

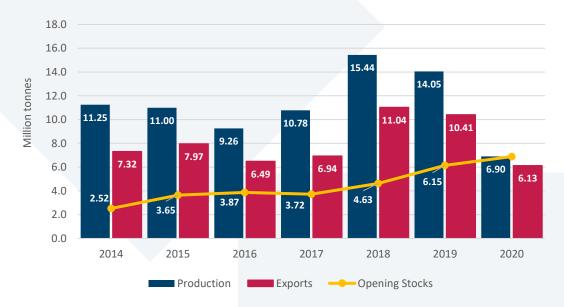
CEFS FACTSHEET ON THAILAND

OVERVIEW

Thailand is one of the major players on the world sugar market, with 75% of its production dedicated to exports. Its industry benefits from, on the one hand, a highly regulated political framework and, on the other hand, market protection to protect and reinforce its position on export markets, despite competition and price evolution.

Despite two catastrophic sugar campaigns, in 2020 and 2021, Thailand has managed to keep its leading position in the world market, representing more than 12% share of the global sugar market. For the coming years, sugar exports are expected to significantly increase due to larger exportable supplies of sugar and the increased demand for sugar in Southeast Asia.

Figure 1: Thailand's sugar production in comparison with exports, 2014-2020. Source: International Sugar Organisation



The Government's support for sugarcane prices is the most basic intervention. It allows cane producers to continue supplying mills by mitigating the impact of sugar price fluctuations on cane prices. Fixed minimum sugar prices support the 25% of production that is not exported. Imports are limited through different means that allow the control of prices and the management of the market.

¹ ISO figures over 2015-2021 period



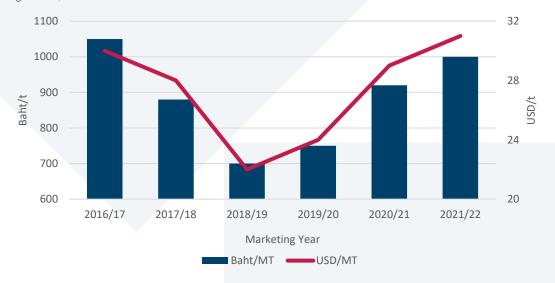
CANE SUPPLY MANAGEMENT AND CANE PRICE SUPPORT

The Thai authorities regulate cane production via support for cane prices that guarantees farmers will supply raw material to the mills and will not switch to another crop when sugar prices drop.

The system of pricing is based on a revenue sharing formula that establishes a link between the sugar and cane prices, whereby 70% of the revenues from sugar and molasses sales on domestic and export markets go to growers and 30% go to the mills.

However, the Thai authorities have implemented a system of direct support to "improve" the system in cases where the preliminary cane price, calculated at the beginning of the sugar campaign on the basis of the forecast sugar price, differs from the final cane price. If the final cane price is above the preliminary price, the sugar mill will compensate the cane grower with an additional payment for the cane. If the final cane price is lower than the preliminary price paid, the grower does not reimburse the difference to the miller, but the miller will instead be compensated by the Government through the Cane and Sugar Fund (CSF), which will cover the difference.

Figure 2: Minimum sugarcane prices evolution under the the Thai government sugarcane price support programme, 2016/17-2021/22. Source: USDA



Before the deregulation that started in 2018 the CSF was funded by a fee (5,000 Baht/t, i.e. US\$154/t) and VAT (7%) collected on domestic sugar sales to repay the Bank for Agriculture and Agricultural Cooperatives (BAAC) and its action through the CSF. Now the CSF is funded by the price difference between the domestic wholesale ex-factory price and the world sugar price.

Over the past decade the amount of direct support to growers through the CSF and additional direct payments for sugarcane has amounted to over US\$ 1.7 billion.



SUGAR PRICES

Price control on the domestic market is the second important element of Thai sugar policy with a double commitment from the sugar authorities to guarantee sugar prices at certain levels for millers and cap retail prices for consumers, in case of possible tensions on the internal market.

