



Australian Centre
for International
Agricultural Research



Global markets and value chains: implications for disease impact and management

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Final review meeting, Tay Ninh Vietnam
October 2023

Objective 1:

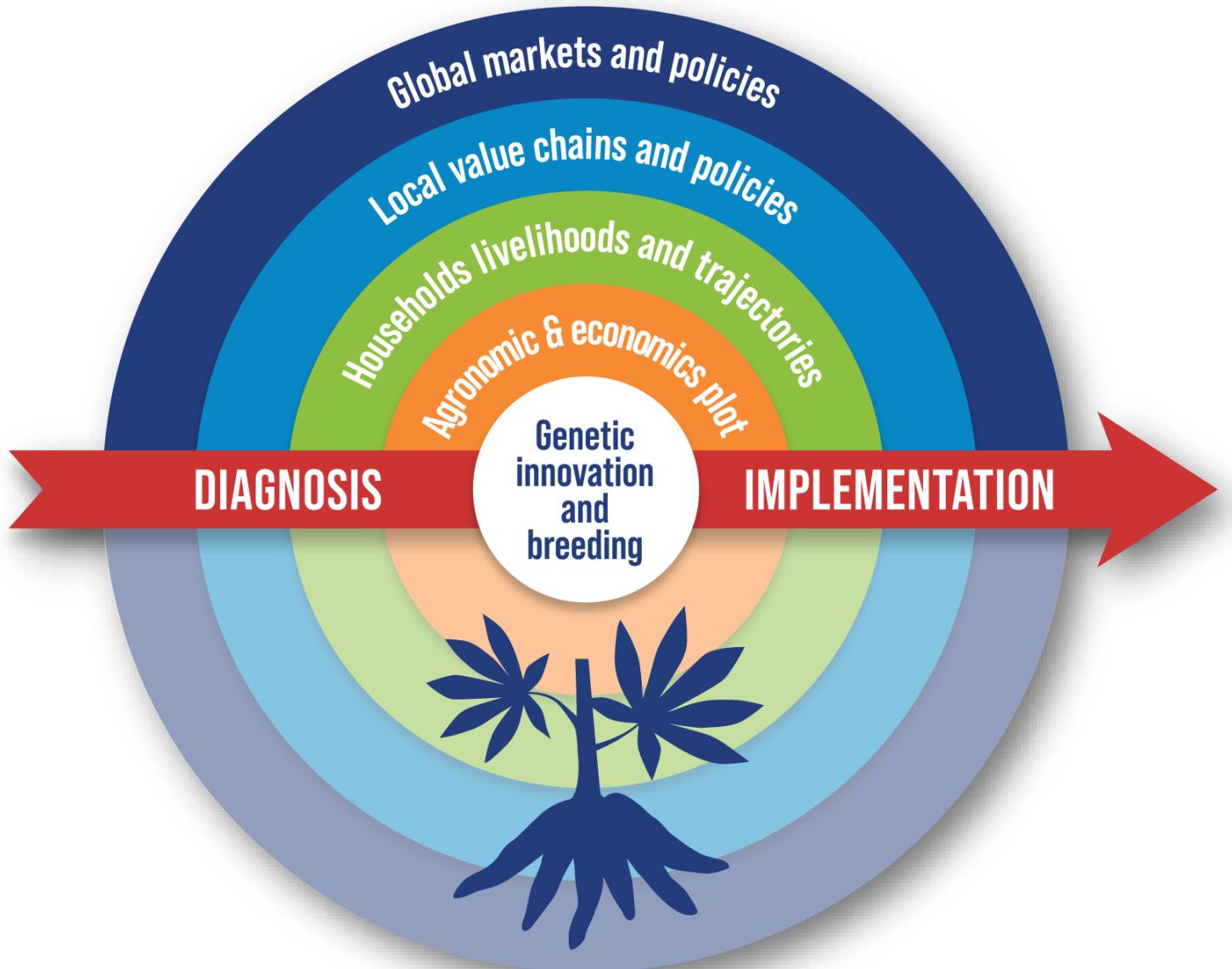
Assess the opportunities, challenges and risks for the development of sustainable regional solutions for cassava disease management in mainland SEA including coordinated policy development, sustainable business and public-private funding models;

The opportunities and threats can come at multiple scales:

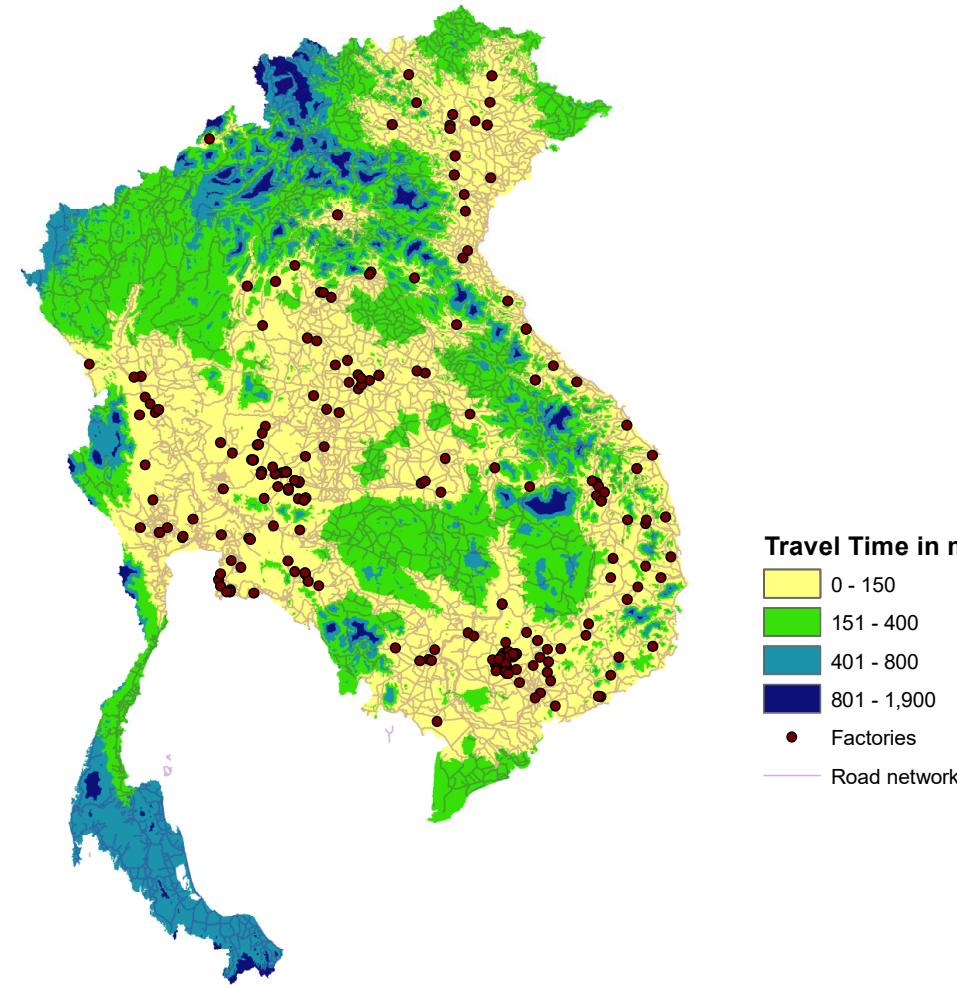
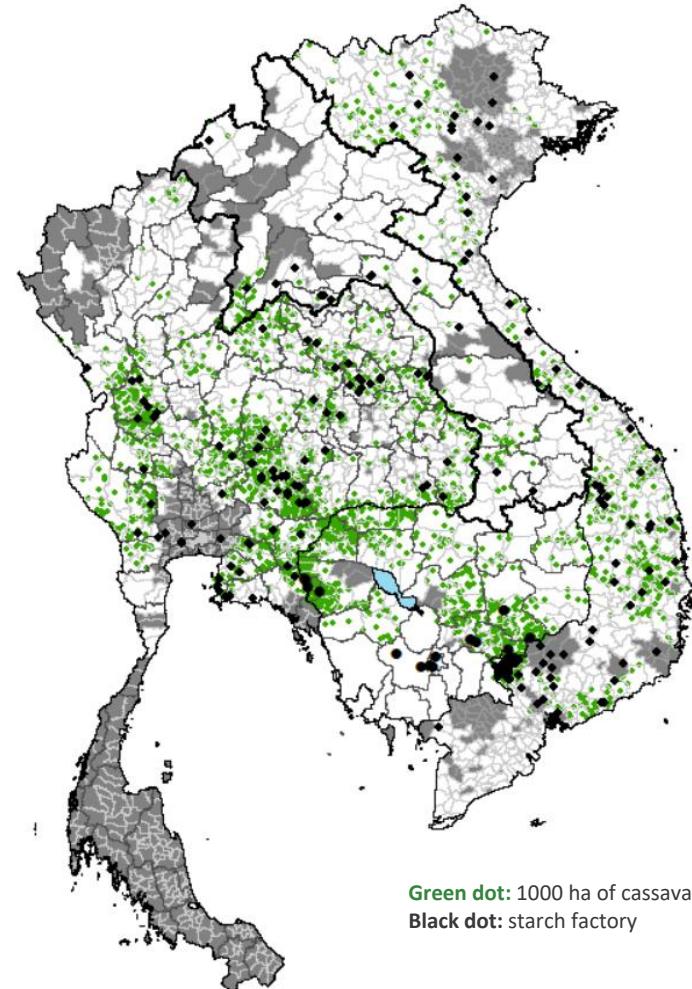
Understand the demand, drivers & trajectories of the cassava sector

