Impact of COVID-19 on the agri-food sector in the GMS

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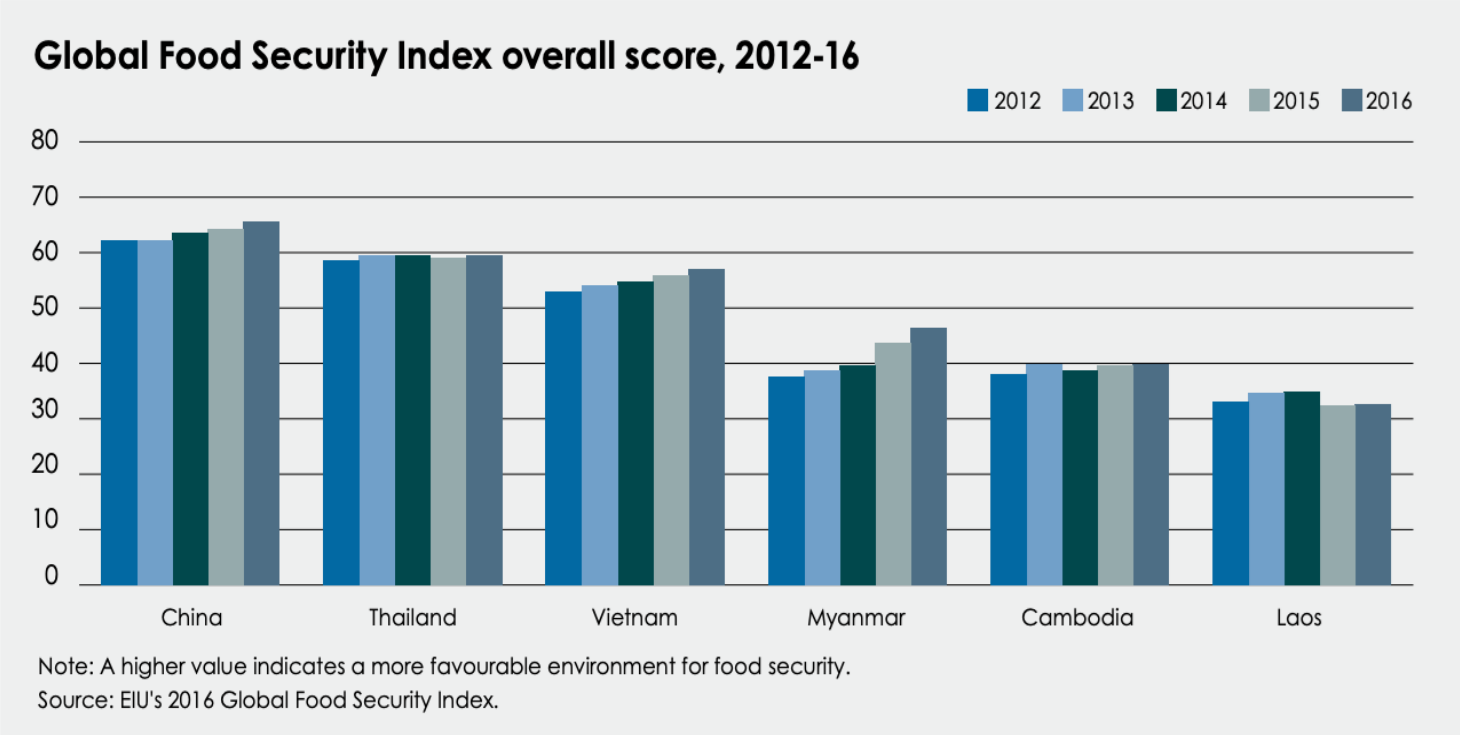
Food Security in Greater Mekong Subregion (GMS)



Source: EIU Water Security: Lessons from the Mekong River Basin

Overall, the greatest food security risk in the basin is faced by Cambodia and Laos, where urbanisation is relatively low and the poverty level remains around 20%

By 2050, population growth is expected to increase food demand in the Greater Mekong Subregion by 25% or more, placing an even heavier burden on food systems that are already under stress.

Clearly, agriculture must not just aim to increase food production but also to improve the nutritional status of the population.

