

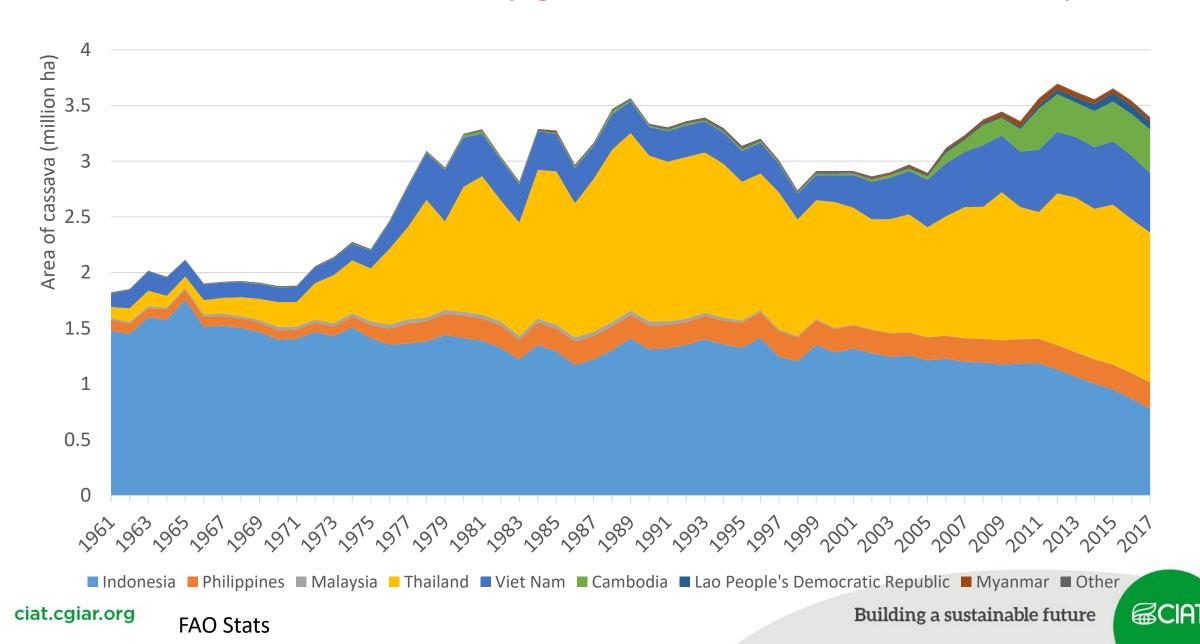
Cassava markets, value chains and livelihoods in Asia: implications for Lao PDR

National Cassava Stakeholder Meeting Vientiane, March 2019 Jonathan Newby



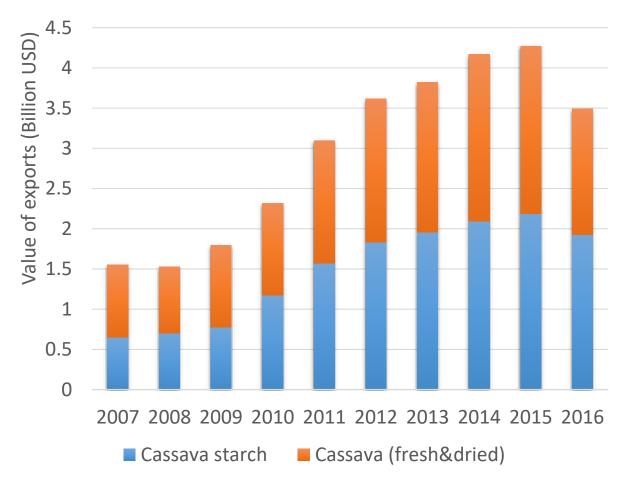
j.newby@cgiar.org

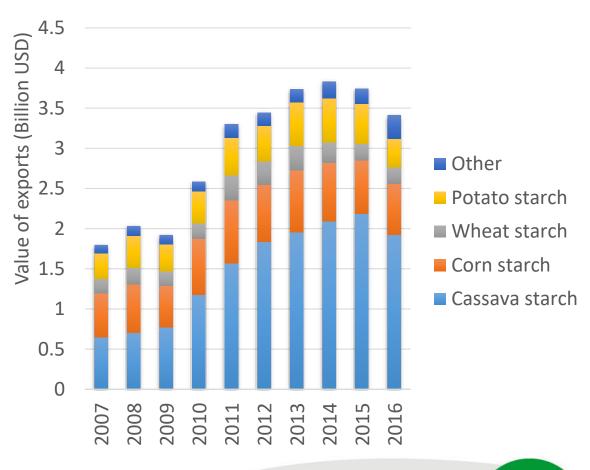
How much cassava is currently grown in Asia? How much next year?