Incentives to adopt and scale innovations in different contexts

Incentive to sustain particular practices, processes, partnerships



The interconnected cassava economy of Mainland Southeast Asia



Travel Time in minutes

- 0 - 150
- 151 - 400
- 401 - 800
- 801 - 1,900

● Factories

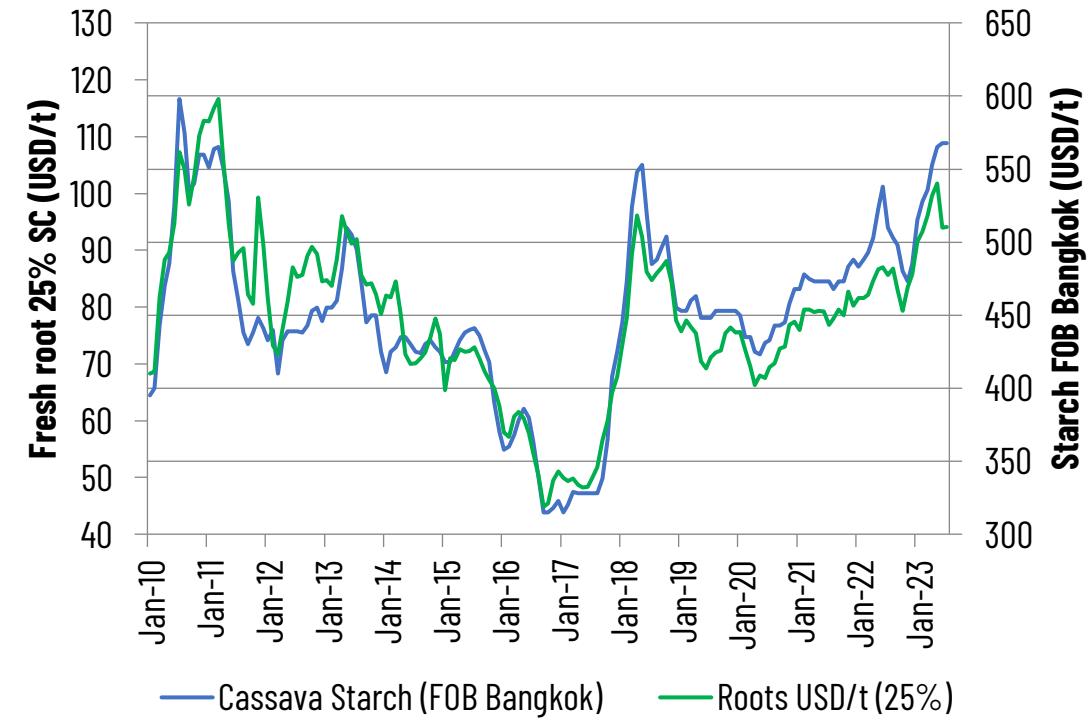
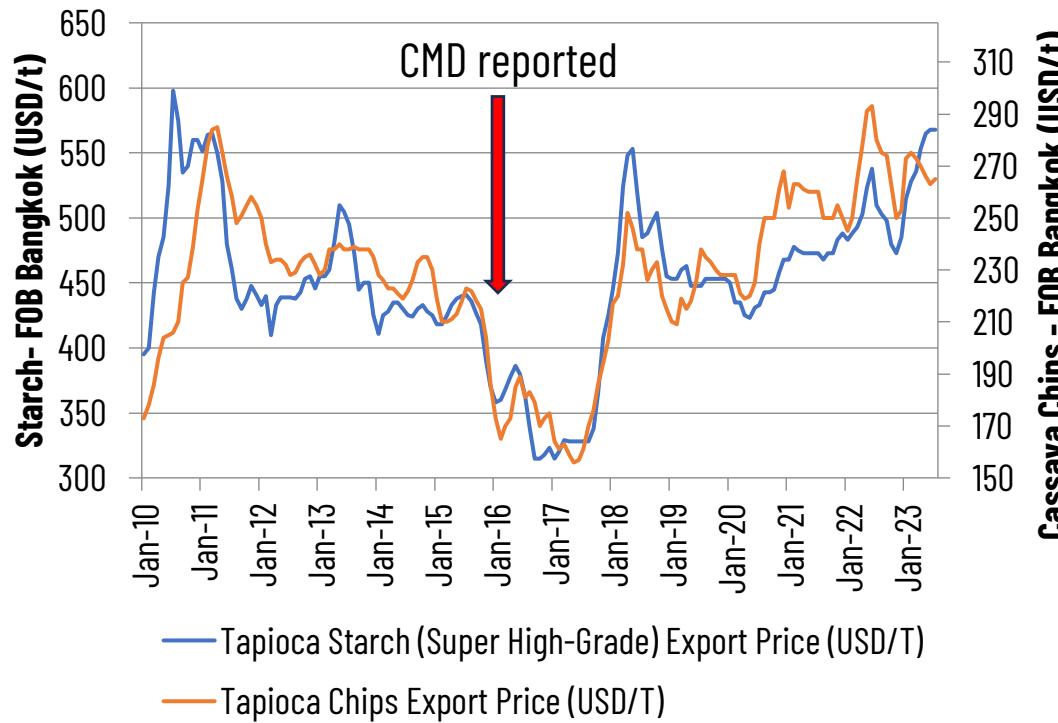
— Road network

Accurate national level statistics of total infected area are difficult to obtain – even total area of cassava is a challenge

From the first report in a single plantation in Northeast Cambodia

- The economic impact of cassava disease continues to accumulate rapidly. Estimates of infected production area from partner include
- **419,560 ha in Cambodia** (~76% of planted area in June 2022),
- **120,686 ha in Vietnam** (72,400ha in 2021),
- **~480,000ha in Thailand** (105,777ha in 2021).
- In Laos there had been several new outbreaks, but eradication has efforts have reportedly kept the area low (**<100ha**) decreasing from the 600 ha in 2021
- **This represents over 37% of the combined cassava area in those countries (up from 24% in 2021).**

Changes in the prices impact production decisions at the farm level and influence the flow of trade – impacting disease spread and impact



Prices fluctuate based on local demand and supply – but global markets largely influence the average prices