Agriculture in the Greater Mekong Subregion

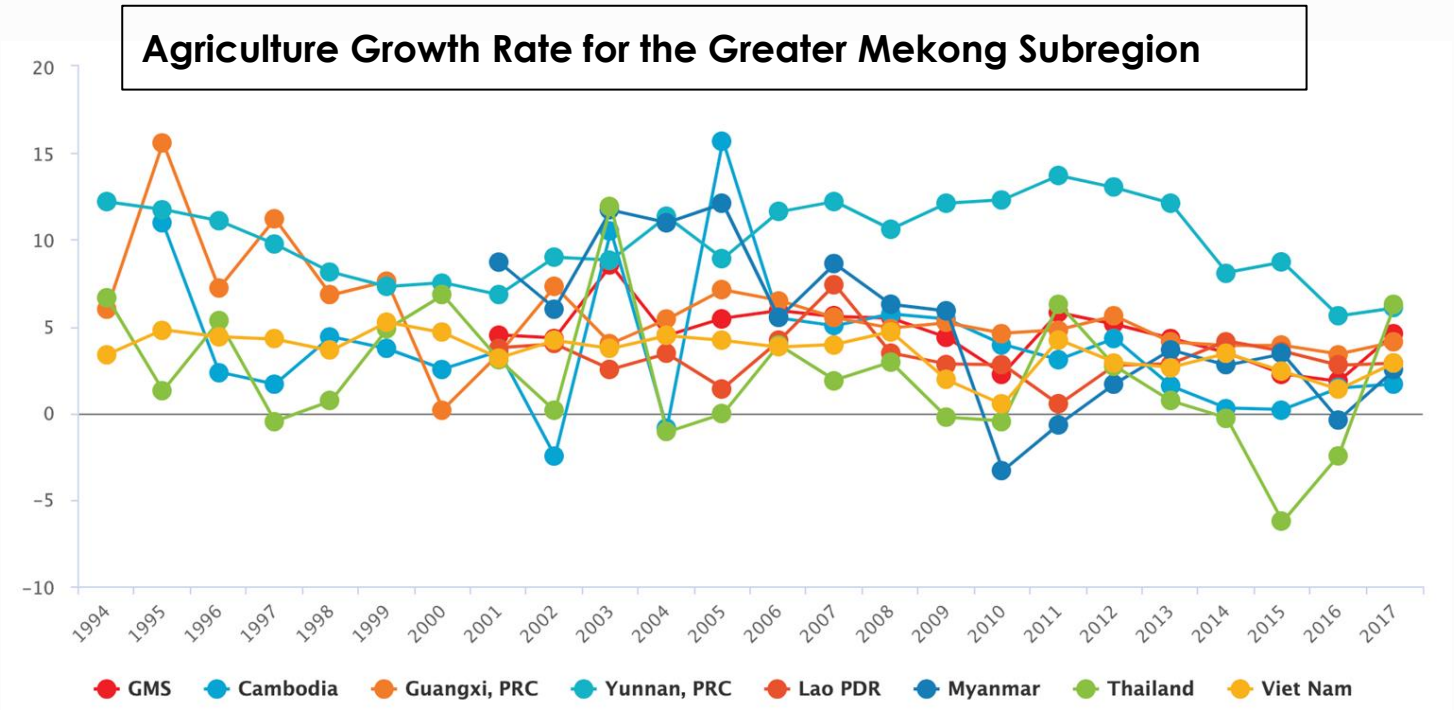
Agriculture and Growth

GDP Share of Agriculture and GDP per Capita in the GMS

	GDP share of Agriculture (%)		GDP per Capita ($/year)	
Country	**2000**	**2010**	**2000**	**2010**
Cambodia	37.90	36 .00	290.00	788.00
PRC				
Guangxi	26.80	17.50	561.84	2,986.56
Yunnan	20.70	12.81	560.00	2,327.00
Lao PDR	48.54	30.81	303.47	1,003.71
Myanmar	57.20	36.40	177.64	742.44
Thailand	9.02	12.42	1,983.32	4,992.43
Viet Nam	24.53	20.58	401.57	1,173.55