Value of cassava trade and relative importance of cassava starch in global trade

Global trade largely is Southeast Asia exporting to East Asia and Southeast Asia

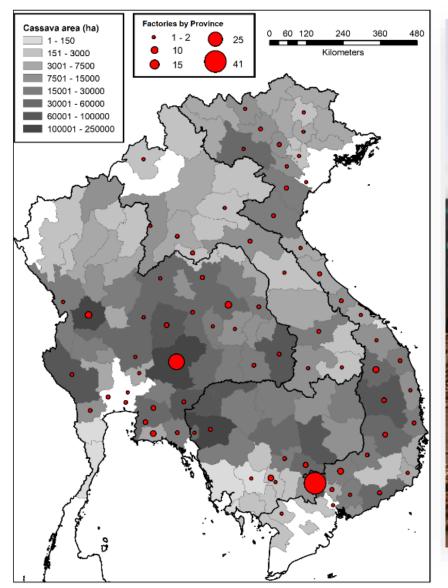




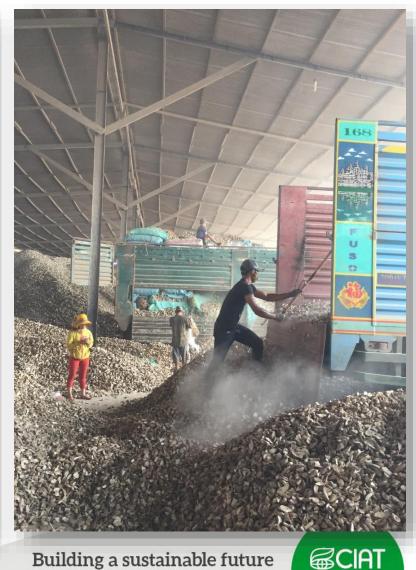
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Source: Comtrade

The regional value chain for cassava products involves large amounts of cross border trade







Cross border trade in fresh roots and dried chips (2016)

Value of cassava (fresh or dried) exports between project countries and world (2016 \$'000)

Importer	Thailand	Viet Nam	Lao PDR.	Cambodia	China	World
Exporter						
Thailand		5	21	2	1,106,456	1,108,946
					(1,139,302)	
Viet Nam			6		219,786	256,205
					(236,045)	
Lao PDR	50,260	11,552			73	62,203
	(56,418)	(14,547)				
Cambodia	12,872	42			8,355	21,333
	(260,976)	(212,807)			(15,484)	
Myanmar	12				31	43

Figures in parenthesis is the import value reported by partner countries. In some cases there is significant differences between the recorded export value and import value by the partner country.



Cross border trade in cassava starch (2016)

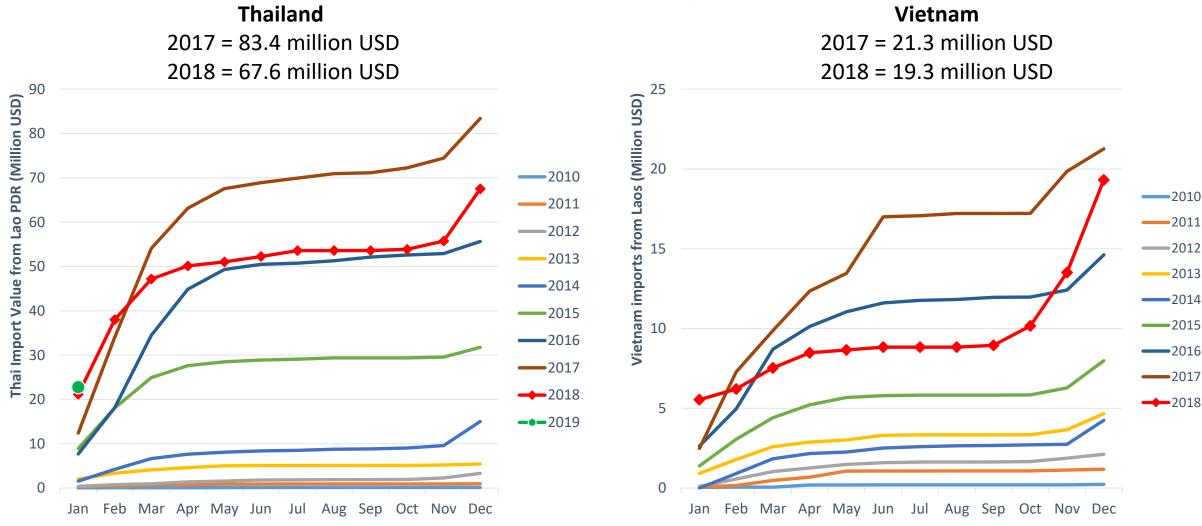
Value of cassava starch exports between project countries and world (2016 \$'000)