Farmers witness low production due to drought in local area

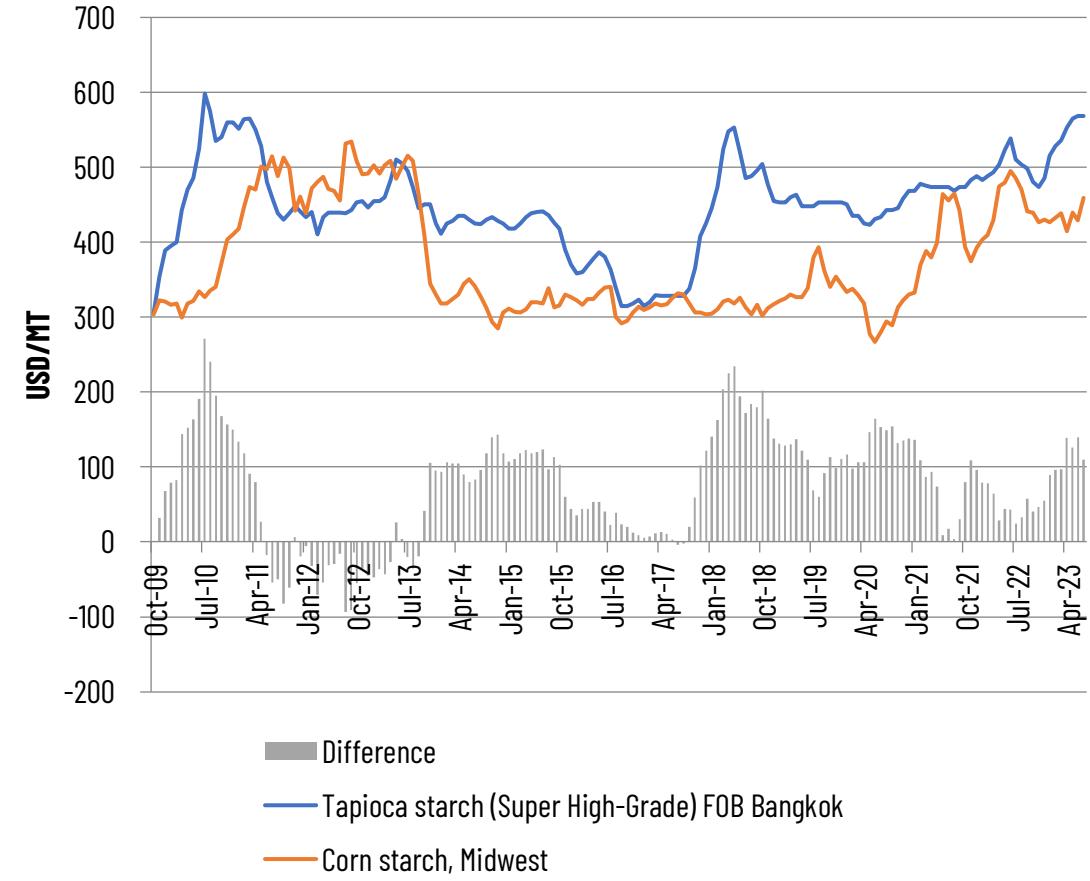
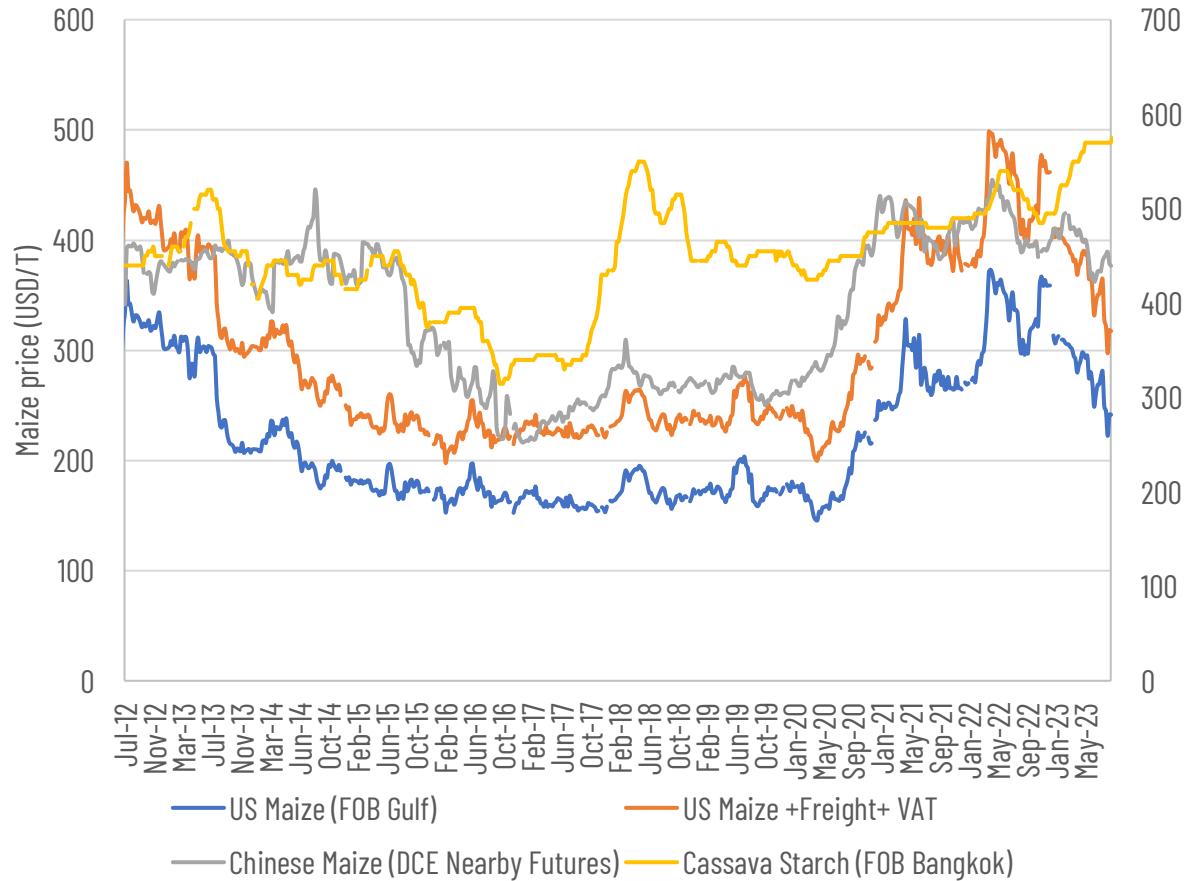