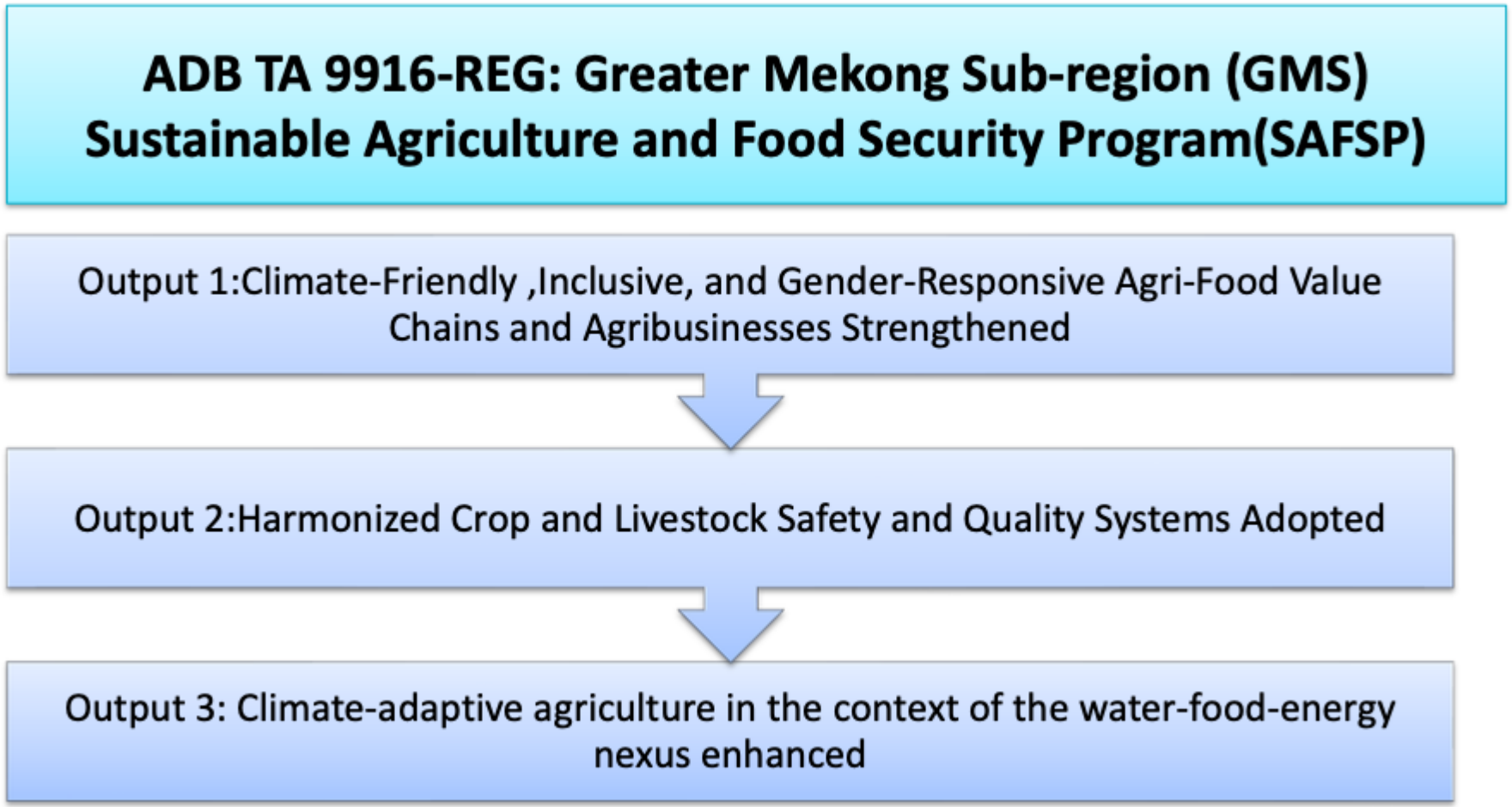
GDP = gross domestic product, GMS = Greater Mekong Subregion, Lao PDR = Lao People's Democratic Republic, PRC = People's Republic of China.
Source: ADB. 2011. *Key Indicators for Asia and the Pacific 2011*. Manila; Council for the Development of Cambodia. 2011. *Why Invest in Cambodia?* Phnom Penh; Guangxi Bureau of Statistics. 2011. *Guangxi Statistical Yearbook 2011*. Beijing; International Monetary Fund. *World Economic Outlook Database, September 2011*. http://www.imf.org/external/pubs/ft/weo/2011/02/weodata/index.aspx; Government of Viet Nam, Ministry of Planning and Investment, General Statistics Office. 2011. *Statistical Yearbook of Viet Nam 2010*. Ha Noi; Yunnan Bureau of Statistics. Yunnan Statistical Yearbooks 2001 and 2010. Beijing.

