THE CONVERGENCE INITIATIVE
CONVERGENCE ACTION BLUEPRINT — THAILAND

1. INTRODUCTION

The Convergence Action Blueprint (CAB) serves as a practical framework designed to facilitate synergies between **food systems transformation and climate action** to support the implementation of the 2030 Agenda and the Paris Agreement objectives at national level. Thailand's CAB is a living document and will be updated periodically. It provides a structured approach for conceptualizing and implementing strategic actions in Thailand that align with both agendas while promoting sustainable development. The CAB is divided into four main pillars, namely:

I.   Convergence vision and objectives,
II.   Key convergence interventions,
III. Convergence milestones, and
IV.   Monitoring, evaluation, and accountability.

2. BACKGROUND

Since 2021, Thailand has committed to alleviating hunger and addressing the natural and climate impacts on food systems through the UN Food Systems Summit (UNFSS). This platform not only fosters ambitious commitments to transforming food systems but also serves as an opportunity to use these systems as a vehicle for recovery from the COVID-19 pandemic and to get back on track to achieve the Sustainable Development Goals (SDGs) by 2030. The food system includes smallholder farmers, traders, processors, retailers, and consumers. Key food system challenges include climate vulnerability, malnutrition, food loss, food waste, inequality, workforce, and environmental degradation.

The UN Food Systems Summit +2 Stocktaking Moment (STM) held in July 2023 provided a platform for countries, including Thailand, to report on their progress in food systems transformation. Thailand submitted its voluntary progress report, highlighting efforts and achievements in transforming its food systems.

The report is crucial for informing the UN Secretary-General's report on food systems transformation and shaping future actions.

Thailand aims to leverage its agrifood industry to advance its Bio-Circular Green Economy (BCG) economic model, built on the Sufficiency Economy Philosophy, while addressing global food security challenges. Key aspects of Thailand's report are as follows:

- **Sustainable and inclusive food systems:** Thailand is working to transform its national pathways for agriculture and food, focusing on sustainability, safety, and security.
- **Alignment with SDGs:** Thailand's efforts are aligned with the SDGs, particularly those related to people and planet.
- **Leveraging agrifood industry:** Thailand plans to utilize its agrifood industry to advance its BCG economic model, a strategy based on the Sufficiency Economy Philosophy.
- **Addressing global food security:** Despite global food shortages, Thailand is positioned to contribute to global food security by capitalizing on its agrifood sector.
- **Improving food safety:** Thailand is focusing on improving food safety as a key component of its food systems transformation.
- **International partnerships:** Thailand participated in the UN Food Systems Summit and emphasizes the importance of strengthening international partnerships to achieve sustainable agriculture and global food security.
- **Regional Preparatory Meeting:** In March 2025, Thailand actively participated in a regional preparatory meeting for the UNFSS+4, further contributing to the global dialogue on food systems transformation.
- **Youth Conference on 15-16 May 2025:** Thailand hosted a preparatory youth conference for UNFSS+4, involving young leaders, policymakers, and experts to foster intergenerational partnerships and develop actionable recommendations.

The interlinkages between food systems transformation and climate action, highlighting the core aim of the Convergence Initiative – to develop a joint "Blueprint" aligning the national food system transformation pathway, Nationally Determined Contributions (NDCs), and National Adaptation Plan (NAP). The importance of a multi-stakeholder collaboration framework, emphasizing joint efforts on climate action and sustainable development in partnership with the ASEAN Climate Smart Agriculture (ACS) Practices.[1] The Convergence Initiative aims to enhance food systems by making them more resilient, sustainable, and inclusive through knowledge-sharing, innovation, and integrated policy approaches.

The Convergence Initiative National Inception Workshop was organized in Bangkok on 19-21 May 2025 with 65 participants from government and non-government representatives. The workshops brought together National Food System Convenors, UNFCCC Climate Focal Points, and, where relevant, focal points from other Rio Conventions (UNCBD, UNCCD), along with the UN Country Team and Resident Coordinator, national food systems networks, academia, and the scientific community. It aims to review Thailand's needs and agree on means of enhancing the capacities of countries to develop synergetic action for food systems transformation and climate action, through the co-design of the CAB.

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1   ASEAN Regional Guidelines on Promoting CSA Practices-endorsed 37th AMAF.pdf

3. FOOD SYSTEM AND CLIMATE ACTION IN THAILAND

Approximately 40-50 percent of Thailand's total land area is used for agriculture. The proportion of agricultural workers decline continuously from more than 60 percent in the past 60 years to about 37.5 percent in 2023[2]. The main factor is that workers move into the industrial and service sectors that provide higher incomes and have more opportunities for growth. The proportion of GDP in the agricultural sector is only 9 percent, reflecting the slower development of the Thai agricultural sector than activities in other sectors.[3] Despite ongoing challenges, Thailand remains the leading agricultural exporter in ASEAN and ranks eighth globally. Its signature exports—rice, rubber, durian, and processed foods—are staples in international markets. Beyond agriculture, fisheries and aquaculture play a vital role in Thailand's food system and economy, producing over 2.4 million tonnes annually.

Thailand faces a "double burden" of malnutrition, with 8.8 percent of the population undernourished alongside a rising prevalence of obesity. Food loss and waste are high in fruits and vegetables, with food waste accounting for nearly 49 percent of Bangkok's municipal waste (about 4,500 tonnes daily).