Farmers are expecting higher prices

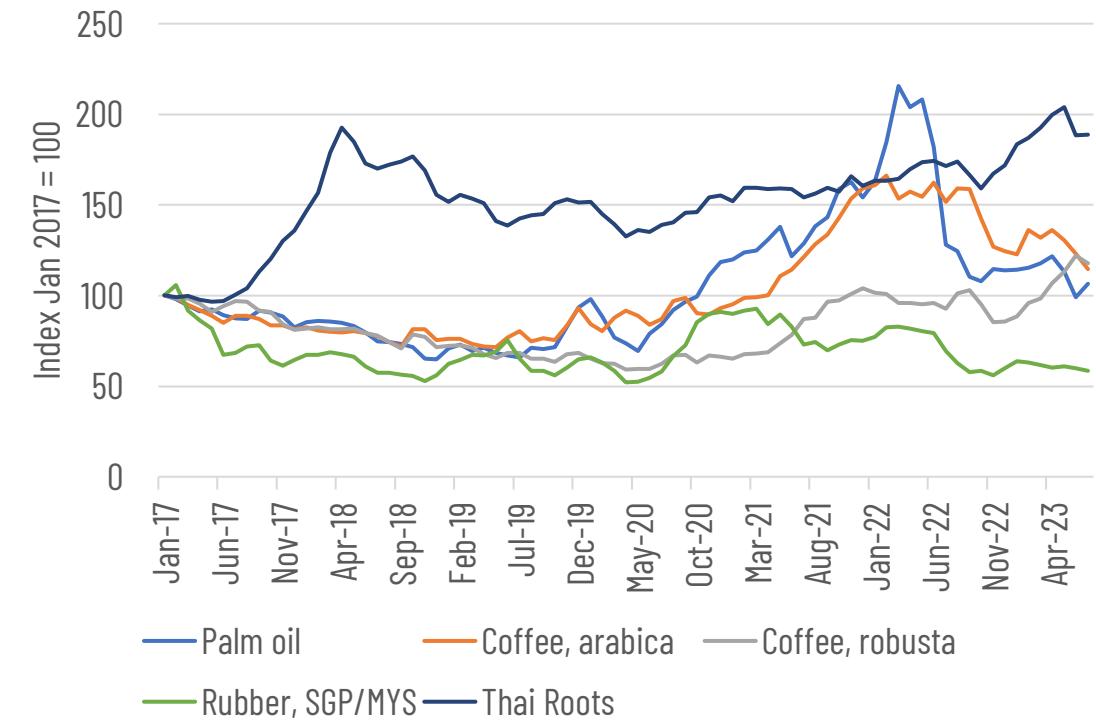
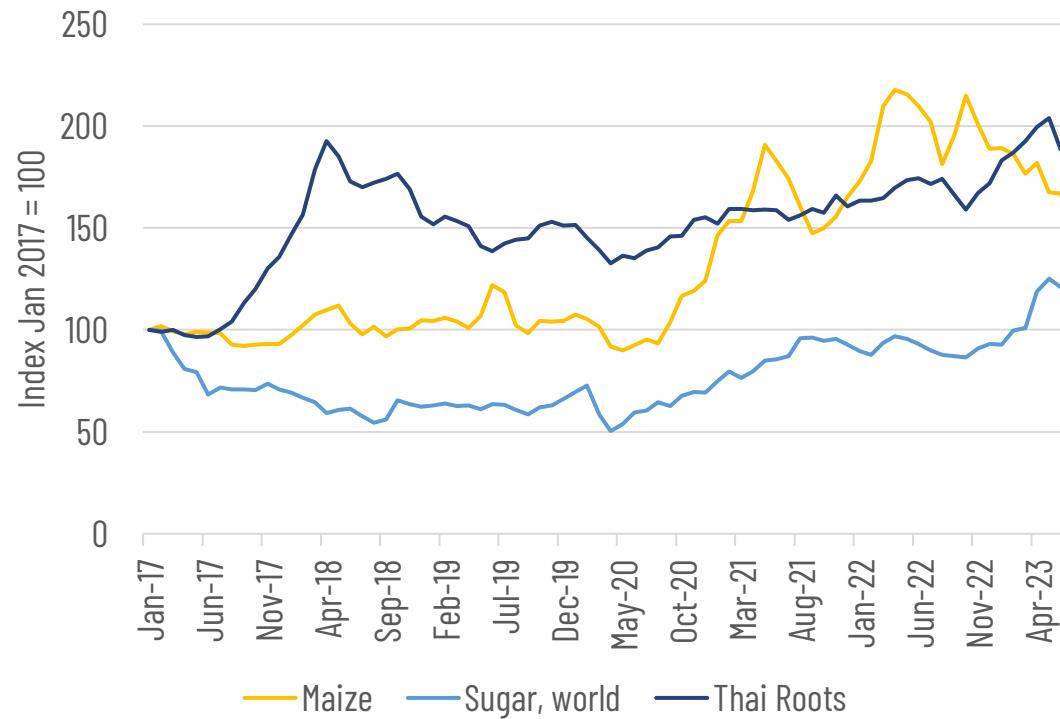