Even with dynamic growth in manufacturing and services sectors in GMS countries, a large portion of the population still lives below the poverty line. **This underlines the importance of enhancing and stabilizing growth in agriculture and agriculture as a major key to reducing poverty.**



Source: Greater Mekong Subregion Statistical Database

Food Security in Greater Mekong Subregion (GMS)

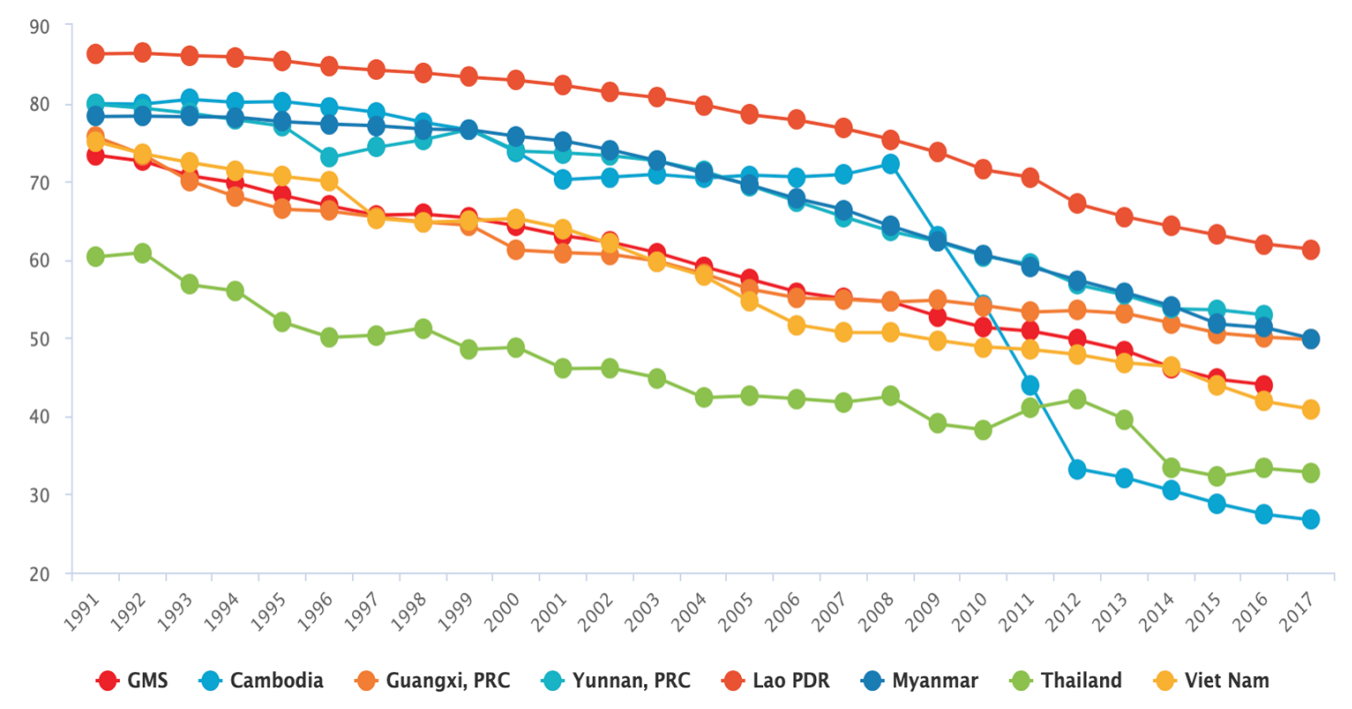


Source: Dr. Thanda Kyi, 19th GMS WGA Annual Meeting Presentations

Agriculture in the Greater Mekong Subregion

Agriculture and Employment

Employment in Agriculture (% of Total Employment)



Employment in Agriculture follows a decreasing trend across GMS countries. Although total employment in agriculture (in millions) remains constant, the decreasing trend reflects lesser manpower availability for the agriculture sector.

