

Thematic 3: Redefining Food Security Toward a Climate-Resilient and People- Centred Framework

Moderator: Alice YAMABE, Policy Researcher, IGES

Panelists:

- Kei KURUSHIMA, Chief Policy Researcher, IGES
- Nazia HUSSAIN, Assistant Professor, Institute for Future Initiatives, the University of Tokyo
- Sayamol CHAROENRATANA, Director, Center of Excellence for Human Security and Equity, Chulalongkorn University

How does climate change affect food security in the Asia-Pacific?

Melting glaciers in the Hindu Kush Himalaya due to rising temperatures, bring short-term floods and long-term drought, threatening agriculture from Central to South Asia.

Rising sea levels (57–100 cm by 2100) from warming seas and ice melt heighten coastal flooding and intensify storm surge risks for Asian megacities and Pacific atolls.

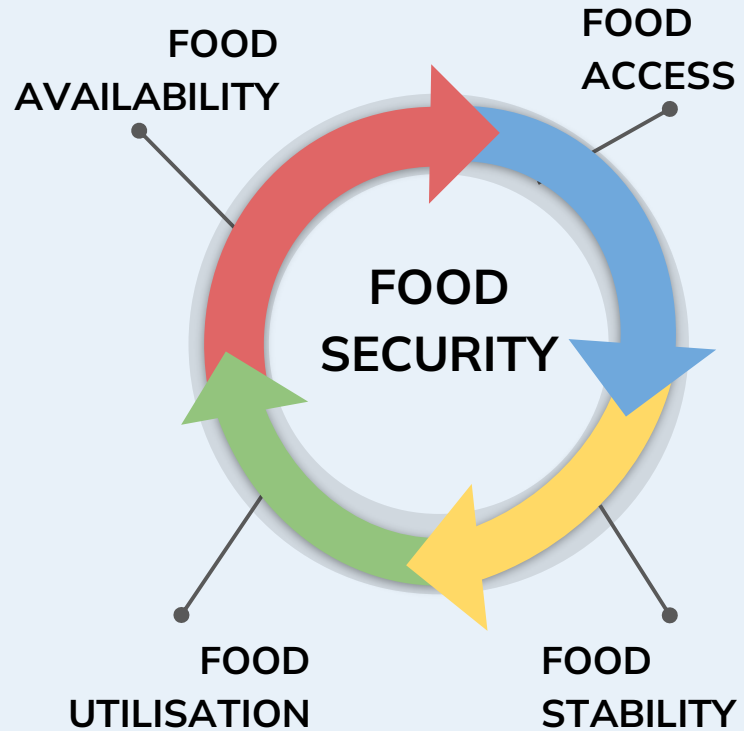
Intensifying tropical storms cause severe losses to crops and key livelihood assets such as land, agricultural tools, and fishing boats.

Extreme floods already inundate up to 60% of Bangladesh, with rising risks across South, Southeast, and East Asia.

Changing rainfall and temperature patterns disrupt rain-fed farming and fishing livelihoods from the Mekong Basin to New Zealand.

Intensifying droughts in South Asia, Australia, and the Pacific Islands threaten crops, livestock, and water security.

Traditional definition of Food Security



Thematic 3: Redefining Food Security Toward a Climate-Resilient and People-Centred Framework



Alice YAMABE,
Policy Researcher,
IGES
(Moderator)



Kei KURUSHIMA,
Chief Policy Researcher,
IGES



Nazia HUSSAIN,
Assistant Professor,
Institute for Future Initiatives,
University of Tokyo



Sayamol CHAROENRATANA,
Associate Professor
Director of the Center of Excellence for
Human Security and Equity (HuSE),
Chulalongkorn University's Social
Research Institute (CUSRI)

Panel discussion

1. Theoretical foundation:

In your view, why is the traditional concept of food security insufficient?