The climate shocks significantly impact agricultural productivity and vulnerable groups, particularly smallholder farmers, and micro-, small and medium-sized enterprises (MSMEs). The Office of Agricultural Economics (OAE) has reported increasing spending on agricultural disaster relief funds between 2008 and 2021. Notably, spending peaked in **2011 at 33,764 million baht**. These funds are primarily used to **compensate farmers for losses in agricultural production**. Climate change impacts agriculture, livestock, and aquaculture, leading to declining crop yields and economic losses estimated at 14 billion THB by 2050. According to the Germanwatch's Climate Risk Index 2025, Thailand ranks **30th out of 174 countries**[4] for long-term climate risk—an improvement from its previous ranking of **9th for the period 1993–2021**. This shift reflects significant progress in disaster risk management and climate resilience, including enhanced early warning systems, improved water resource management, and efforts to reduce greenhouse gas emissions (GHG)[5].

Thailand's Decarbonization Pathway begins with NDC tracking in 2021 and outlines targets through 2065. These include achieving its first NDC (NDC1) by 2030, achieving carbon neutrality by 2050, and reaching net-zero GHG emissions by 2065. To support these efforts, Thailand is developing its Long-Term Low Greenhouse Gas Emission Development Strategy (LT-LEDS), which outlines measures to balance emitted and absorbed carbon by 2050 and offset remaining emissions through removal strategies by 2065.

2   Agriculture Statistics 2023
3   Article, bank of Thailand 2022
4   Climate Risk Index 2025 | Germanwatch e.V.
5   Department of Climate Change and Environment

Under its current NDC, Thailand aims to reduce GHG emissions by 30 percent (unconditionally) and up to 40 percent (conditionally) below the projected Business-as-Usual (BAU) level by 2030. An additional 3 percent reduction is targeted through enhanced carbon market mechanisms, guided by Article 6 of the Paris Agreement. These targets cover five key sectors: energy, transport, industrial processes and product use, waste, and agriculture.

The agriculture sector contributes 17.86 percent of Thailand's total GHG emissions, based on 2022 baseline data. Within this sector, rice cultivation is the largest emitter—accounting for nearly half of all agricultural emissions—followed by livestock activities, agricultural soil management, field burning of agricultural residues, and urea fertilizer use, respectively[6]. Looking ahead, Thailand plans to raise its climate ambition in the upcoming NDC 3.0 for 2035, with a new target to be submitted to the UNFCCC in Q3 of 2025. This updated commitment may include GHG accounting from the Agriculture, Forestry, and Other Land Use (AFOLU) sectors.

Thailand's NDC includes the adaptation priorities that are aligned with the NAP. Thailand's NAP identified six key sectors/ thematic areas, namely: (i) water management; (ii) agriculture and food security; (iii) tourism; (iv) public health; (v) natural resource management; and (vi) human settlement and security. The Department of Climate Change and Environment (DCCE) is responsible for driving the NAP implementation by coordinating with sectoral ministry focal points to develop and activate plans and projects. For the agriculture and food security sector, the Office of Agricultural Economics (OAE) under the Ministry of Agriculture and Cooperatives (MOAC) is the focal point to develop the Climate Change Action Plan for Agriculture Sector 2023-2027 (CCAPA). Additionally, the DCCE aims to drive NAP implementation through the provincial government through the Provincial Committee on Climate Change and Biodiversity chaired by the Governor.

Between 2019 and 2023, the Government of Thailand allocated approximately THB 1,200 million for adaptation—representing 0.04% of the total fiscal budget.[7] Thailand is still open to receiving financial and technical assistance from international development partners to overcome its challenges in enhancing and maintaining the carbon sink in its long-term mitigation goal[8]. Achieving Thailand's ambitious 2030 NDC targets will require an estimated THB 5,000 billion (**USD 145 billion**) needed for the unconditional target and THB 7,000 million (**USD 202 billion**) for the conditional target[9].

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6   Thailand. Biennial update report (BUR). BUR 4. | UNFCCC
7   The Parliament
8   Thailand 2nd Updated NDC.pdf
9   Thailand's Climate Finance Strategy: Conceptual Framework 2030, DCCE 2024

4. CLIMATE RESILIENCE AND POLICY INTEGRATION

Agriculture and food security is one of the six priority sectors identified in Thailand's NAP 2024. The NAP specifies the institutional structure in implementing the adaptation measures, targets, and indicators in each sector, as well as monitoring and evaluation, thus enabling conditions, such as data, research, technology, finance, personnel, and international support needs. Actions and participation by all sectors and international support would facilitate the achievement of Thailand's NAP that would drive the country to being a climate resilient economy and society in line with the SDGs. For the agriculture and food security sector, the NAP set the goal to achieve "*Productivity and food security maintained amidst climate risks and impacts*".

Box 1

Agriculture measures indicated in Thailand's NAP

The implementation of climate change adaptation in Thailand has been collaborated between the Department of Climate Change and Environment (DCCE) and leading agencies of the six sectors. The agriculture and food security sector is led by the Office of Agricultural Economics (OAE) under the Ministry of Agriculture and Cooperatives (MOAC). Productivity and food security maintained amidst climate risks and impacts are set as the goal for the agriculture and food security sectors. Twenty-four (24) measures are under the four (4) guidelines.