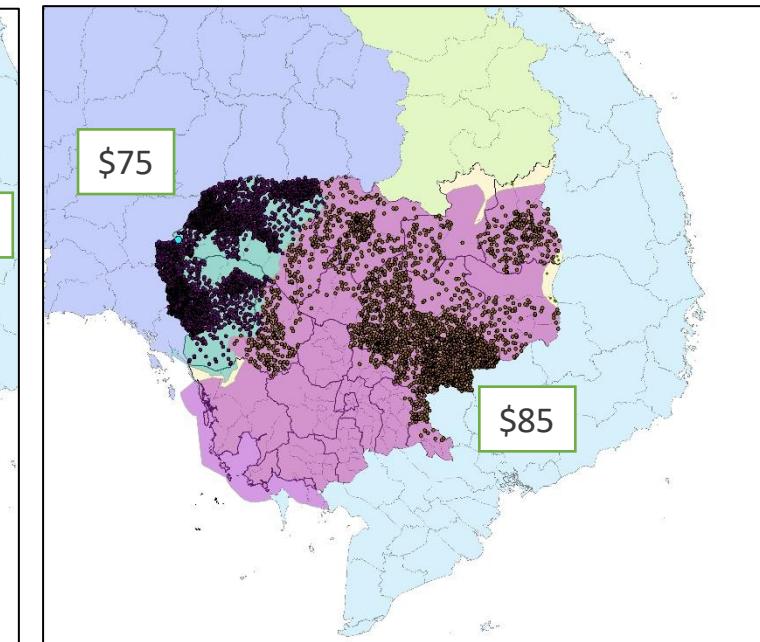
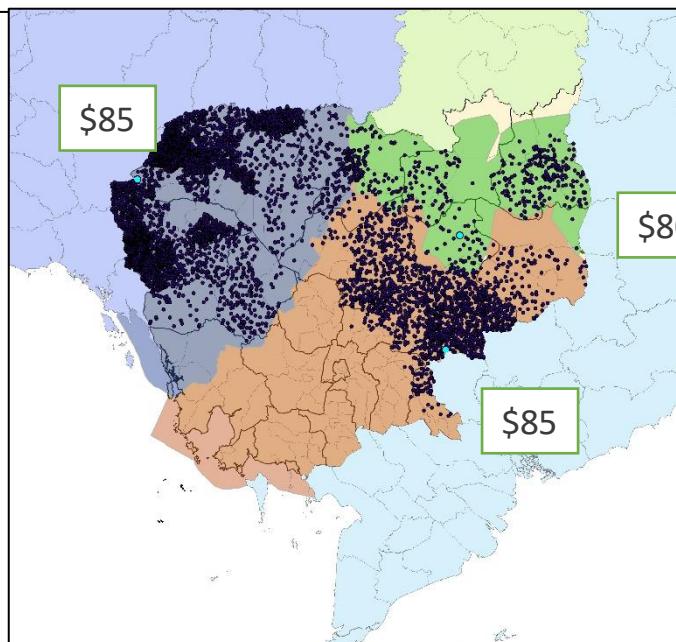
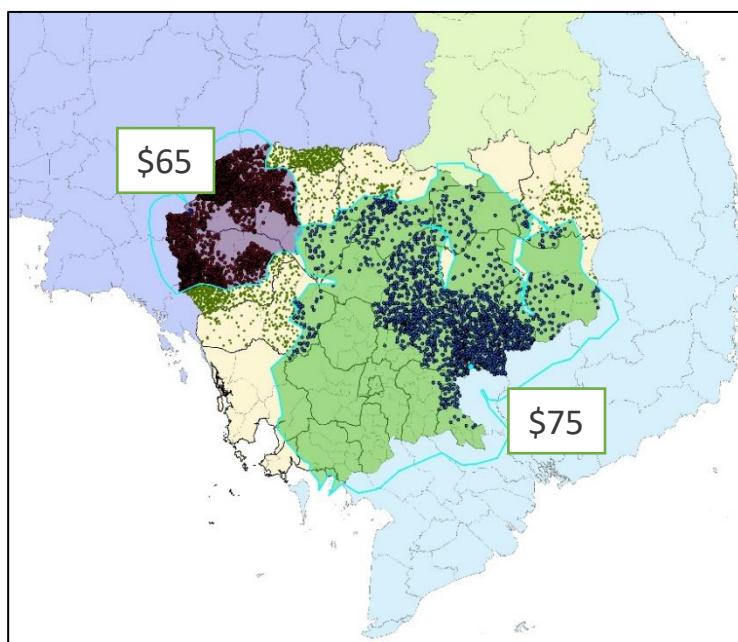
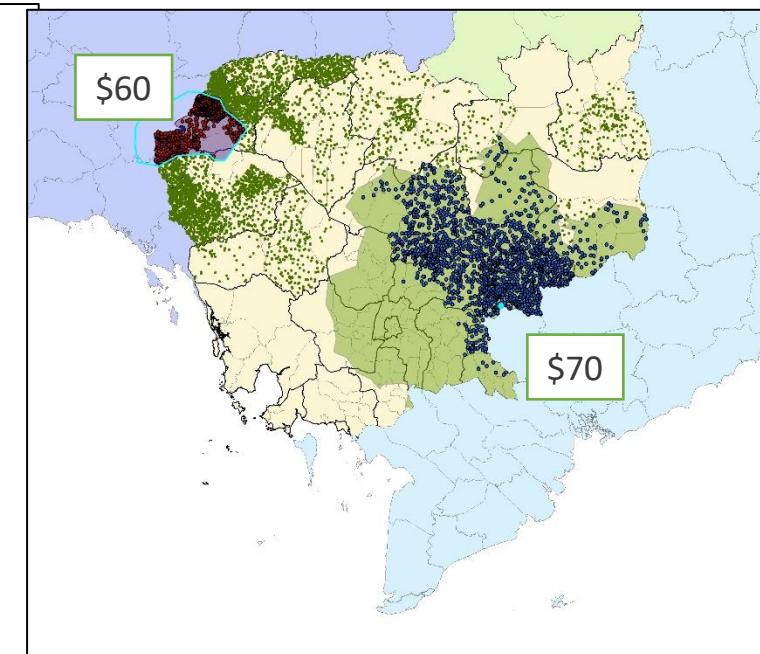
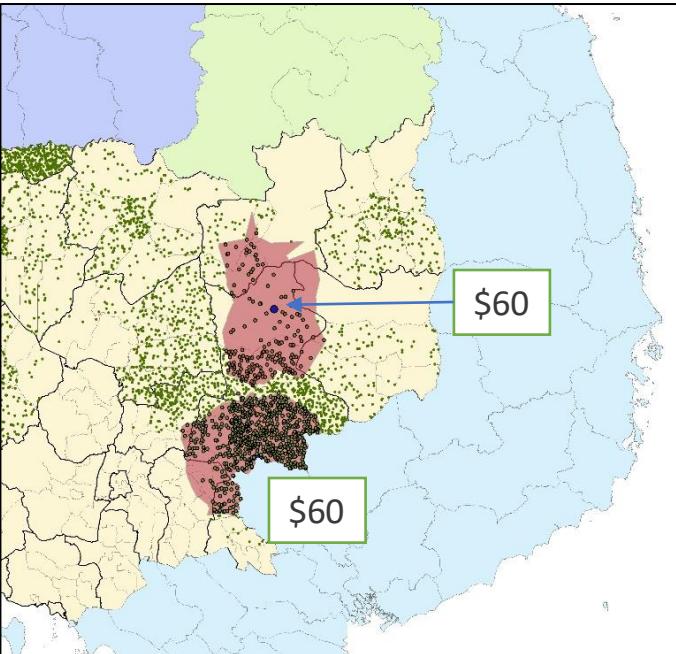
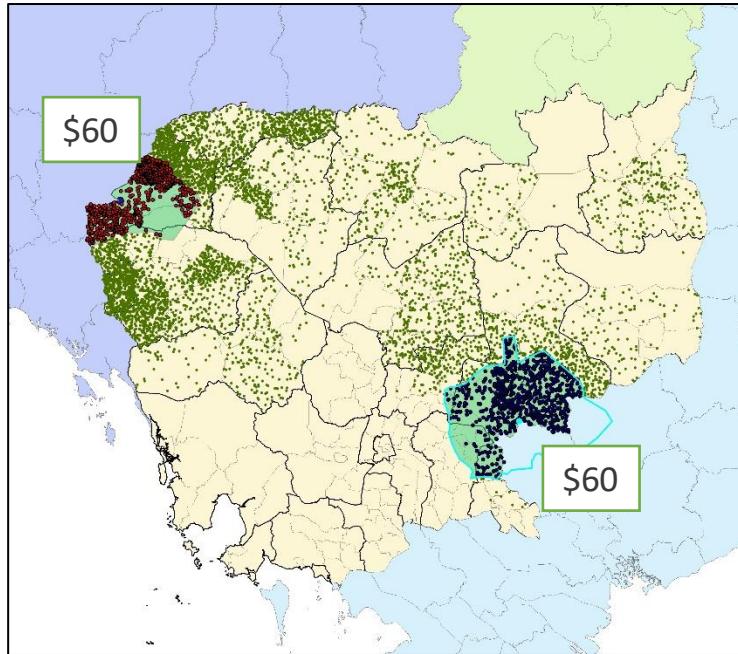
The price is determined by the global market situation

CMD arrived around the time that the floor price was removed from Chinese maize – good news.