Importer	Thailand	Viet Nam	Lao PDR	Cambodia	Myanmar	China	Indonesia	World
Exporter								
Thailand		3,460	272	11	751	524,603	198,569	1,112,428
						(535,697)		
Viet Nam	11			59	146,295	649,604	25,410	738,588
						(181,453)		
Lao PDR		5,794				2,830		8,982
						(1,337)		
Cambodia						10,564		13,366
						(10,428)		
Myanmar								



Cumulative monthly value of imports of cassava from Lao PDR

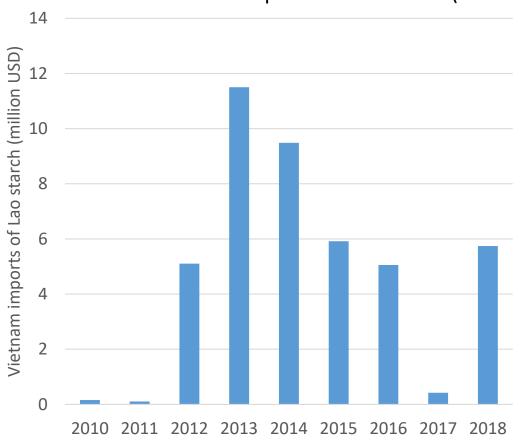
(fresh or dried)

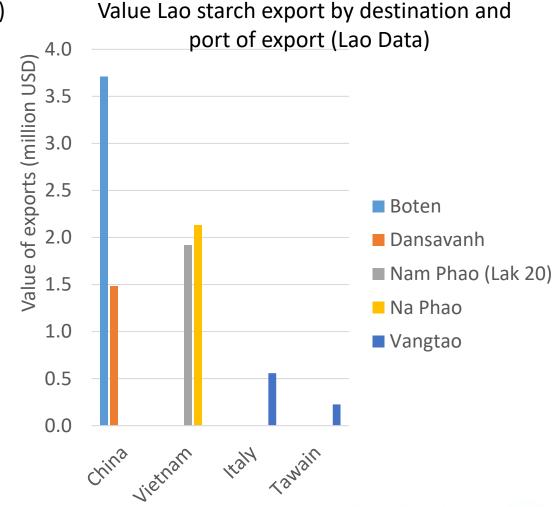




Starch Exports

Value of Vietnam's imports of Lao starch (Vietnam data)







What is cassava used for?

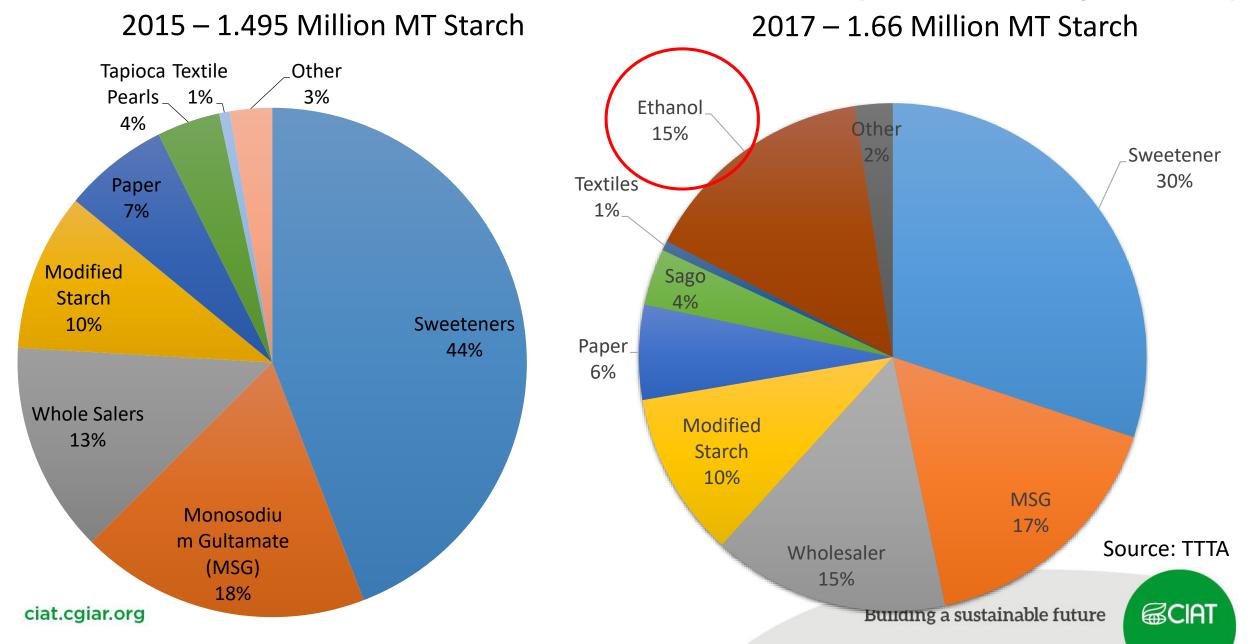
On the demand side – the market outlook for cassava in Asia needs to be considered in the context of substitutes in different applications