Guideline 1: Management of crop farmland (5 measures)
Guideline 2: Management of livestock farmland (2 measures)
Guideline 3: Management of fisheries and aquaculture farmland (3 measures)
Guideline 4: Supporting mechanisms for agriculture and food security (14 measures)

In support of NAP implementation, the Climate Change Action Plan for the Agricultural Sector 2023 - 2027 of the Ministry of Agriculture and Cooperatives (CCAPA) is an operational guideline for the MOAC's officials to take action following a target to reduce GHG emissions from crops and livestock and to build climate resilience for farmers through several adaptation measures.

• The CCAPA consists of the five missions/strategic areas and its goals, including: The CCAPA determines the key performance indicators that require collaborative actions from agriculture stakeholders.
• The value of damage and assistance in agricultural disasters is reduced by 20 percent during 2023 - 2027 compared to 2017 – 2022.
• There is 20 percent less damage to the major agricultural products than in the years 2017 – 2022.

- The market value of low-carbon agricultural products grows at 5 percent per year.[1]
- The agricultural sector reduces annual GHG emissions by 1 million tons of carbon dioxide equivalent.
- Carbon credit from the agricultural sector can be traded internationally in the markets.
- At least 100 current researchers involved in climate change in scarce fields obtain capacity development annually.[2]
- The agriculture sector has at least 100 new researchers per year in scarce fields related to climate change.
- The database related to climate change is in place.

Missions/strategic areas	Goals
• Enhance the adaptive capacity of farmers and related businesses throughout the agricultural supply chain. • Contribute to the reduction of GHG emissions throughout the agricultural supply chain to mitigate the long-term impact of climate change. • Develop a knowledge database and raise awareness of climate change impacts, as well as the importance of climate change adaptation and mitigation. • Develop manpower capacity in agriculture and promote cooperation of network partners to deal with climate change in all sectors and levels. • Enhance contributions and efforts of different agencies in implementing climate actions.	• The capacity of the agricultural sector throughout the supply chain has been enhanced and the impact of climate is reduced. • Scale up climate sustainability throughout the agricultural supply chain to reduce climate impacts and support the reduction of GHG emissions from the agricultural sector. • Research, knowledge and information on climate change are collected in a database that is inter-agency linked and easily accessible to all sectors (government, private sector, farmers, and citizens). • The capacity of manpower in agriculture increases at all levels and generates the cooperation of network partners in dealing with climate change. • The environment is conducive to successfully driving climate change adaptation and resilience in agriculture.

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[1] Low-carbon agricultural products are agricultural products that emit less greenhouse gases during production than other similar products, such as rice grown with alternative wetting and drying practice; livestock and aquatic animal production through feed improvement; livestock production with biogas production from manure by using anaerobic digester system instead of open fermentation system; crop production with appropriate fertilization according to the GAP principle, or according to the analysis of soil values and plant needs; and planting crops without burning agricultural waste, etc.

[2] Examples of fields facing shortage of experts such as breeders/physiologists in plants, livestock and aquatic animals, genetic improvement in economic aquatic animals, agronomists, rice production technologists, plant pathologists, epidemiologists and prevention of diseases in livestock and aquatic animals and an entomologist (Attavanich et al. (2021). Project "Manpower Development Plan in Thailand's Agricultural Sector, Fiscal Year 2021", Agricultural Research Development Agency (Public Organization)).

The strategic areas and key performance indicators of the CCAPA will be a reference for developing the project/programme proposal to request a fiscal budget and international finance support for the implementation.

Efforts to align food systems with climate and sustainability goals span multiple sectors:

- **Agriculture:** Promotes climate-smart agriculture, Good Agricultural Practices (GAP), and value-added production.
- **Forestry:** Focuses on carbon sequestration, biodiversity conservation, and REDD+ programmes.
- **Fisheries:** Enhances climate-resilient aquaculture and combats illegal, unreported, and unregulated (IUU) fishing.
- **Water resources:** Emphasizes irrigation efficiency, watershed management, and regional cooperation (e.g., Mekong River).
- **Energy:** Integrates agrivoltaics and energy-efficient food processing.
- **Transport:** Supports sustainable logistics and resilient infrastructure.
- **Urban planning:** Encourages land use zoning and urban agriculture.
- **Health:** Addresses food safety, nutrition, and adopts One Health approaches.

Key national policies and plans guiding integration for developing Thailand's national food system transformation pathway:

- **Climate Mitigation and Adaptation Master Plan (2015−2050):** Provides a long-term roadmap toward net-zero emissions and climate resilient development.
- **NAP & NDCs:** Core frameworks for climate adaptation and mitigation.
- **Climate Change Action Plan for Agriculture Sector 2023-2027 (CCAPA):** Determine missions, goals, and targets for all agencies under the MOAC to implement the plan.
- **13th National Economic and Social Development Plan (2023−2027):** Embeds food and climate strategies in national development.
- **BCG Action Plan:** Promotes innovation and circular economy in agriculture.
- **National Food Management Plan (2023−2027):** Focuses on food security, safety, and value-added agriculture.