Thematic 3: Redefining Food Security: Toward a Climate-Resilient and People-Centred Framework

REDEFINING FOOD SECURITY: TOWARD A CLIMATE-RESILIENT AND PEOPLE- CENTRED FRAMEWORK

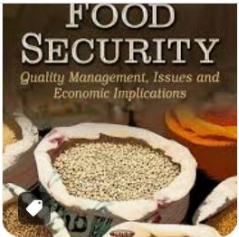
Assoc. Prof.(research) Sayamol Charoenratana, PhD

Human Security and Equity Center, CUSRI, Chulalongkorn University

21st January 2026

Tokyo, Japan

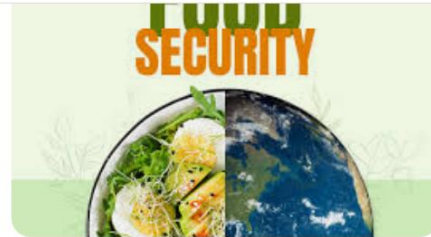




Nova Science Publi... Food Security: Qu...



Observer Research Foundation Transnational Corridors for Global Fo...



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กรมการเปลี่ยนแปลงสภ... Climate Change A-Z ...



World Bank Food Security | Food Insecurity ...



Future Problem Solving Food Security | Future Problem Solving



Eden Green Food Security: The Challen...



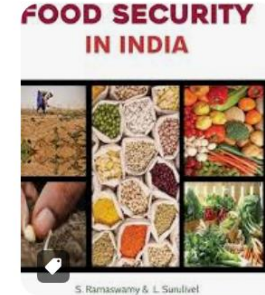
One Health and Development Initiative... Food Security and the need for ...



YouTube Food Security - YouTube



Global Tree Initiative Food Security and the way forward ...