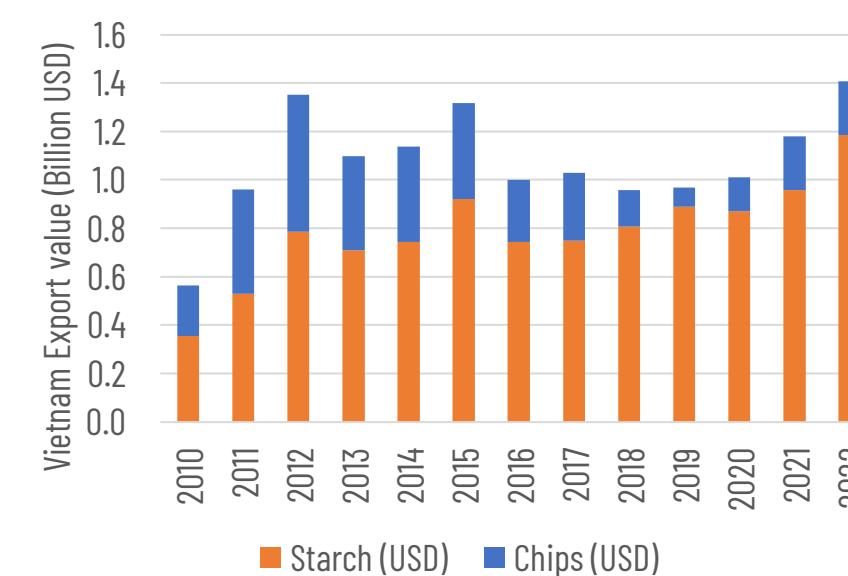
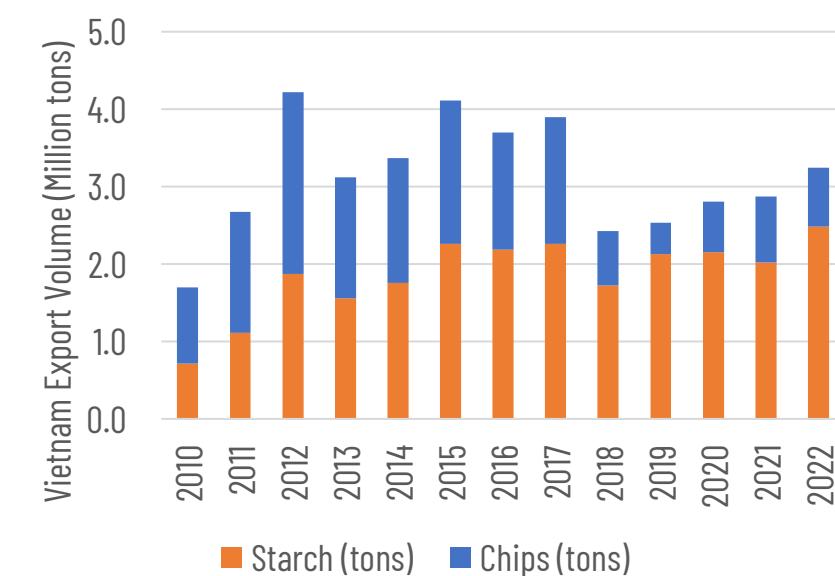
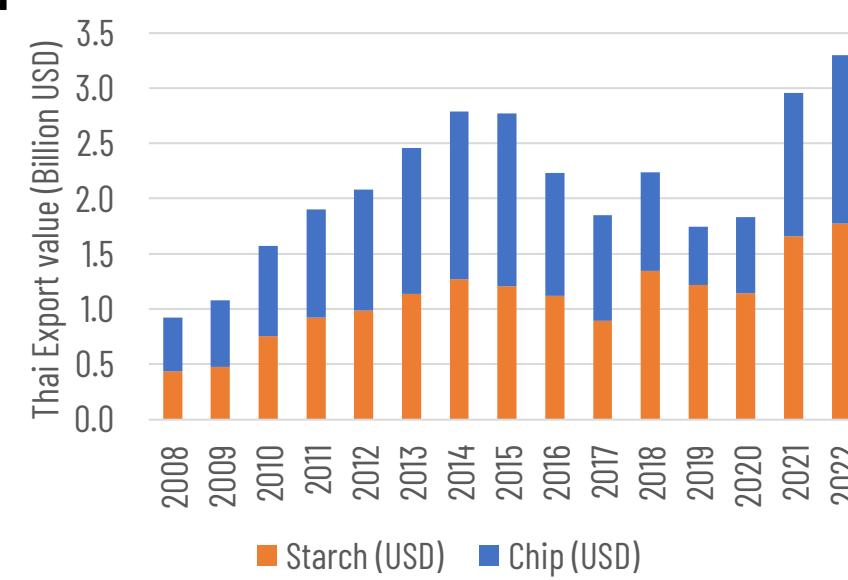
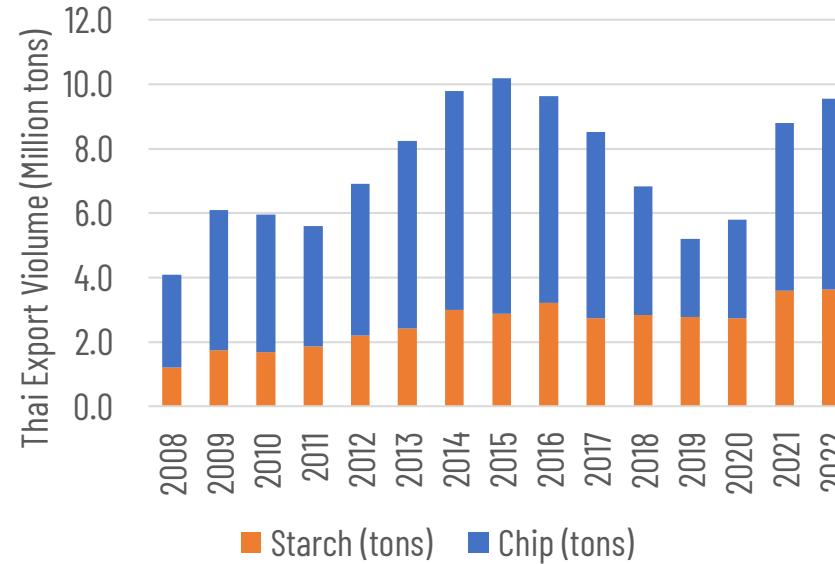


Smallholder cassava farmers are connected to global markets that impact both demand and supply

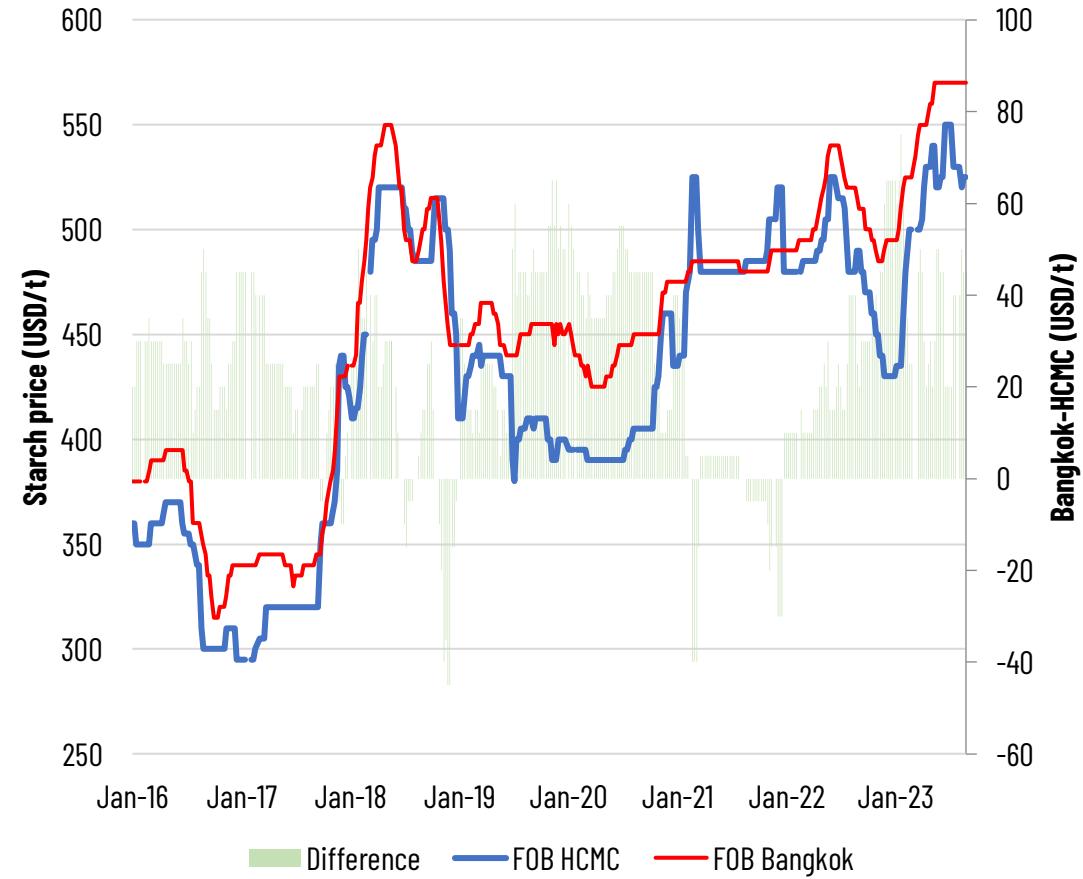
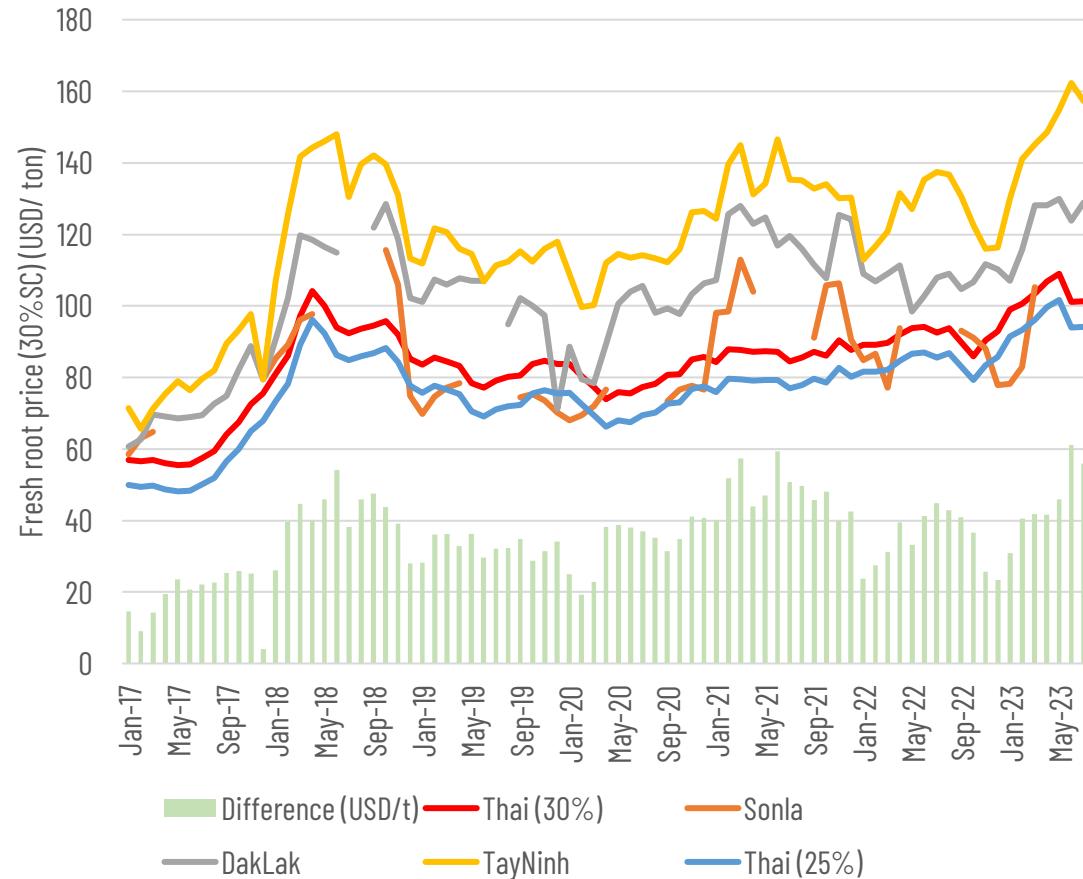




