

Sustainable Cassava Farming

**SMS Group Empowers Farmers for
a Sustainable Cassava Farming**



Cassava's Impact on Global Food Security

Unveiling the Power of Cassava

Cassava is the third-largest source of dietary carbohydrates in the tropics, after rice and maize. It is also a staple food for over half a billion people globally. This versatile crop plays a pivotal role in global food security and industry, serving as a vital resource for both human consumption and animal feed. Additionally, it serves as a raw material across various industries.



Sustainable Development Toward a Better Future



Highlighting Thailand's Cassava Leadership

Thailand is a major player in the global cassava market, accounting for a significant 10% of global production according to the Food and Agriculture Organization (FAO, 2022). Over 1.5 million hectares of land are dedicated to cassava cultivation, involving an estimated 730,000 farming households. The average farm size for cassava production is around 2.5 hectares.⁽¹⁾


Thailand's dominance in the cassava industry is further solidified by its export value. In 2023, the country exported cassava products worth a staggering 1.25 billion dollars, solidifying its position as the world's leading cassava exporter.⁽²⁾

1. Office of Agricultural Economics, Thailand

2. Thai Customs Department, Thailand

Innovative Solutions for a Thriving Future

Cassava plays a vital role in Thailand's economy, food security, and rural livelihoods, making it a crucial crop for the country. This lucrative plant provides a key source of income to smallholder farmers across the nation, driving Thailand's rural economy. Despite its importance to rural livelihoods, the cassava crop faces a serious threat from rapidly spreading pests and diseases.



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Cassava Mosaic Disease (CMD)

In recent years, Cassava Mosaic Disease (CMD), caused by the Sri Lankan cassava mosaic virus (SLCMV), has emerged as a significant threat to Thailand's cassava industry. CMD is transmitted by the whitefly, as well as through infected stem cuttings, which are used to propagate cassava plants. Once a cassava plant is infected by CMD, it needs to be cut and destroyed.

Infected plants display noticeable symptoms, including leaf curling and distortion, mosaic patterns, yellowing, and stunted growth. The impact of CMD is severe, accounting for 30% to 80% of yield losses nationwide. This has led to production challenges, a shortage of disease-free stems for cultivation, and significant impacts on the livelihoods of farmers. Addressing CMD is critical for the future sustainability of Thailand's cassava industry.

In a proactive response to this challenge, the Thai Tapioca Development Institute (TTDI) collaborated with the International Institute of Tropical Agriculture (IITA) and Kasetsart University. Their joint efforts led to the successful development of CMD-resistant cassava varieties: ITTI 1, ITTI 2, and ITTI 3 in 2023. This breakthrough not only demonstrates a commitment to combating agricultural threat but also showcases

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The Innovative Capacity of Thailand's Agricultural Sector

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Championing a Sustainable Cassava Future with

Empowerment Through Knowledge and Collaboration



SMS Group is a leading force in revolutionizing the cassava industry. In a significant step forward, they have partnered with TTDI to distribute CMD-Resistant Variety stems free of charge to farmers through their dedicated farmer membership program.

This initiative goes beyond just providing CMD - resistant varieties. The SMS Group, in collaboration with Poon Udom, a subsidiary of the Poonphol Group, is a project focused on propagating CMD-resistant cassava varieties through tissue culture technology.

But their commitment extends even further. By offering comprehensive training programs, SMS Group empowers farmers with the knowledge and skills for sustainable agriculture. These programs cover best practices for cultivation, pest management, and soil health. This empowers farmers to become stewards of their land, ensuring a brighter and more sustainable future for the cassava industry as a whole.

Our Farmer Membership Team is committed to providing CMD-resistant stems to 2,000 of our farmers' membership. Initially, our goal is to cover 30% of Chaiyaphum province with CMD-resistant stems, with a long-term plan to extend this coverage to the entire province within 5-6 years.

Their experiences underscore the immense value of scientific innovation and collaborative effort in addressing agricultural challenges. This narrative isn't just about combating a plant disease; it's a testament to human resilience, the triumph of science over adversity, and the promise of a sustainable future for farming communities.



As we continue to explore the scientific breakthroughs behind these resistant varieties, the positive change they've ushered in, and the hurdles still to conquer, it becomes evident that collective action is crucial.

By joining forces, we can ensure that cassava, a vital crop, not only survives but thrives, paving the way for prosperous communities and robust food security.

This journey, marked by hardship, innovation, and hope, invites us to support a future where agriculture is sustainable and resilient, ensuring well-being and prosperity for all. With a focus on innovation and sustainability, SMS Group aims to increase crop yield, improve farmer livelihoods, and contribute to food security. We believe that our achievements can serve as a model for other regions, helping Thailand achieve a CMD-free future. Education and collaboration are vital to this success, paving the way for sustainable cassava production and a prosperous future for Thai farmers.

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We hope that farmers returned to their fields, equipped with new insights and a sense of hope, they witnessed the transformation of their lands into thriving grounds of productivity and sustainability. This shift not only promises a more prosperous future but also positions Chaiyaphum as a model of resilience and innovation in the face of agricultural challenges.

Open communication and trust form the foundation of this partnership, fostering a collaborative learning environment through workshops and farmer exchanges. This approach ensures the adoption of culturally relevant and impactful solutions, tailored to the community's specific needs.

The fight against CMD exemplifies the importance of collaboration among all stakeholders, highlighting the synergy between TTDI's research capabilities and SMS Group's commitment to sustainable practices. Together, they demonstrate the power of united efforts in overcoming agricultural challenges, setting a precedent for addressing similar threats in the future and ensuring the resilience of Thailand's cassava industry.

Created By : SMS Group and Poon Udom Member of Poonphol Group

ABOUT SMS

The global leader of Non-GMO TAPIOCA STARCH AND MODIFIED TAPIOCA STARCHES from THAILAND is internationally certified with BRC, FSSC 22000, FDA, HACCP, ISO, HALAL, KOSHER.

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