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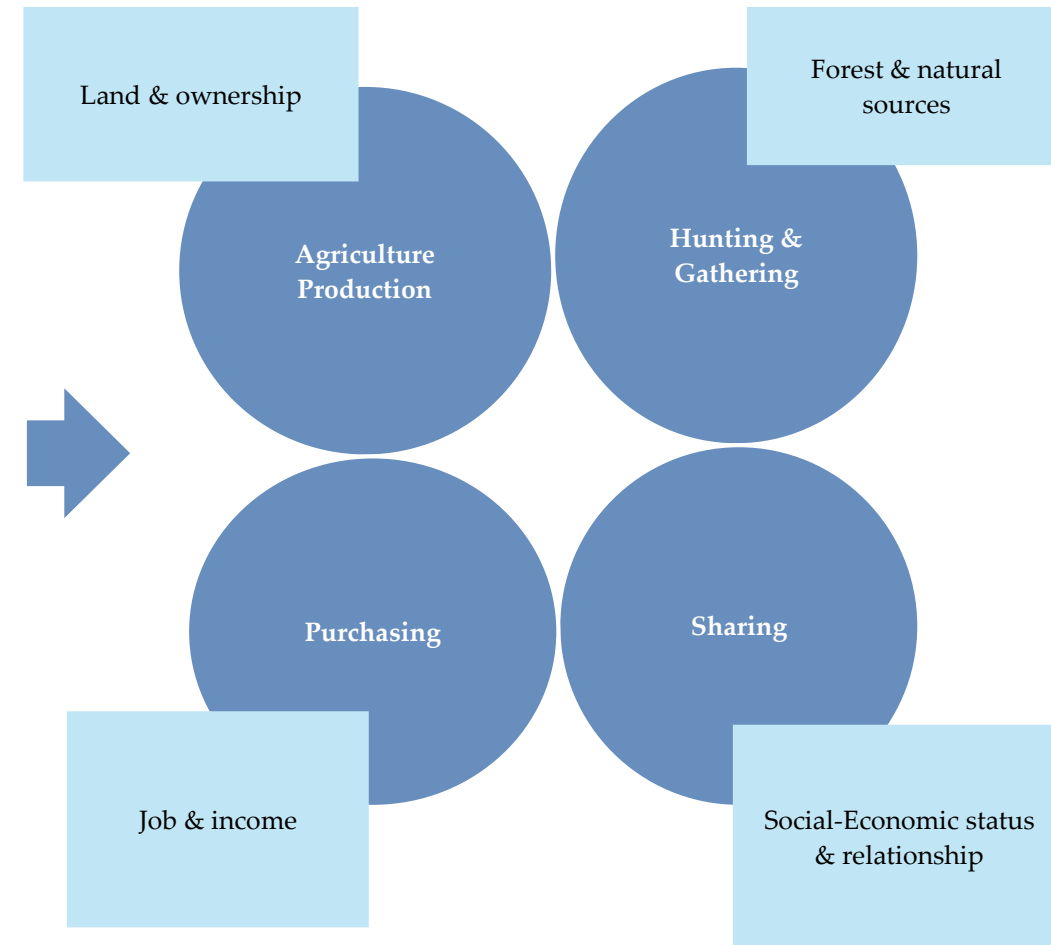
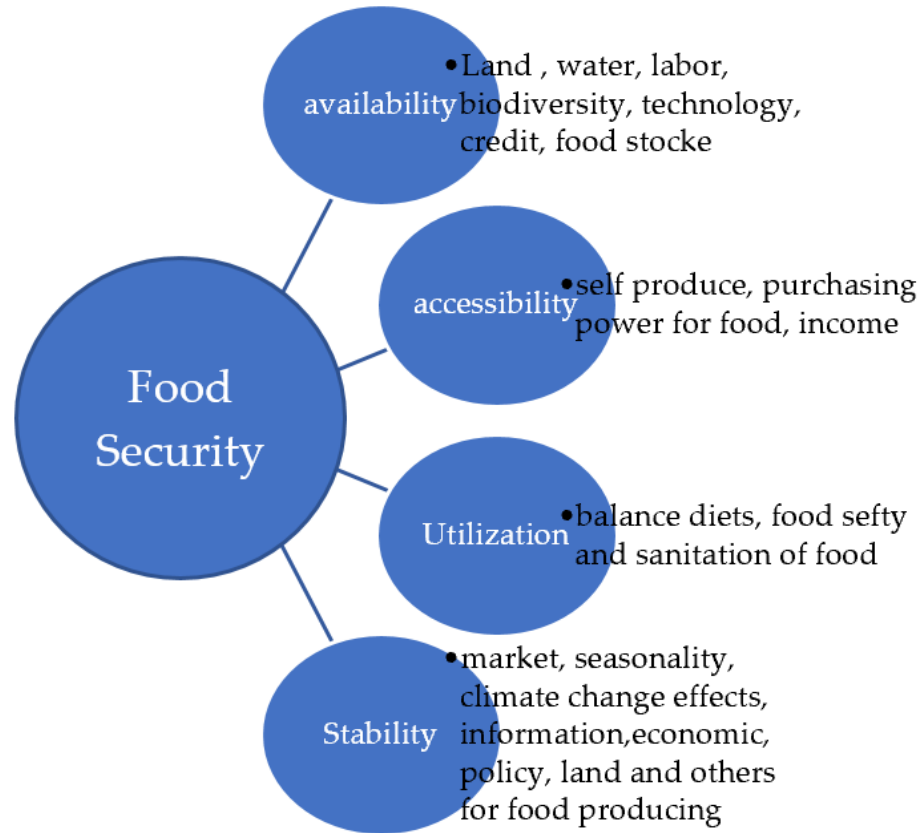


SciRP.org Food Security in Developing Cou...



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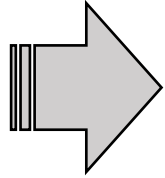
Food Security Concept & Shipping the Paradigm



Sustainability

Agency
[Producers Power]

Structure inequality &
Social justice

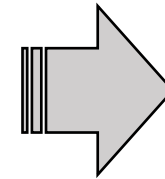


Food Security

Food
availability

Food
accessibility

Food
utilization



Stability

Human insecurity

Their Story



Their Story



2011
Big Flood



Kapook, 2011

2020
COVID-19



ประชาชาติธุรกิจ, 2020

Central Dry Zone of Myanmar



North eastern of Thailand



Panel discussion

2. Findings from the field:

- Drawing on your field research, what emerging or intensifying food security challenges have you observed?
- How do these challenges interact with pre-existing socio-economic inequalities, governance structures, or resource access?