- 1. Global markets where cassava chips compete with other forms of carbohydrate for processing animal feed or ethanol such as maize, sorghum, wheat, molasses oil, gas.
- 2. Markets where cassava starch competes largely on price with substitutes such as **maize** and **potato** starch, **sugarcane**.
- 3. Markets where the functional properties of the starch are desired. Consumer preferences, clean label segment, gluten free etc.





Domestic utilisation of starch in Thailand (14.5% Root Equivalents)



And on the supply side – the relative competitiveness against other land use

in the context of different trends and shocks

- Own price and relative prices to other commodities that can be produced in agro-ecological zones
- Changes in costs of production
 - Changing labour costs and ease of mechanization
- Long term climate trends
- Floods and droughts
- Changes in land suitability and land degradation
- IMPACT OF PEST AND DISEASE



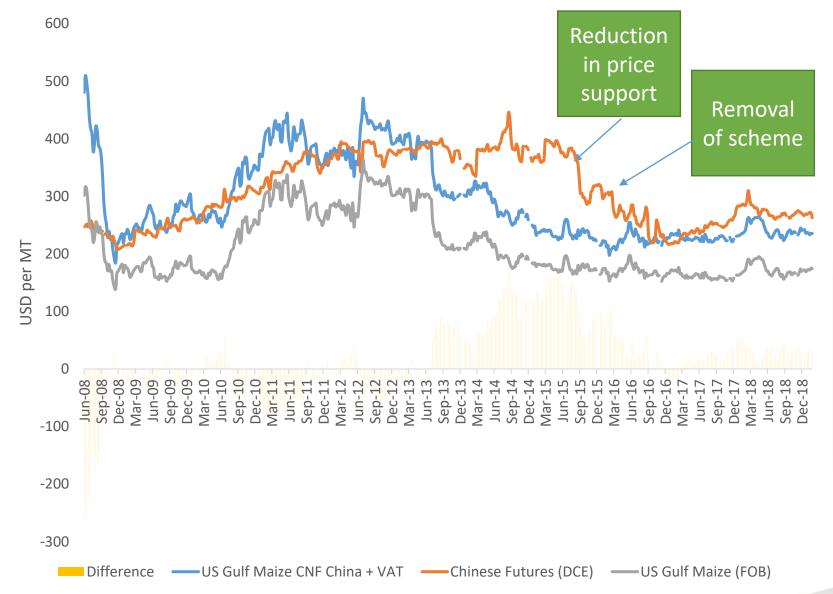
Cassava farmers and processors in Southeast Asia are involved in a constant battle to be competitive