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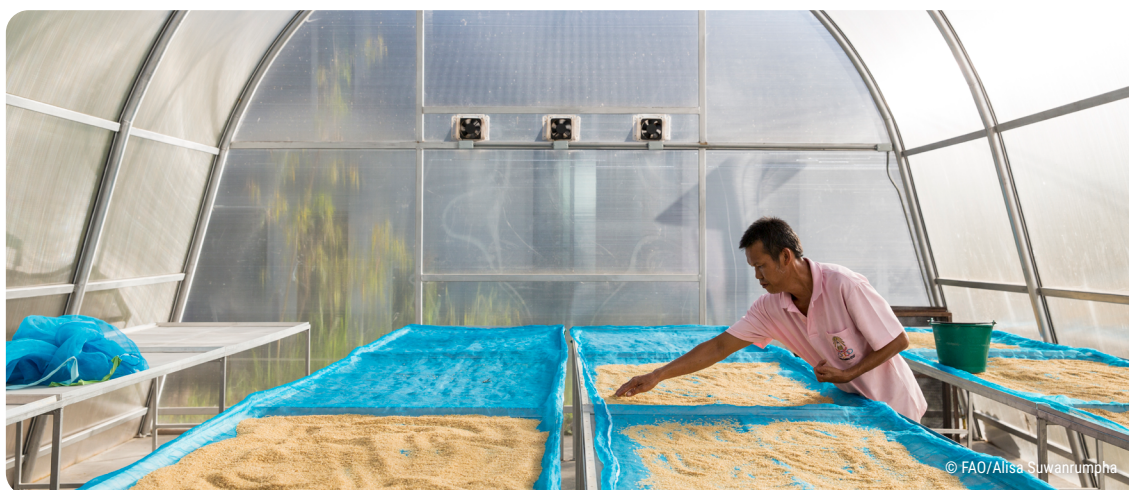
5.   KEY CHALLENGES AND DRIVERS

Thailand's food system faces several gaps and support needs as it aims for transformation.

Gaps include:

1. **Low productivity:** Many smallholder farmers in Thailand struggle with low productivity due to traditional farming practices and limited access to modern technology.
2. **Climate vulnerability:** The sector is highly vulnerable to climate change, with extreme weather events like floods and droughts impacting harvests and livelihoods.
3. **Food safety and quality:** Ensuring food safety and quality remains a challenge, particularly in meeting international standards for exports.
4. **Market access:** Smallholder farmers often face difficulties accessing high-value markets, both domestically and internationally.
5. **Trade policies:** Integrated policies to support nutritious foods and the establishment of independent accountability mechanisms are needed.
6. **Access to finance:** Smallholder farmers lack collateral, limited financial literacy, high perceived risk by lenders, small and irregular incomes, lack of credit history, complex loan requirements, and limited access to financial institutions. These factors contribute to the lack of flexibility in loan products and the underutilization of digital finance, despite the growing importance of digital finance in rural areas.

Continued efforts are required to address these gaps and ensure comprehensive food systems transformation.

Overall, Thailand's efforts in transforming its food systems have shown promising results, but ongoing attention and improvements are necessary to fully achieve the desired outcomes.

Support needs for transformation:

1. **Technology adoption:** There is a need for greater adoption of agriculture technologies and innovative farming practices to enhance productivity and resilience.
2. **Climate-smart agriculture (CSA):** Implementing climate-smart agricultural practices can help mitigate the impacts of climate change and improve sustainability.
3. **Capacity building:** Training and capacity-building programmes for farmers are essential to improve their skills and knowledge in modern agricultural techniques.
4. **Inclusive business models:** Promoting inclusive business models that integrate smallholder farmers into value chains can enhance their market access and economic stability.
5. **Policy support:** Stronger policy frameworks and government support are needed to facilitate the transformation of the agrifood system, including incentives for sustainable practices.

Regarding the government budget, the Bio-Circular Green Economy (BCG) Action Plan 2022-2027 was approved by the former Thai Cabinet with a total budget of approximately 41 billion Thai Baht (around USD 1.2 billion). This national effort involves multiple government agencies from various ministries. The Ministry of Agriculture and Cooperatives (MOAC) is leading the BCG initiative for the agricultural sector, focusing on the circularity of agricultural waste management. With the allocated BCG budget, MOAC can spearhead efforts to transform the food system.

6. PILAR 1: VISION AND OBJECTIVES

"By 2050, Thailand will lead in climate-smart, regenerative agrifood systems—driven by green innovation and collaboration. Resilient food systems will ensure nutrition, farmer prosperity, and environmental sustainability, turning challenges into opportunities and empowering communities to shape a climate-resilient future."

"ภายในปี ค.ศ. 2050 ประเทศไทยจะก้าวขึ้นเป็นผู้นำด้านระบบอาหารและการเกษตรอัจฉริยะเท่าทันต่อสภาพภูมิอากาศและระบบเกษตรฟื้นฟู ขับเคลื่อนด้วยนวัตกรรมที่เป็นมิตรต่อสิ่งแวดล้อม ผ่านการบูรณาการแนวทางแก้ปัญหาในทุกขั้นของห่วงโซ่คุณค่า ประเทศไทยจะสร้างระบบอาหารที่มีความยืดหยุ่น มั่นคงทางโภชนาการสร้างความมั่งคั่งอย่างเท่าเทียมแก่เกษตรกร และยั่งยืนต่อสิ่งแวดล้อม พลิกวิกฤตให้เป็นโอกาส พร้อมเสริมพลังให้ชุมชนมีบทบาทในฐานะผู้ร่วมกำหนดอนาคตที่ยืดหยุ่นด้านภูมิอากาศ"