FINDINGS FROM THE FIELD: INEQUALITY AS A RISK MULTIPLIER

- Climate Change as an Inequality Multiplier
- Structural Injustice of Vulnerability
- Governance Gaps
- Farmers in problems: the debt cycle and landless farmers

RESEARCH ARTICLE | JANUARY 22 2024

Addressing the impacts of climate change on agricultural adaptation strategies: a case study in Nepal

Sayamol Charoenratana ; Samridhi Kharel 

[+ Author & Article Information](#)

Management of Environmental Quality: An International Journal (2024) 35 (5): 1176–1192.

<https://doi.org/10.1108/MEQ-03-2023-0082> [Article history](#) 


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Climate change and food security at household level in the central dry zone in Myanmar

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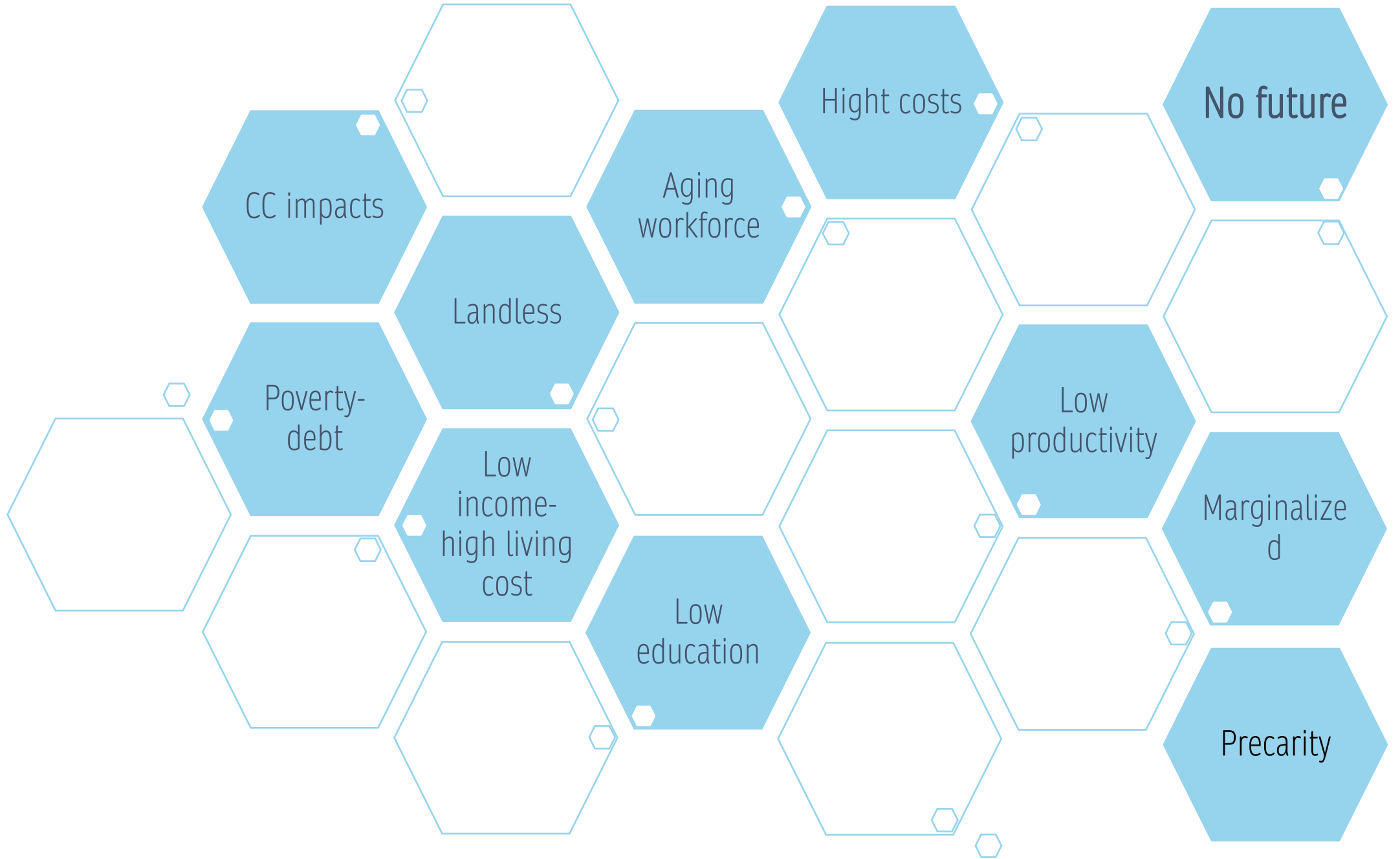
Clim Res 92:151-170 (2024) DOI: <https://doi.org/10.3354/cr01738> 