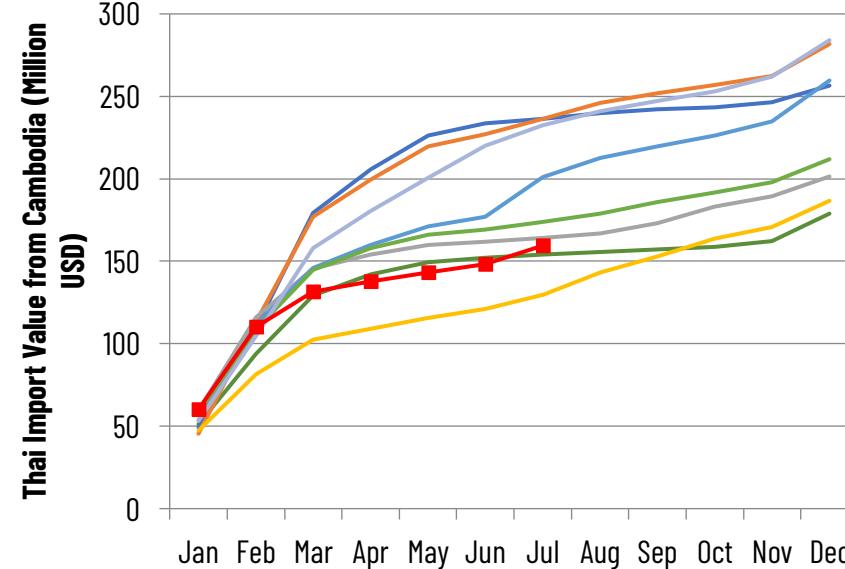
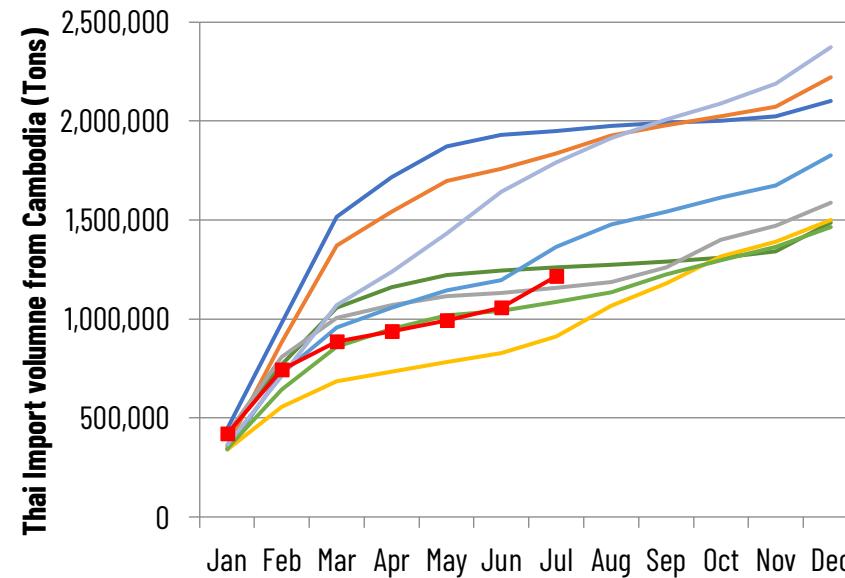
2022 largest export value for both Thailand and Vietnam



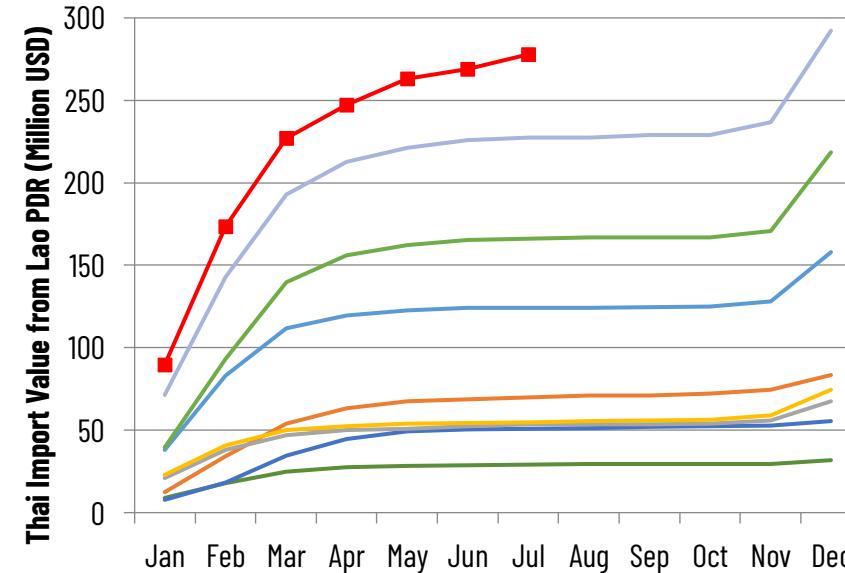
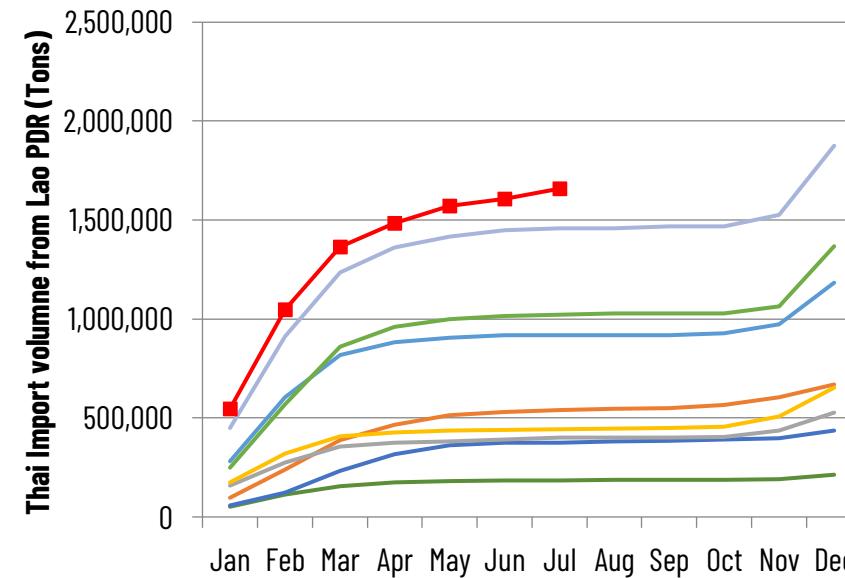
The battle for fresh roots between Vietnam and Thailand; and between starch and chip processors