7. PILAR 2: KEY CONVERGENCES INTERVENTION

Game changers advance the alignment between the food systems transformation and climate action agendas to enable government and stakeholders in Thailand to strengthen energetic actions that will simultaneously support the achievement of the SDGs and the Paris Climate Agreement. The seven game changers of Thailand are:

1. **High-level political commitment:** Secure sustained ministerial-level support and cross-sectoral policy alignment to prioritize food-climate convergence in national development strategies.
2. **Precision agriculture transition:** Scale up data-driven, resource-efficient farming systems that optimize inputs while maximizing productivity and reducing environmental impacts.
3. **Digital innovation ecosystem:** Establish supportive regulatory frameworks and incentives for climate-smart agricultural technologies including automation, remote sensing, and AI-powered solutions.
4. **Carbon finance mechanisms:** Develop robust agricultural carbon accounting systems with incentives that reward sustainable practices while ensuring equitable distribution of benefits to smallholders.
5. **Agri-food policy reform:** Redesign subsidy structures and market regulations to prioritize climate resilience and sustainability across the entire food value chain.
6. **Bio-circular-green economy integration:** Accelerate transition to regenerative systems that minimize waste, enhance resource efficiency, and create new value streams through circular approaches.
7. **Agroecological scale-up:** Support landscape-level implementation of diversified farming systems that harness ecological processes to build climate resilience while protecting biodiversity.

Figure 1: Game changers emerge five areas of interventions for Convergence Action Blueprint (CAB) of Thailand.

Game Changers	Community-Led Resilience	Food Loss & Waste Reduction	Climate-Smart Agricultural Systems	Inclusive Food Systems Governance	Bio-Circular Innovation Ecosystem
High-Level Political Commitment	✓	✓	✓	✓	✓
Precision Agriculture Transition			✓		✓
Digital Innovation Ecosystem			✓	✓	✓
Carbon Finance Mechanisms	✓	✓	✓		
Agri-food Policy Reform	✓	✓	✓	✓	✓
Bio-Circular Green Economy Integration		✓	✓		✓
Agroecological Scale-up	✓		✓	✓	✓

Source: Convergence Workshop 19-21 May 2025, Thailand

Following the discussions on the Pillar 1 and the game changers, which identified key intervention thematic areas to bridge the food systems and climate agendas were presented. Participants discussed key intervention actions to accelerate the transition toward convergence.

Strategic area 1: Community-led resilience Empowering communities to lead adaptation is key to sustainability. Participants stressed the need for locally driven plans, supported by resources and inclusive collaboration across sectors to co-create solutions.	Key interventions: 1. **Develop community-level food system databases** Establish localized databases to monitor and manage key food system components, including food banks, emergency stockpiles, and food loss and waste tracking across the agri-food value chain. 2. **Launch of climate-linked financing mechanisms for community food enterprises** Introduce innovative financing solutions—such as climate-resilient funds—with institutions like the DCCE serving as focal points to facilitate access for local food enterprises and cooperatives.

	3. Localize and enhance accessibility of early warning systems and adaptive calendars Deploy user-friendly, community-based early warning systems and adaptive agricultural calendars that address multi-hazard risks, including droughts, floods, and pest outbreaks. **4. Conduct reskilling assessments and tailored capacity building** Implement localised assessments to identify skill gaps and deliver targeted training programmes that align with specific climate risks and the evolving needs of communities. **5. Promote behavioral change for climate-smart consumption and production** Design and implement behavioral change interventions that encourage sustainable consumption patterns and climate-resilient production practices at the household and community levels.
Strategic area 2: Food loss and waste reduction Food recovery and the reduction of food loss and waste (FLW) have been identified as national priorities. To drive coordinated action across ministries and sectors, the establishment of a National Food Recovery Commission with a five-year mandate has been proposed.	Key interventions: **Reducing food loss** 1. Improve harvesting techniques and technologies • Promote the use of climate-resilient crop varieties. • Introduce modern harvesting equipment and tools. • Provide farmer education and training on optimal harvesting practices. 2. Enhance post-harvest infrastructure • Expand access to cold storage facilities. • Invest in drying technologies and improved packaging solutions. • Strengthen transportation systems to reduce spoilage. 3. Promote processing and preservation solutions • Encourage consumer acceptance of imperfect or "ugly" produce. • Support local processing initiatives to extend shelf life and reduce waste. 4. Strengthen supply chain integration • Localise supply chains through shared knowledge platforms and resource mapping. • Foster collaboration among producers, processors, and distributors.