In 2018 the Thai authorities decided to allow sugar prices to float, as part of the incomplete process of deregulation. However in November 2019, following a consistent sugar price decline, the Thai Government decided to reintroduce fixed prices on the internal market at the following levels:

- White sugar: US\$ 552/t (17,250 Baht/t)
- Refined sugar: US\$ 585/t (18,250 Baht/t)

Sugar is still listed on the Ministry of Commerce's List of Controlled Goods and Services despite the deregulation of the ex-factory wholesale price of sugar. As a result, the retail ceiling price for sugar remains unchanged at approximately US\$ 750/t (23,500 Baht/t). The retail ceiling exists to protect consumers from upward price fluctuations.

OTHER SUGAR SPECIFIC SUPPORT

The Thai Government supports the modernisation of sugarcane farms through a series of subsidised loans. These loans were designed to encourage cane farmers to invest in specific equipment such as new cane harvesters or loaders (to eliminate cane burning), in water sourcing and water management, and in other agricultural machinery. Below is a selection of the most recent government interventions:

- Soft loans for purchasing sugarcane harvesters (2010/11-2017/18): Decided in 2010 with a credit limit of 3 billion Baht (US\$ 94.6 million) with the interest of MRR- 2 (6.75%-2% =4.75%). The loan credit of 3 billion Baht was renewed in 2013 for five years for the same purpose.²
- Soft Loans for sugarcane production efficiency improvement at full scale (2014/15 –2023/24):
 Initially decided in 2015, the Cabinet approved a credit limit of 9 billion Baht (US\$ 254.9 million) for two schemes:
 - 1. Developing water resources and water management in sugarcane fields or for purchasing sugarcane harvester or loaders
 - 2. Purchasing agricultural machinery (tractors or trucks)
- Soft loans for cane farmers on production costs (2019/20): Government compensation of the financial costs for BAAC of 10 billion Baht at an interest rate of 2.35%.

No more new programmes have been decided since then. However, the soft loans for sugarcane production efficiency improvement at full scale are still running until 2024,

² MRR: Minimum Retail Rate



to support modernisation and address the question of water resources, which is one of the limiting factors in a country where only 20% of crops are irrigated.

SUSTAINABILITY

Pre-harvesting sugarcane burning is a widespread agricultural practice in Thailand, used for 60-67% of production. Although it speeds up the harvesting process, cane burning has severe consequences for air quality and the health of field workers: incomplete combustion leads to the production of black carbon, $PM_{2.5}$ and PM_{10} ash, and VOCs. It is estimated that the open burning of crop residue and biomass contributes over 30% of PM2.5 in the country. ³,

Since 2019 the Thai Government has introduced the Burnt Sugarcane solving plan. With an environmental objective to end the burning of cane to reduce air pollution. The target is to move progressively from 61% of cane burnt during the 2018/19 sugar campaign to 5% in 2021/22 and total suppression by 2022/23. This support is contingent on crushing green cane and takes the form of an additional payment (Baht 120/tc, US\$ 4/tc) versus burnt cane, which is subject to a Baht 30/tonne penalty (US\$ 1/tc). The total amount disbursed over the last two campaigns is close to US\$ 300 million and the current one (2021/22) should provide a similar amount to reach the target of an end to cane burning by 2022/23. This policy has led to reduced cane crushing for the MY 2020/21, without, however, reaching the 20% burned cane requirement set by the Thai authorities.

Because sugarcane burning leads to cheaper, less labour-intensive, and less time-consuming harvesting, it is uncertain if this policy will succeed. In addition, the Thai government often accepts requests from agribusiness companies and farmer groups to relax the percentage of burnt sugarcane that can be sold, indirectly leading to increased burning of sugarcane.

³ Air Quality in Thailand – Understanding the regulatory context, Stockholm Enviroment Institute. February 2021

[•] PM_{2.5} and PM_{10.5}: Airborne particulate matter (PM). PM2.5 and PM10 are minute particles present in the air and exposure to it is very harmful for health, mainly causing breething problems

VOCs: Volatile organic compounds are gases that are emitted into the air from products or proesses