Source: Greater Mekong Subregion Statistical Database

Impact of COVID-19 on the agricultural sector in GMS

Decrease in agricultural labor force

Decrease in agricultural labor force due to COVID-19-induced mobility restrictions could **reduce agricultural production** in Southeast Asia particularly low income countries

Table 1. Estimated reduction in the volume agricultural production due to decrease in agricultural labor force in Southeast Asia

Country	Volume of Agricultural production* (in million tons)	Annual production per capita of ALP (tons/capita)**	With COVID Scenario			
			Estimated ALF in 2020 due to COVID (in million)***	Estimated Volume of Agricultural production (in million tons)****	% Change in Volume of Agricultural Production due to Decrease in ALF	Reduction in Volume of Agricultural Production (in million tons)
	2018	2018	2020	2020		2020
Vietnam	120.67	5.492	21.13	116.056	-3.82%	-4.614
Cambodia	4.88	1.580	2.98	4.705	-3.63%	-0.177
Indonesia	0.05	0.001	38.05	0.045	-3.28%	-0.002
Philippines	99.98	9.379	10.34	97.011	-2.97%	-2.972
Thailand	112.53	9.002	12.16	109.442	-2.74%	-3.084
Malaysia	132.73	80.932	1.60	129.274	-2.60%	-3.454
Myanmar	64.47	5.302	11.90	63.096	-2.13%	-1.373
Timor-Leste	0.38	1.595	0.24	0.377	-1.40%	-0.005
Singapore	0.18	6.163	0.0296	0.182	-1.40%	-0.003
Brunei	0.16	15.793	0.01	0.156	-1.40%	-0.002
Lao PDR	12.30	5.211	2.35	12.230	-0.56%	-0.069
Southeast Asia	548.33	5.272	100.77	531.295	-3.11%	-17.034

*Notes: * Computed using crops and livestock production*

*** Computed using the agricultural production in 2018 as base year*

**** Computed assuming 1.4% reduction in agrilcultural labor force (Source: IFPRI; see Laborde and Vos 2020)*

***** Estimated based on 2018 production and with 1.4% reduction in ALF*

Impact of COVID-19 on the agricultural sector in GMS

Decrease in agricultural productivity and GDP

Overall, an estimated **1.4 percent drop in GDP (USD 3.76 billion)** could be felt by the whole of SEA

Increase in poverty

- This decrease in GDP could **mean more families in Southeast Asia being pushed below the poverty line**
- Overall, poverty impacts in SEA could reach an additional **14.68 million families** to live below the USD 1.90 a day threshold

Table 2. Estimated Reduction in GDP due to decrease in labor productivity in Southeast Asia

Country	With COVID Scenario					With COVID Scenario	
	Estimated ALF in 2020 due to COVID (in million)*	Estimated GDP (in billion USD)**	Difference in GDP (in billion USD)	% Change in GDP	Total Population (in millions)	Percent Increase in Poverty Ratio due to Labor Productivity Reduction***	Estimated Increase in the Number of Population Living Below USD 1.90 a day (in millions)
	2020	2020	2020		2020		
Brunei	0.01	0.14	0.000	0.00%	0.43		
Cambodia	2.978	4.70	-0.066	-1.39%	16.50		
Indonesia	38.05	142.50	-2.022	-1.40%	266.10	2.07	5.51
Lao PDR	2.347	3.03	-0.043	-1.39%	6.70	2.97	0.20
Malaysia	1.597	27.90	-0.402	-1.42%	32.60		
Myanmar	11.901	17.16	-0.244	-1.40%	54.10	2.97	1.61
Philippines	10.343	30.26	-0.430	-1.40%	108.80	2.97	3.23
Singapore	0.0296	0.08	-0.001	-1.33%	5.71		
Thailand	12.157	38.06	-0.542	-1.40%	66.56	2.36	1.57
Timor-Leste	0.237	0.41	-0.005	-1.25%	1.30	1.63	0.02
Vietnam	21.13	34.51	-0.490	-1.40%	96.48	0.96	0.93
Southeast Asia	100.769	264.60	-3.758	-1.40%	655.28	2.24	14.68

*Notes: * Computed assuming 1.4% reduction in agrilcultural labor force (Source: IFPRI); Labor Productivity (LP) = GDP/Worker (in thousand USD)*

*** Computed using the estimated 2020 ALF and the computed labor productivity*

**** Based on the estimates of IFPRI from 1.4% reduction in labor supply, except for Brunei, Cambodia, Malaysia, and Singapore, as data is not available*