Reducing food waste

1. Improve retail and distribution systems
   - Expand food bank networks and donation systems.
   - Implement food-waste coding and tracking mechanisms.
2. Raise consumer awareness and education
   - Promote responsible shopping habits through tools like shopping planners.
   - Conduct surveys to understand consumer behavior and tailor interventions.
   - Educate on the health and environmental impacts of food waste.
   - Encourage innovative cooking and eating practices to reduce waste.
   - Address food safety concerns to reduce unnecessary disposal.
3. Leverage technology and innovation
   - Support startups focused on food waste reduction.
   - Develop digital platforms and apps for waste tracking and redistribution.
4. Foster collaborative actions
   - Engage municipalities, provinces, businesses, NGOs, and religious institutions (e.g., temples) in joint food waste initiatives.
   - Promote community composting and urban waste separation through clear regulations and incentives.
5. Promoting policy coherence in food waste management and climate action
   - Strengthen cross-sectoral collaboration among relevant
   - ministries to align food waste management with climate action goals.
   - Develop robust, interoperable data systems to track and quantify food loss and waste across the value chain.
   - Create inclusive platforms that bring together government agencies, private sector actors, civil society, and academia to identify FLW hotspots and co-develop targeted, evidence-based solutions.

| Strategic area 3: Climate-smart agricultural systems

There is a critical need to integrate and enhance existing knowledge management systems to effectively support climate-smart agriculture (CSA). | Key interventions:

1. **Enhance knowledge management for an integrated food system and climate-smart agriculture (CSA)**
   - Strengthen the effectiveness of knowledge management by developing a centralized, AI-powered web portal to curate, manage, and disseminate information on climate-smart agriculture (CSA). This platform will consolidate and link existing resources from key institutions such as T-Plat, the National Hydroinformatics and Climate Data Centre, and the Climate Change and Environmental Centre.
   - Develop thematic knowledge areas to support climate resilience: Curate and expand knowledge content across critical subject areas, including:
     - Food and nutrition security.
     - Food loss and waste management.
     - Climate risk reduction strategies.
     - Gender-responsive approaches in climate action.

2. **Develop an incentive payment system to CSA**
   - Design and implement an incentive-based payment scheme to encourage smallholder farmers to transition from traditional farming practices to CSA approaches.
   - Targeted incentives for enhanced adaptive capacity: Establish a comprehensive incentive framework aimed at local administration offices, farmers, and small businesses. The scheme will be implemented through public-private partnership (PPP) models to strengthen adaptive capacity and foster sustainable agricultural transformation. |

	3. Strengthen the capabilities of stakeholders throughout the agricultural value chain to comply with both food safety and climate-resilient standards, ensuring competitiveness and sustainability. • Support training and capacity-building initiatives to enable food producers to meet key food safety and quality standards, including good agricultural practices (GAP), hazard analysis and critical control points (HACCP), geographical indications (GI), international organization for standardization (ISO), sanitary and phytosanitary (SPS) measures, good manufacturing practices (GMP). • Promote the integration of climate-smart criteria into agricultural practices through standards such as GAP PM2.5 (stop crop residue burning practices), GAP Carbon Credit Plus (carbon sequestration and emissions reduction), low carbon labelling (climate-friendly product labelling). **4. Develop a comprehensive risk transfer mechanism across the entire value chain** • Design and implement a risk transfer scheme that encompasses all actors within the value chain, ensuring inclusive protection against climate-related risks. • Leverage climate risk-informed data and food system insights. • Utilize climate risk data and food system analytics to design a climate-resilient insurance model tailored to the specific vulnerabilities of agricultural and food supply systems. • Expand access to climate risk-based insurance through the insurance sector. • Promote the adoption and accessibility of climate risk-based insurance products by integrating them into mainstream insurance business models and distribution channels.

Strategic area 4: Inclusive food systems governance	Key interventions:
Governance transformation is recognised as a critical cross-cutting enabler for sustainable food systems. To reinforce high-level political commitment, participants called for the establishment of a Chief Inter-Ministerial Committee and direct engagement from the Prime Minister. These measures aim to institutionalise coordination, drive policy coherence, and ensure that food systems transformation remains a national priority.	**1. Transforming national food policy for climate and biodiversity integration** • Policy reform and integration. • Advance national food policy reforms that explicitly integrate climate resilience and biodiversity conservation. • Align agrifood strategies with sustainable consumption and production goals. • Inclusive and accountable governance. • Establish inclusive governance platforms that actively engage local governments, communities, and marginalized groups. • Institutionalize stakeholder consultations and participatory decision-making processes across all levels. • Five-year governance blueprint. • Develop a dynamic, five-year governance blueprint as a living framework to guide food system transformation. • Ensure the blueprint is adaptable and informed by continuous stakeholder input. • High-level political commitment. • Propose the governance blueprint and policy reforms for Cabinet approval, with direct endorsement from the Prime Minister. • Foster inter-ministerial cooperation among key agencies (e.g., MOAC, MOPH, MONRE) to ensure cohesive implementation. • Revise the current midterm plan and develop a new midterm policy aligned with the blueprint, incorporating multi stakeholder engagement throughout the policy cycle. **2. Enabling systems for innovation and sustainability** • Digital innovation ecosystem. • Leverage digital technologies to streamline processes and enhance transparency. • Invest in research and development to improve technological infrastructure and ensure access to affordable innovations.

	• Scaling up the sufficiency economy philosophy.
	  • Promote the principles of the sufficiency economy to support resilient, self-reliant communities and sustainable livelihoods.
	• Biodiversity and agroecology in agrifood systems.
	  • Raise awareness and accountability for biodiversity within food systems.
	  • Promote agroecological practices that enhance sustainability, profitability, and biodiversity conservation.
	  • Encourage biodiversity-friendly approaches as drivers of inclusive economic growth.