Adaptation to climate impacts on rice production: an analysis of dry zone farmers in central Myanmar

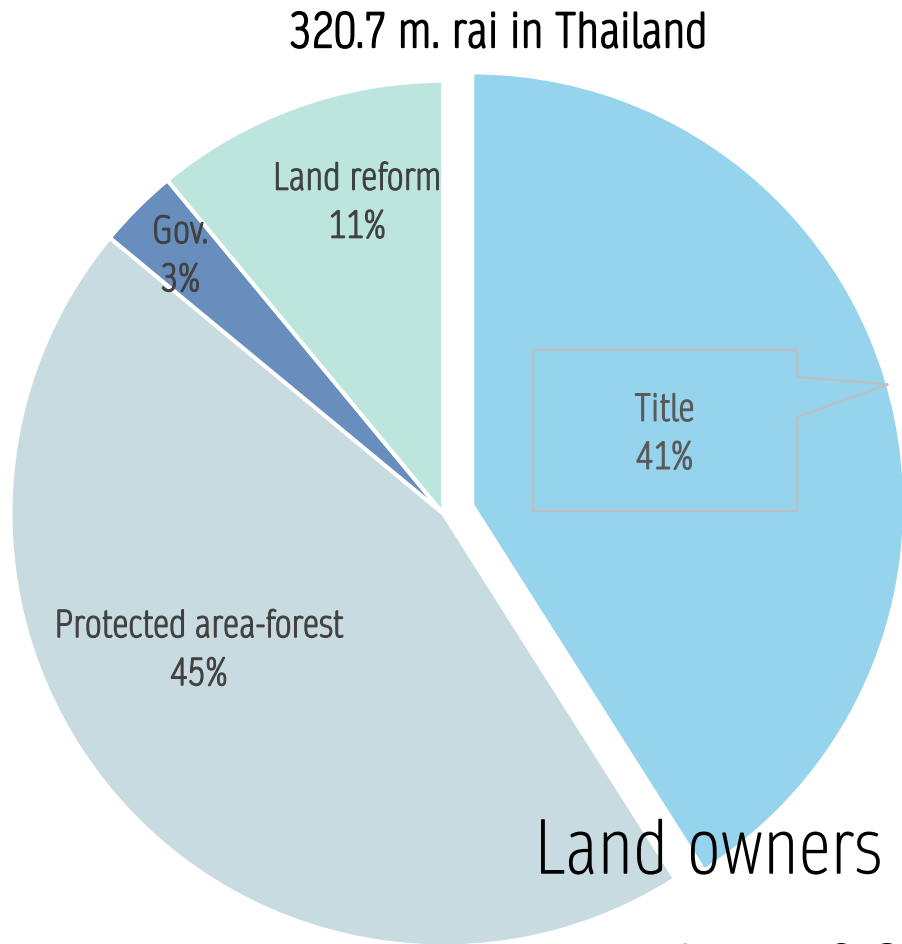
[Thandar Win Maung](#) [Sayamol Charoenratana](#) 

SMALL SCALE FARMERS:

THEIR VENERABILITY



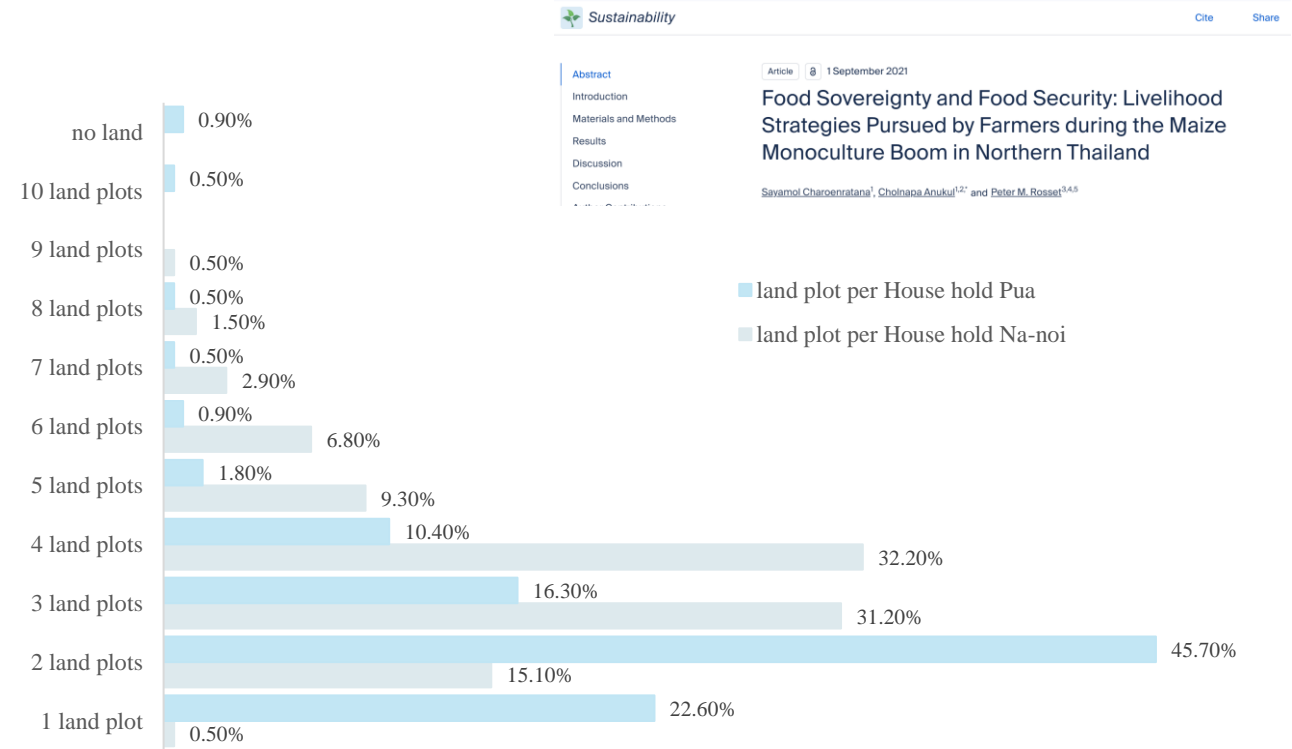
LAND OWNER: VULNERABILITY



Land owners --> 15.9 m.

>1 rai --> 8.0 m. (50.17%)

1-5 rai --> 3.5 m. (21.9%)



Sustainability

Cite Share

Abstract

Article 1 September 2021

Food Sovereignty and Food Security: Livelihood Strategies Pursued by Farmers during the Maize Monoculture Boom in Northern Thailand

