21.6	-1.6		
Region 3	-19.7	-9.6	38.9	44.4		
Region 4	-8.3	9.3	65.2	-14.3		
Region 5	-15.2	12.6	-5.8	-15.4		
Region 6	-40.0	-28.2	-3.4	81.0		
Region 7	-35.9	-23.8	-14.8	-9.5		
Region 8	-39.3	-6.3	4.5	-75.0		
Region 9	-25.5	-28.7	8.1	0.0		
Total	-22.6	-12.1	3.8	12.7		

- The trend indicates a decrease in the number of small farms.
- The trend indicates an increase in medium and large farm sizes.
- Resulted in contract farming for medium and large farm size increase, while individual farrow-to-finish enterprise decreases.

No. of farm size change between 2021 and 2024





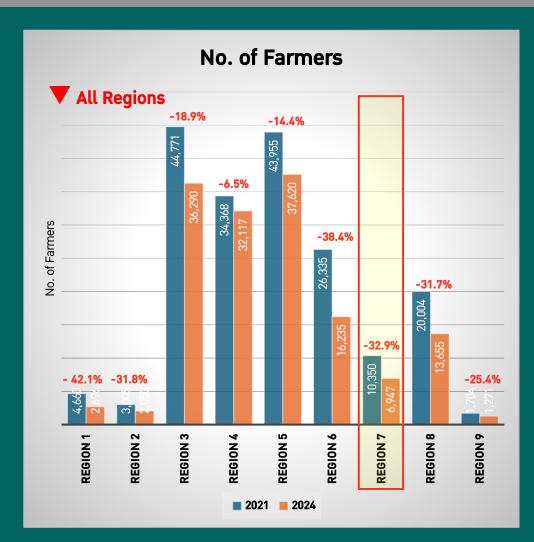
	Very small size		Small size		Medium size		Large size	
Region	(1-50 heads)		(51-500 heads)		(501 – 5000 heads)		(> 5,001 heads)	
	2021	2024	2021	2024	2021	2024	2021	2024
Region 1	3,708	2,058	571	253	353	325	28	<mark>60</mark>
Region 2	1,777	1,191	621	371	546	428	61	60
Region 3	42,952	34,483	1,485	1,342	316	<mark>439</mark>	18	<mark>26</mark>
Region 4	32,201	29,515	1,738	<mark>1,899</mark>	422	<mark>697</mark>	7	6
Region 5	42,500	36,045	1,116	<mark>1,257</mark>	326	307	13	11
Region 6	23,984	14,391	1,797	1,291	533	515	21	<mark>38</mark>
Region 7	8,444	5,414	1,086	827	683	582	137	124
Region 8	15,638	9,498	3,721	3,487	640	<mark>669</mark>	4	1
Region 9	1,323	985	342	244	37	<mark>40</mark>	2	2
Total	172,527	133,580	12,477	10,971	3,856	<mark>4,002</mark>	291	<mark>328</mark>

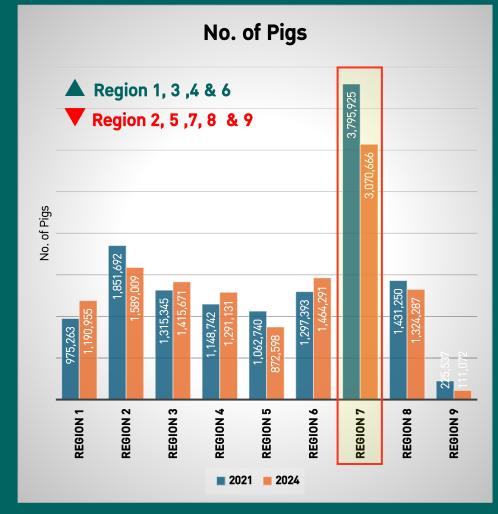
Source: DLD Thailand (2021, 2024)

Majority pork supply still come from Region 7.









Fattening pig production cost structure increases





Cost Structure (US\$)	2007ª	2017ª	2021 ^b	2024 ^c	Percentage	
1. Variable costs	124.9	183.2	234.0	207.5	91.5%	
• Labor costs	2.1	3.4	4.1	23.2	10.2%	
Piglet cost	33.1	72.3	101.3	61.8	27.2%	76.2%
Feed cost	82.9	93.8	109.6	111.2	49.0%	Total c
Veterinary medicine and supply	1.7	4.8	9.1	4.3	1.9%	
Other operating costs	5.2	8.9	9.9	7.1	3.1%	
2. Fixed costs	1.8	3.2	3.2	19.3	8.5%	
3. Total cost per head	126.7	186.3	237.2	226.7	100.0%	
4. Cost per kg.	1.3	1.9	2.4	2.3		

Source: ^a Premashthira, Photchanaprasert, & Ratanavanichrojn (2020), ^b OAE, Thailand (2022), ^c Sayruamyat (2024)