VS



Smallholders cassava farmers part of a larger global carbohydrate market

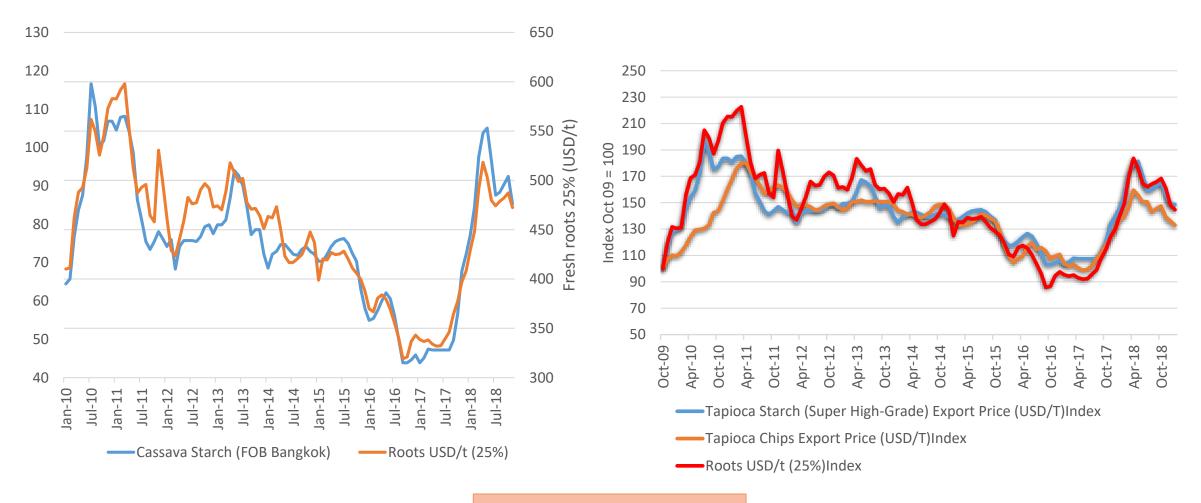


Large stockpile remains:
Allowed to be used for biofuel





Cassava root, dried chips and starch prices in Thailand (world reference)



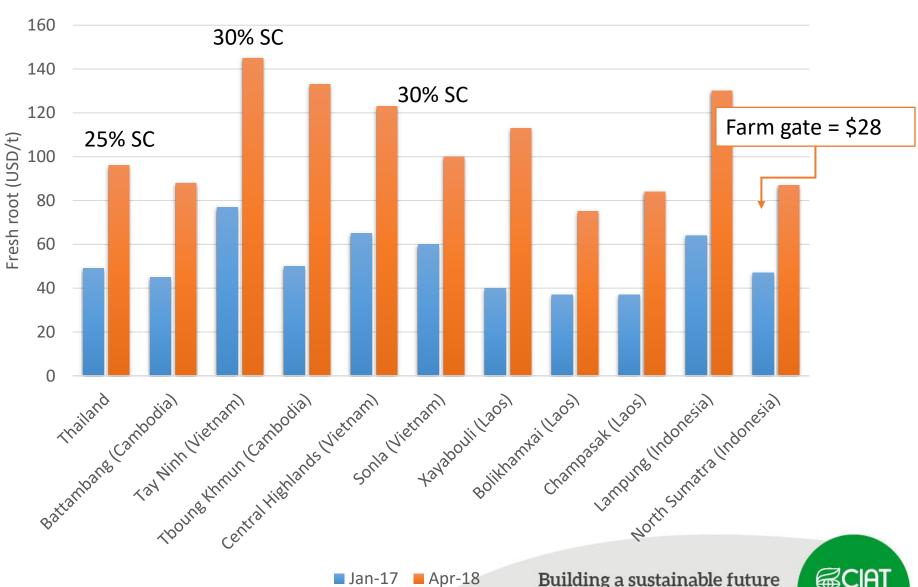
Reduction in planted area Flooding in Thailand Maize price in China DISEASE?



Large price uncertainly - Fresh root prices at collection points & factory



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Future of cassava starch?



Drivers of use of cassava starch in food processing sector

Factors influencing growing demand:

- 1. Desired functional properties in many food applications
- 2. Reduced cost in modification
- 3. Consumer demand and clean label market

Stronger Demand for Clean Label in Asia Pacific Reveals Ingredion Consumer Research



22 Jun 2015 --- Ingredion has highlighted key results of its latest wave of global consumer research conducted in March 2015, showing that clean label is as much on the radars of consumers in Asia Pacific as in many other parts of the world. The online study was conducted across 17 countries; including China, Japan and Australia, in order to provide Ingredion and its customers with key insights into consumer perceptions of ingredients, labels and product positioning.

Since 2011, Ingredion has been conducting the global consumer research study with an independent research partner - MMR Research Worldwide. The survey is repeated annually to help benchmark and





Images and Graphics

Social Media

Media Relations Contacts

Awards and Recognition

Label Starch CLARIA® Functional Clean-Label Starches empower manufacturers to meet increased consumer demand for cleaner labels enabling formulations with similar functionality to a modified food starch.