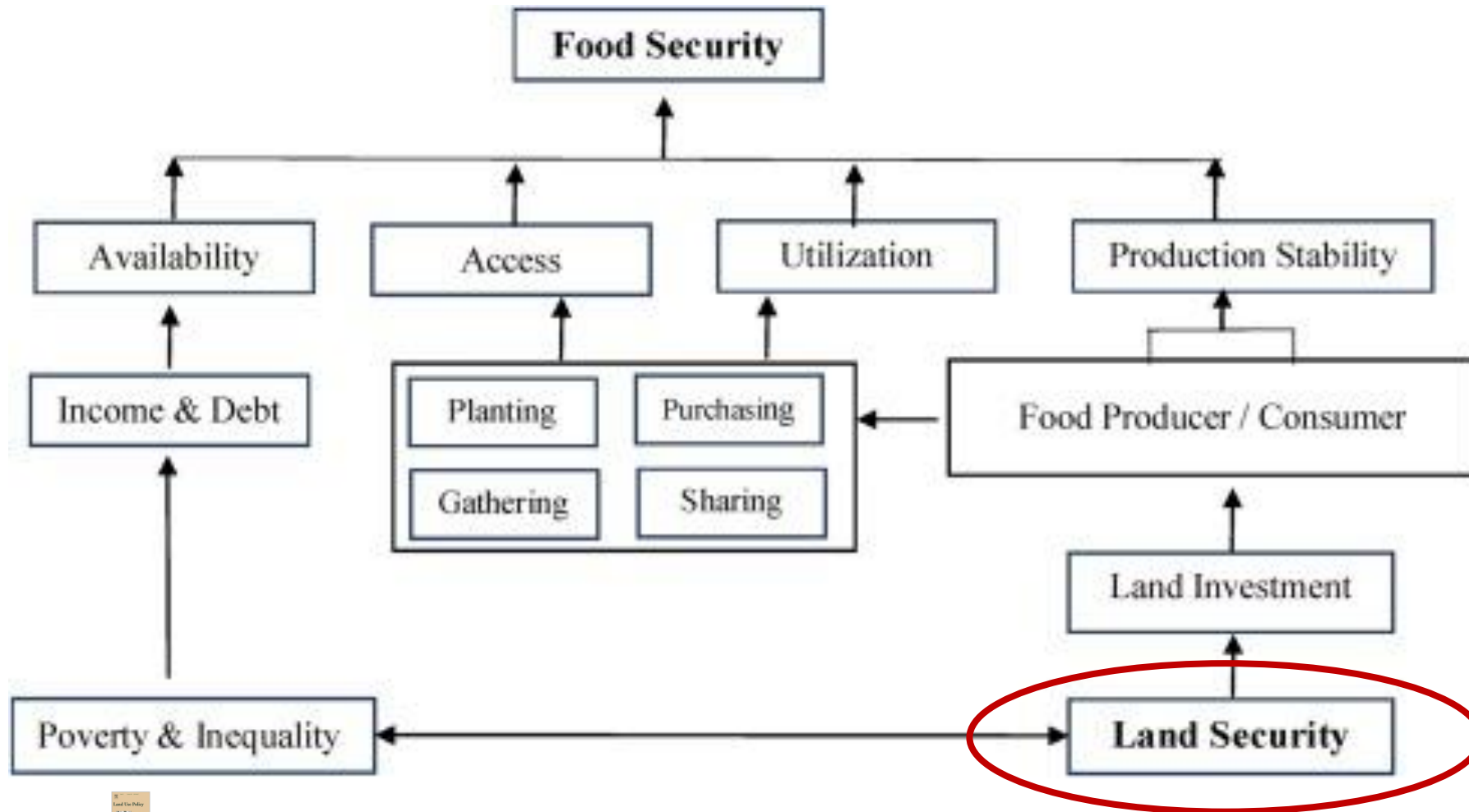
Savarnol Charoenratana¹, Cholnena Anukul^{1,2*} and Peter M. Rosset^{3,4,5}

land plot per House hold Pua

land plot per House hold Na-noi

VS <1,000 rai --> 837 person (0.01%)

LAND OWNER: VULNERABILITY





Distributive Justice



Panel discussion

3. Recommendations:

- What are the implications of this work and approach for Japan?
- How can policies and interventions move beyond short-term adaptation to better strengthen the agency, security, and resilience of food producers under climate stress?

NEXT STEP

- Beyond Short-term Adaptation: Shifting from temporary aid to long-term agency, security, and resilience.
- Institutionalizing Procedural Justice:
 - Producers must have a "*seat at the table*".
 - Active participation in policy-making, not just passive recipients of technology.
- Distributive Justice: Equitable distribution of climate-resilient resources and innovations.
- *Just Transitions* for Japan, Thailand and Asia: Focusing on protecting the security and dignity of the people who feed us.

CONCLUSION & VISION

- Summary:
 - "Without addressing structural inequalities, the definition of food security remains incomplete"
 - Why are they still hungry and marginalized? -->structure of inequality & Social justice lens.
 - Climate change is a cause of vulnerability for those who are food insecure due to exclusion.
 - Farmers, the food producers with small-scale farms, are insecure as consumers.
- Final Thought: Ensuring no one is left behind in the face of climate instability through a Human-Centred approach.