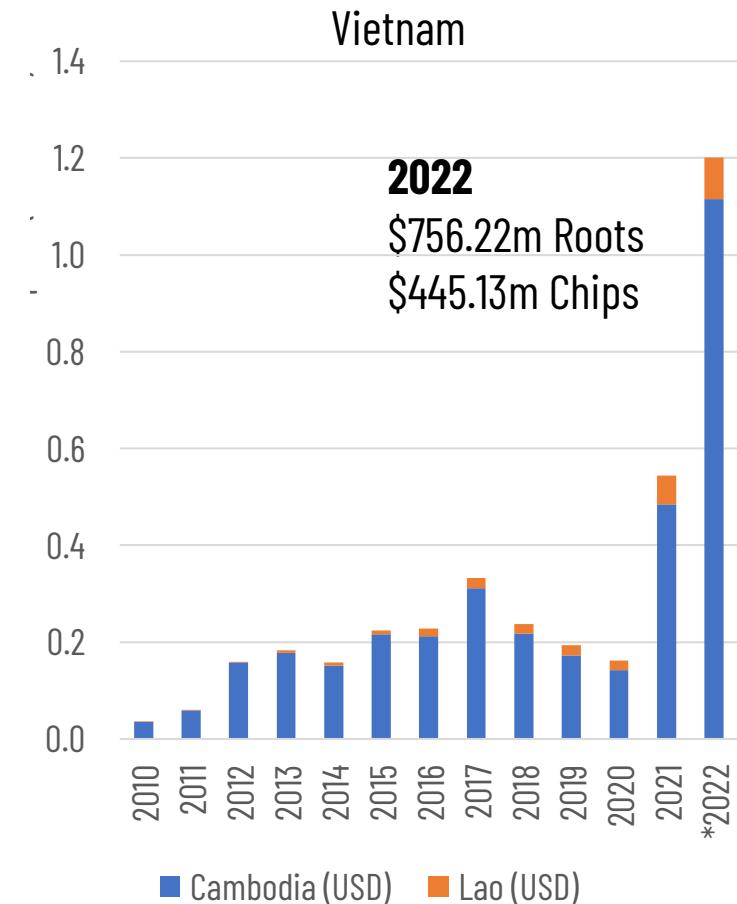
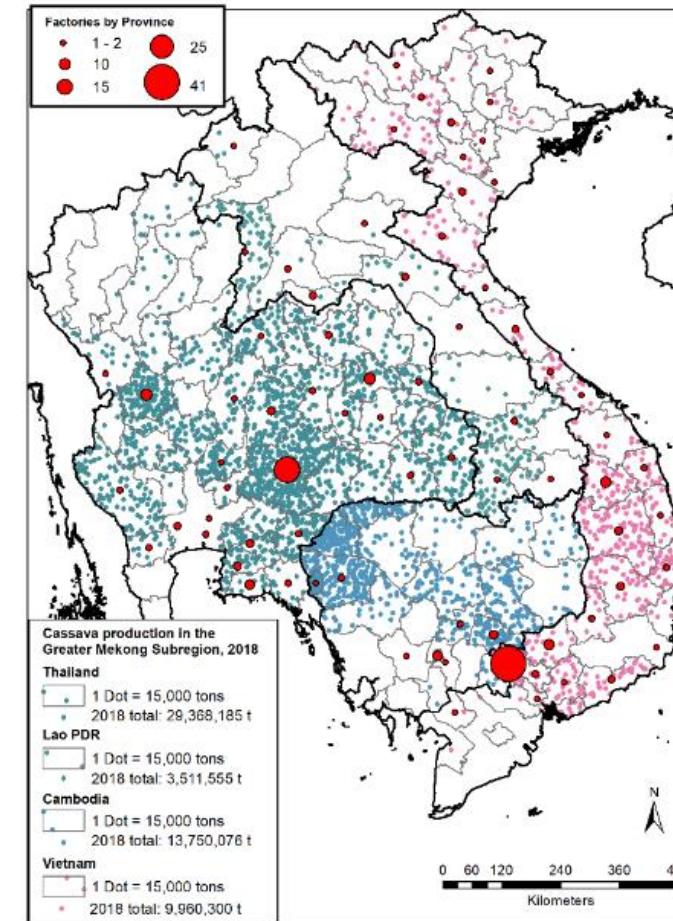
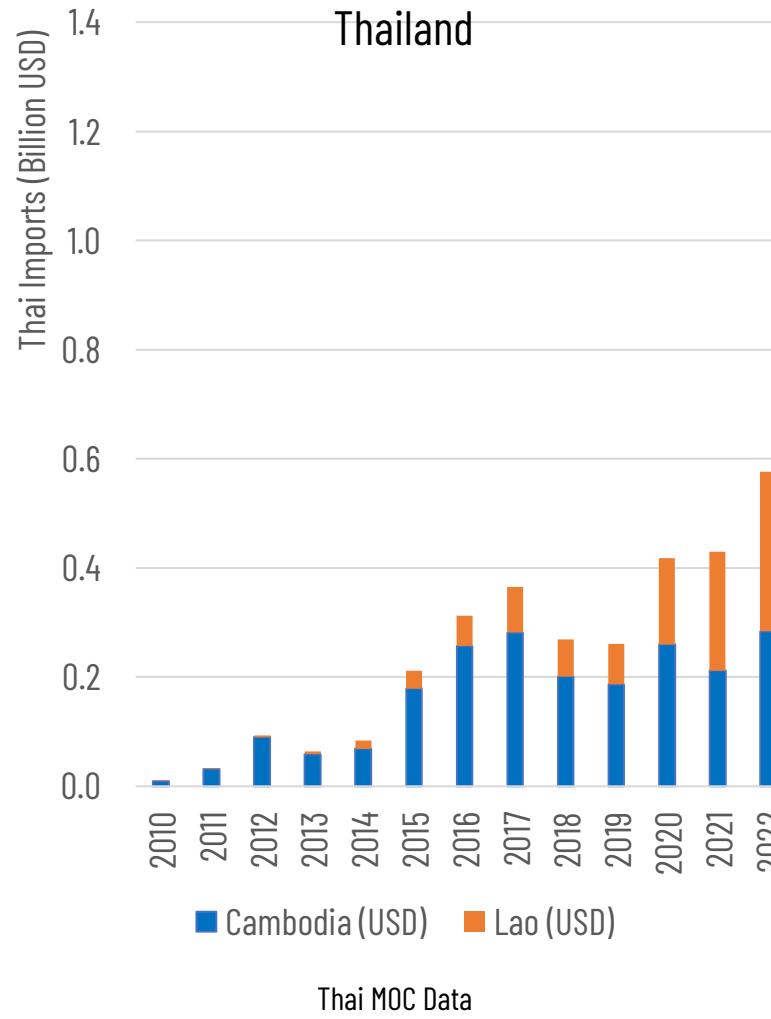
Cambodia



Laos



Imports from Cambodia and Laos can mask fall in production in Thailand and Vietnam



Why starch content matters and the case for ongoing breeding effort (scenario)

- Benchmark root price is at 30% starch
- Yesterday's price is 3650-3800 VND/kg
 - 30% = \$156 USD/T
 - 25% = 133 USD/T
 - If yield is similar at 30t/ha
 - \$690 loss per ha
(Equivalent to ~5t of fresh roots at 30%)
- Area of Tay Ninh 40,000 ha
- \$27.6 Million USD value lost to farmers in Tay Ninh alone per year





Thanks!

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