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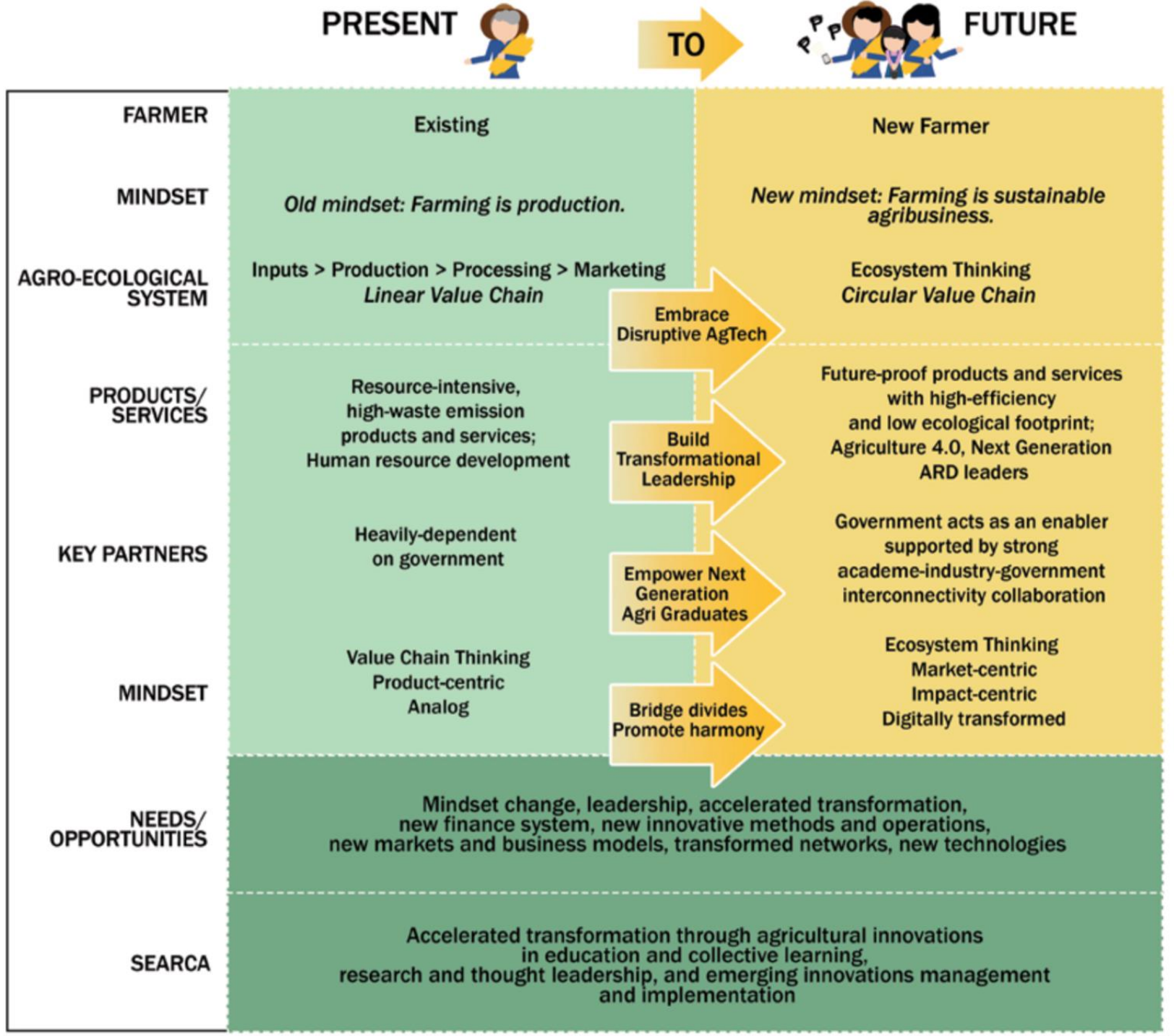
Achieving food security in GMS amid its growing populations has been a continuing challenge, made even more elusive by the onset of COVID-19 pandemic.