THANK YOU

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HuSE, SRI, Chulalongkorn University, Bangkok, Thailand

Abstract

Introduction

Materials and Methods

Results

Discussion



Conclusions

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Sayamol Charoenratana¹, Cholnapa Anukul^{1,2,*} and Peter M. Rosset^{3,4,5}

Rural farmers in an unequal world: Land rights and food security for sustainable well-being

Sayamol Charoenratana ^a  , Chika Shinohara ^b

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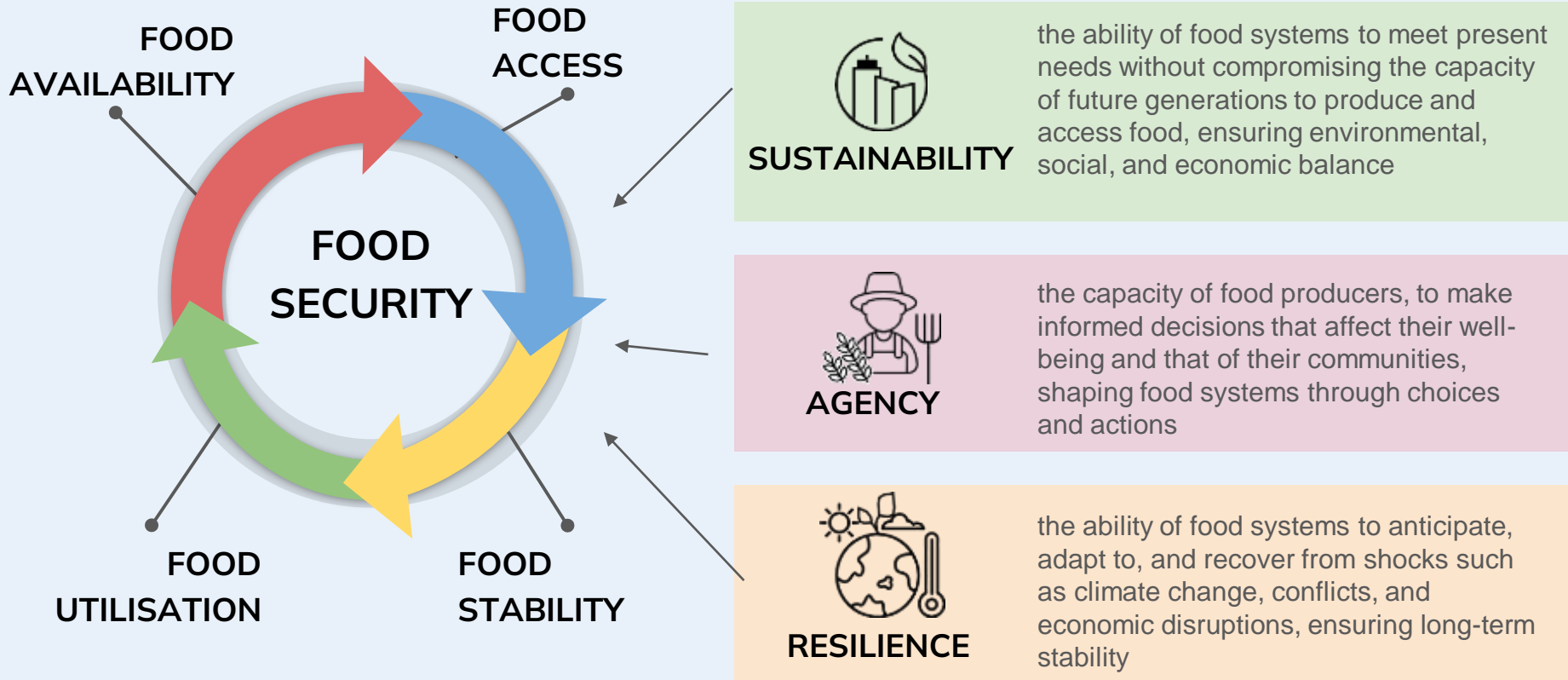
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Thandar Win Maung [Sayamol Charoenratana](#) 

REFERENCES

Discussion Paper: Broadening the Definition of Food Security



Newly published working paper “Broadening the Definition of Food Security in the Asia-Pacific”:

<https://x.gd/P1mVh>

Upcoming policy paper “From Vulnerability to Agency: Reframing Food Security under Climate Change in the Asia-Pacific”



Will be uploaded on APCS website soon!