Strategic area 5: Bio-circular-green (BCG) innovative solution ecosystem for agrifood system
 	
The BCG model is essential for achieving:
 	
• Ecological sustainability through regenerative practices and resource efficiency.
• Economic profitability by fostering innovation, value addition, and green entrepreneurship.
• Inclusive development that empowers local communities, smallholders, and marginalized groups.
 	
This strategic area calls for the integration of science, technology, and innovation to build a resilient, low-carbon, and circular agrifood ecosystem that aligns with national and global sustainability goals.
	Key interventions:
	
	1. **Accelerate commercialisation and local implementation of innovations**
	   • Fast-track the scaling and market deployment of innovative BCG solutions, ensuring they are locally tailored, profitable, and context sensitive.
	   • Leverage rural extension services to support local adoption, ensuring affordability and accessibility for smallholders and communities.
	
	2. **Strengthen technology infrastructure and accessibility**
	   • Invest in affordable, community-level technology infrastructure to support the deployment of BCG innovations.
	   • Promote digital inclusion to ensure equitable access to tools and platforms.
	
	3. **Mobilize finance and partnerships**
	   • Utilise Article 6 mechanisms and foster PPPs to scale BCG innovations and unlock climate finance.
	   • Provide incentives and enabling conditions for all actors—farmers, entrepreneurs, investors, and consumers—to participate in the BCG transition.
	
	4. **Bridge gaps through intermediaries and inclusive engagement**
	   • Identify and empower intermediary actors to facilitate communication, coordination, and trust-building among stakeholders across the value chain.

A key aspect for consideration is to ensure that BCG innovation is well defined.	5. **Invest in research, development, and innovation** • Prioritise R&D investments, particularly in digital technologies, eco-efficient processes, and nature-based solutions (NbS) to drive sustainable transformation. 6. **Build advocacy and networking platforms** • Establish a national advocacy and networking platform for BCG actors to promote shared understanding, policy alignment, and consumer awareness. • Address the need for clarity, visibility, and definition of BCG principles at both policy and grassroots levels. 7. **Ensure policy coherence and institutional alignment** • Address policy fragmentation by aligning and harmonizing multi-sectoral and inter ministerial policies. • Promote the integration of biodiversity and BCG economy metrics into agri-food policies and planning frameworks.

8. PILLAR 3: CONVERGENCE MILESTONE

Strategic	2026	2030	2050
Strategic area 1: Community-led resilience	• Implement 20 pilot villages per province as models of climate-resilient agricultural systems, with a strong emphasis on community participation throughout the planning and implementation process, supported by targeted grants to promote adaptation activities. • Enhance knowledge management for an integrated food system and CSA.	• Target villages achieve full coverage in community plan development and database establishment for effective risk management. • Expand the comprehensive implementation of early warning systems and smart agriculture, accompanied by transparent reporting on fund utilization. • Integrate climate change knowledge into the formal school curriculum.	• Strengthen and fully advance the agri-food system, positioning the country as a leading force in the Asia region.

Strategic	2026	2030	2050
	• Communities have actively adopted the early warning system to support agricultural production planning and enhance preparedness for natural hazards such as droughts, floods, and irregular rainfall. • A draft strategy on behavior change in the agri-food system has been developed to drive behavioral shifts at the individual, household, and community levels.		
Strategic area 2: Food loss and waste reduction	• Enhance agricultural productivity through improved harvesting, breed selection, innovation, and capacity building. • Develop smart transportation systems including real-time tracking, cold chain logistics, and route optimization. • Promote consumer awareness on food waste reduction, local supply chains, processing, startups, and supportive policies.	• Advance smart logistics infrastructure with AI, automation, big data analytics, and sustainable solutions. • Strengthen sustainable food systems via expanded processing, education, localization, startups, and regulatory frameworks.	• Strengthen sustainable food system development through education, local supply chains, food loss waste management, innovation support, and policy

Strategic	2026	2030	2050
Strategic area 3: Climate-smart agricultural systems	• Enhance knowledge management for an integrated food system and CSA by developing a centralized, AI-powered web portal that consolidate and link existing resources from key institutions such as T-Plat, the National Hydroinformatics and Climate Data Center, and the Climate Change and Environmental Center. • Develop thematic knowledge areas to support climate resilience: Food and nutrition security food loss and waste management, climate risk reduction strategies, gender-responsive approaches in climate action.	• Develop an incentive payment system to promote CSA. • Strengthen the capabilities of stakeholders throughout the agricultural value chain to comply with both food safety and climate-resilient standards, ensuring competitiveness and sustainability. • Develop a comprehensive risk transfer mechanism across the entire value chain: Climate risk-based insurance through the insurance business sector.	• Transformative change for sustainability.
Strategic area 4: Inclusive food systems governance	• Undertake a mid-term evaluation of Phase I (2023–2027) of Thailand's Food Management Action Plan to assess progress, challenges, and opportunities for improvement.	• Implement Food Management Action Plan Phase II (2028–2032), with a focus on scaling up priority interventions.	• Achieve a sustainable and resilient agri-food system.