CLARIA® Bliss are functional clean label tapioca-based

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Introduction to CLARIA® Functional Clean-Label Starch

Clean-label starch, functional clean label starch, starch CLARIA® Functional Clean-Label Starches labels simply as starch yet perform Tate & Lyle's line of CLARIA® Functional Clean-Label Starches empowers manufacturers to meet increased consumer demand for cleaner labels enabling formulations with similar functionality to a modified food starch. Globally, consumers are demanding convenient, great tasting foods that have recognisable ingredients on the label. In fact, one-in-four new products today is launched with "cleaner-label" claims. All CLARIA® Functional Clean-label Starch products are certified as non-GME At Tate & Lyle, our texturants range now offers a comprehensive array of Non-GMO offerings for all regions, providing our customers with choices to fit their needs. Our non-GMO ingredients offer the same functionality as their traditional counterparts without compromising on taste or texture, meaning you can offer your consumers everything they're looking for in the foods and beverages they love CLARIA® Functional Clean-Label Starches use CLARIA® technology, a proprietary technology that has been shown to provide improved sensory attributes (neutral colour) vs. other functional clean-label starche Counted with Tate & Lyle's commitment to partnership and ingredient innovation, CLARIA® Functional Clean-Label Starches provide manufacturers the opportunity to co-create the next generation of cleaner-label products CLARIA® Bliss Functional Clean-Label Starches

Starches

CHICAGO, July 24, 2018—Archer Daniels Midland Company (NYSE: ADM) today introduced a new line of international. CHICAGO, July 24, 2018—Archer Daniels Midland Company (NYSE: ADM) today introduced a new line of specialty taploca starches and taploca maltodextrin ingredients in partnership with Vedan International. ADM's taploca matrodextrin is non-GMO and is available in an organic version. ADM's taploca modified starches "Over the past few years, ADM has been focused on expanding the range of our starch-based ingredient options and solutions for customers." early known that are plant-based to provide cleaner label options and solutions for customers."

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Tapioca's neutral taste profile allows it to now add tapioca-based modified starches and modified starches. "Tapioca's neutral taste profile allows it to be used in a matrices." Difformaso, vice president, ADM's starch business. "Tapioca's neutral taste profile allows it to be used in a mattodextring to the profile allows it to be used in a mattodextring the profile allows it to be used in a mattodext 07/24/2018

Starches help improve stability by binding water in food systems and can also enhance mouthfeel and starches help improve stability by binding water in food systems and can also enhance mouthfeel and starches help improve stability by binding water in food systems and can also enhance mouthfeel and starches help improve stability by binding water in food systems and can also enhance mouthfeel and systems and can also enhance in a can also enha Starches help improve stability by binding water in food systems and can also enhance mouthfeel and starches help improve stability by binding water in food systems and can also enhance mouthfeel and starches help improve stability by binding water in food systems and can also enhance mouthfeel and starches help improve stability by binding water in food systems and can also enhance mouthfeel and starches help improve stability by binding water in food systems and can also enhance mouthfeel and starches help improve stability by binding water in food systems and can also enhance mouthfeel and starches help improve stability by binding water in food systems and can also enhance mouthfeel and starches help improve stability by binding water in food systems and can also enhance mouthfeel and starches help improve stability by binding water in food systems and can also enhance mouthfeel and starches help improve stability by binding water in food systems and can also enhance mouthfeel and starches help improve stability by binding water in food systems and can also enhance mouthfeel and starches help improve stability by binding water in food systems and can also enhance mouthfeel and starches help improve stability by binding water in food systems and can also enhance mouthfeel and starches help improve stability by binding water in food systems. growing starch ingredient portfolio." viscosity, they are local in applications as unessented bakery, beverages, meat and dry sausage applications.

Careers

Conclusion

- Market and production risk contribute to the vulnerability of smallholder cassava farmers in Asia – debt, distressed land sales, migration by necessity, and other undesirable livelihood choices
- 2. An understanding of the global market context in which localised cassava value chains operate (farmer-trader-processor) helps recognize the market risk that farmers and processors are exposed to **but timely information and decision support tools are necessary.**
- 3. The addition of disease pressure will impact the competitiveness of smallholder cassava farmers in the global carbohydrate market



ACIAR Cassava Value Chain and Livelihood Program

Join the conversation at: https://www.facebook.com/groups/1462662477369426/





Australian Government

Australian Centre for International Agricultural Research



















Thank you!



WE'RE PROUD TO
HAVE CELEBRATED 50 YEARS
OF AGRICULTURAL RESEARCH
FOR DEVELOPMENT

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