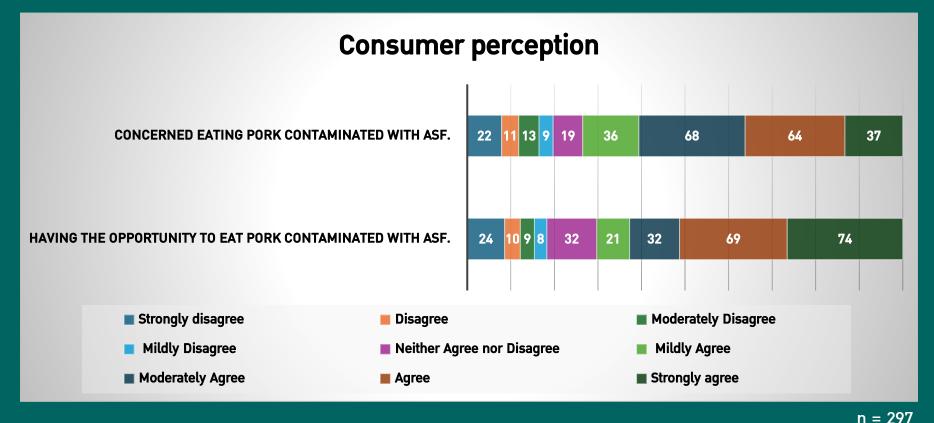
Let's focus on CONSUMER PERCEPTION

November 2024 Suwanna Sayruamyat 1

Thai Consumer have high risk perception of consuming pork contaminated with ASF







Source: Khotchahan (2023)

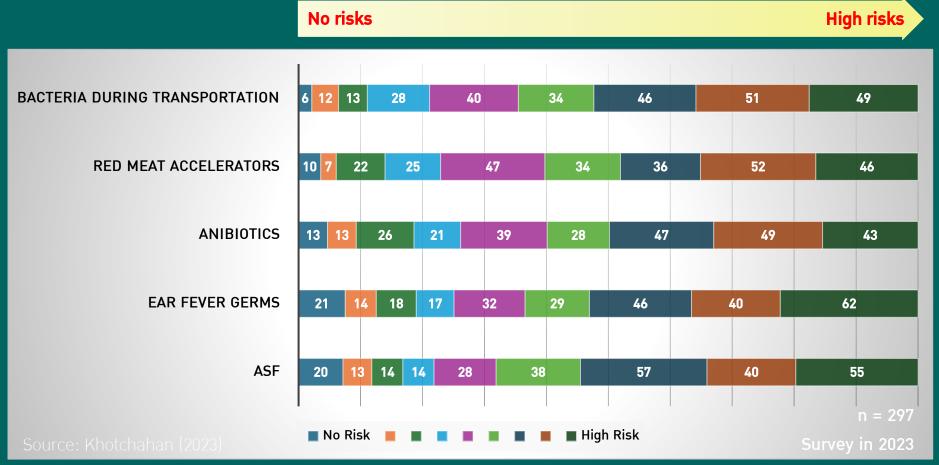
Survey in 2023

Consumer risk perception





For me, there is a risk of eating fresh pork contaminated with ...

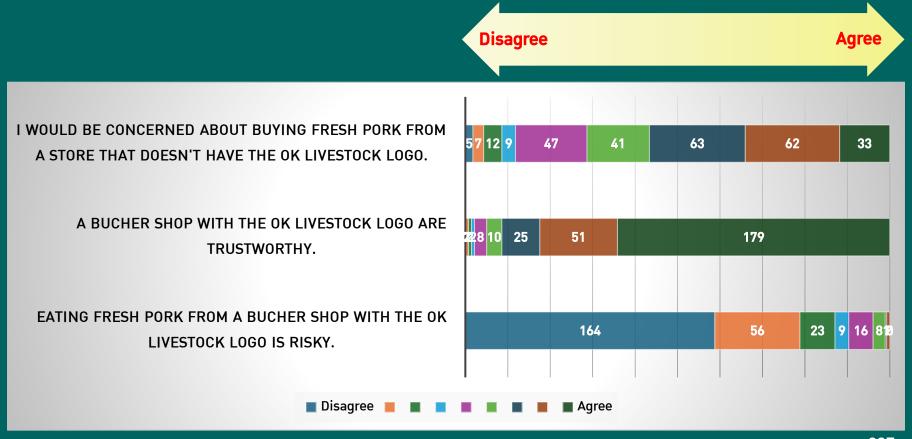




Consumer Attitudes toward the OK livestock logo







Source: Khotchahan (2023)

n = 297 Survey in 2023

Big challenges for Thai swine industry





Supply

- 1. The cost of producing Thai pigs is still high, both in terms of farm management costs, biosecurity costs, and feed costs.
- 2. The enormous cost of new investments was a major barrier to industry entry, resulting in future food insecurity for the nation regarding meat.
- 3. Facilitating the recovery of small and medium-sized farms
- 4. Pressure from the Free Trade Agreement to import pork.

Demand

- 1. The population of Thailand is showing a decline. KResearch (2024) forecasts that Thai pork consumption will increase at an average rate of 0.6% annually over the next five years.
- 2. Thai population will be super-aged in 2029. The elderly consume 38 kg of pork each year, less than working-age adults. The average person eats 49 kg of pork annually.



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