Strategic	2026	2030	2050
	• Integrate relevant entry points from the National Climate Action Blueprint into the Food Management Action Plan Phase II (2028–2032) to ensure alignment with national climate priorities. • Secure formal endorsement of national food security commitments, aligned with climate change adaptation and mitigation goals at the Cabinet level.	• Align the evaluation of Plan Phase II with the SDG Progress Review and integrate it into the existing national monitoring framework. • Establish mechanisms for flagship agri-food projects to support transformative initiatives that drive innovation and deliver measurable outcomes across the agri-food system.	
Strategic area 5: BCG innovative solution ecosystem for agrifood system	• Establish foundational systems for BCG innovation and adoption, pilot BCG solutions are locally commercialized and tested. • Initial finance mechanisms and PPPs are mobilized. • Support early adoption of BCG by strengthening rural extension services and technology infrastructure.	• Widespread scaling and integration of BCG practices across local communities, with proven profitability and context relevance. • Empowering all stakeholders to actively participate and collaborate through accessible digital tools. • Harmonize policy frameworks and multi-stakeholder coordination mechanisms.	• BCG practices are mainstreamed in local agri-food systems. • BCG contributes significantly to climate resilience, economic inclusion, and biodiversity protection. • Communities are self-reliant in maintaining BCG innovations and governance.

9. PILAR 4: MONITORING AND EVALUATION

Thailand is currently developing a monitoring and evaluation (M&E) framework and indicators for its NAP. This presents a strategic opportunity to integrate food system indicators aligned with SDG 2 (Zero Hunger) into the NAP framework. Given that the NAP's objective for the agriculture and food security sectors is to ensure that "productivity and food security are maintained amidst climate risks and impacts," this integration will enable Thailand to report progress on both SDG 2 and SDG 13 (Climate Action) in a coherent and synergistic manner.

Thailand's SDG implementation and monitoring are coordinated by the National Committee for Sustainable Development (NCSD), chaired by the Prime Minister. The Office of the National Economic and Social Development Council (NESDC) serves as the national focal point, ensuring alignment between global SDG targets and national development priorities.

- **Localised SDG indicators:** Thailand has developed a set of localised indicators that reflect national contexts while aligning with the global SDG framework.
- **Data collection and management:** The National Statistical Office (NSO) plays a central role in collecting and managing SDG-related data, in collaboration with line ministries and agencies.
- **Voluntary National Reviews (VNRs):** Thailand has submitted multiple VNRs to the United Nations, highlighting progress, challenges, and innovations in SDG implementation.

The eMENSCR platform (accessible at emenscr.nesdc.go.th) is Thailand's official digital system for monitoring and evaluating national development plans. Developed by NESDC, it supports:

- **Project monitoring:** Tracks progress of government initiatives aligned with national strategies.
- **Data integration:** Consolidates data from various ministries and agencies.
- **Performance evaluation:** Assesses the effectiveness and impact of development programs.
- **Transparency and accountability:** Provides public access to reports and dashboards, enhancing transparency.

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10. KEY AREAS NEEDED IN MONITORING AND EVALUATION

- **Provincial climate risk map enhancement:** To strengthen Thailand's climate risk monitoring system, variables related to the food system, nutrition, and socio-economic factors will be integrated into the existing database managed by the Department of Climate Change and Environment (DCCE). The INFER (INsights on Food SystEm Risks) tool—developed in 2025 by UNESCAP, UNITAR, and UNOSAT—can be applied to support this integration. A beta version of INFER tailored for Thailand is available here: INFER Thailand Beta. https://unosat-geodrr.cern.ch/apps/THA/INFER/
- **Refine NAP and CCAPA indicators for agriculture and food security:** As the dynamics of the food system continue to evolve, it is essential to revise the indicators and variables used in the NAP and the Climate Change Adaptation Plan for Agriculture (CCAPA). These adjustments will help ensure the continued relevance and effectiveness of monitoring and decision-making processes in the agriculture and food security sector.
- **Update the food management plan:** The current food management plan (food security, food quality and safety, food education, food management) lacks relevant indicators that reflect the impacts of climate risks on the food system. To address this gap, the Thai National Food Committee should consider incorporating climate-related risk indicators into future updates of the plan.
- **Aligning M&E for the CAB:** The M&E framework for the CAB should be developed in alignment with the NAP, SDGs, and the eMENSCR platform. This alignment will serve as a powerful mechanism to bring together officials responsible for food systems, nutrition, and climate action—fostering collaboration and shared accountability.

11. CONCLUSION AND NEXT STEPS FOR CAB

This CAB is intended to serve as a living document, subject to regular updates. Further consultations will be conducted to ensure that additional inputs and perspectives are incorporated. The Office of Foreign Agricultural Affairs, under the Office of the Permanent Secretary for the MOAC, will circulate this document among relevant divisions to assess policy alignment, identify existing gaps, and support coordinated implementation.

In this context, efforts to integrate food systems into NDCs and national climate adaptation plans should be reinforced—especially as countries prepare for key moments such as COP30 in Brazil (2025). Moreover, the Summit provides an opportunity to link global dialogues with regional frameworks, such as the ASEAN Regional Guidelines on Sustainable Agriculture, the ASEAN Strategic Plan of Action for Food Security (2021–2025), and the emerging ASEAN Vision for Food Systems.

The 2nd UN Food Systems Summit Stocktake (UNFSS+4) in July 2025 presents an ideal opportunity for all stakeholders and potential conveners to discuss coordination mechanisms and operational guidelines. This event will provide an open space for dialogue and collaboration, helping to streamline efforts and enhance the effectiveness of food system transformation initiatives.