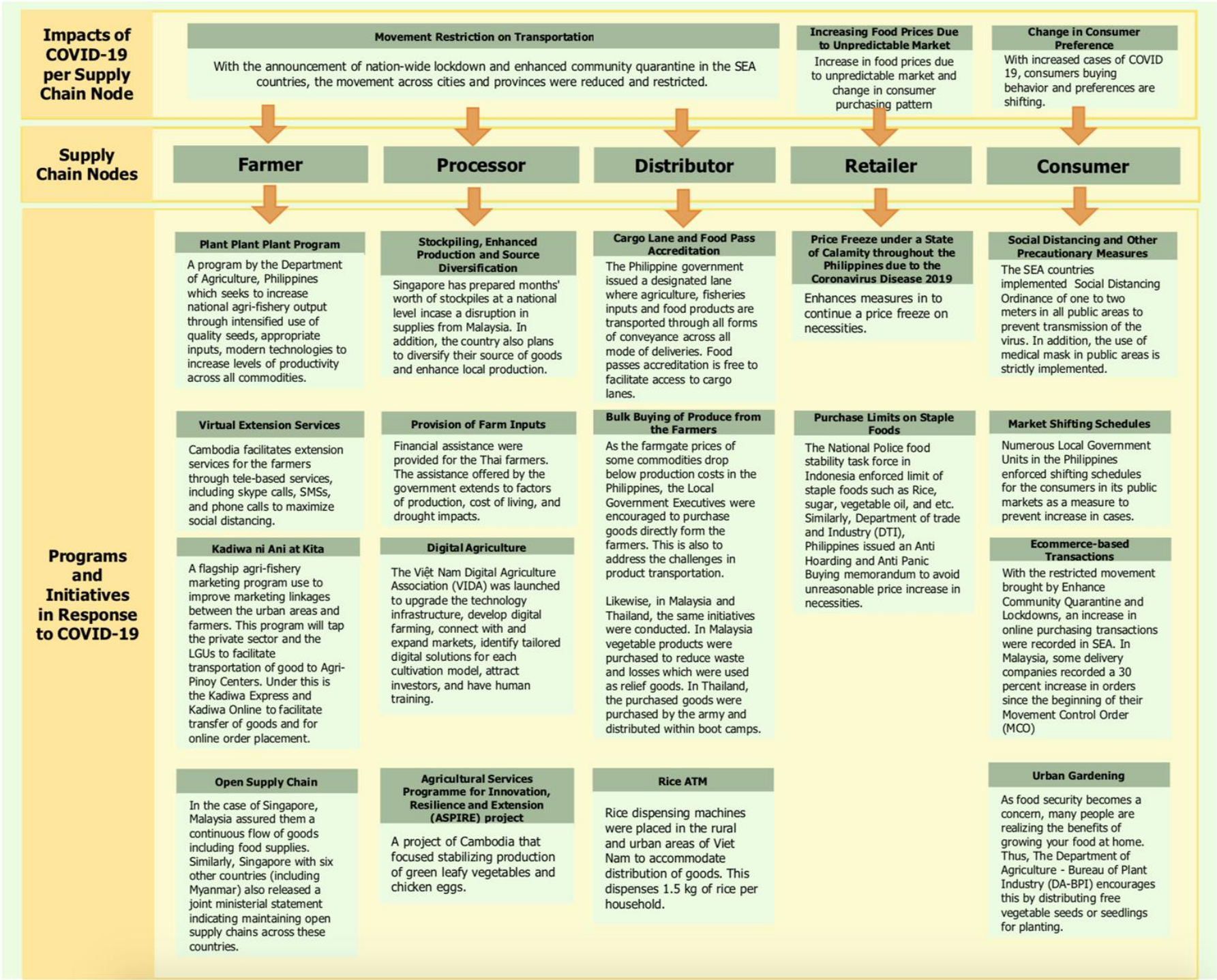
Reinforcing transformed agricultural food systems

Innovations for Transformational Change	
Policy Innovation	Providing inclusive social service and protection schemes to all sectors, especially the women and youth; innovative new sourcing of funding and financing of policies and programs; new policies on innovation, sustainability, and entrepreneurship
Institutional Innovation	New arrangements for more participatory governance; academe-industry-government partnership or multi-stakeholder delivery of services; reconfiguring modalities of engagement with institutions from the macro level into multi-scalar governance, where governance is articulated clearly down to the local levels
Social Innovation	Public and private sector players adopting new ideas, strategies and practices to better meet social needs; building of deeper relationships conducive to social and economic development
Technological Innovation	Science and technology that enable social innovations to scale wider and faster; use of digital technology platforms for business models; IT-based education and collective learning
Conceptual Innovation	Creation of new ways of working, thinking, deciding and operating at the governance level of partner organizations

Reinforcing transformed agricultural agri-food systems



Reinforcing transformed agricultural agri-food systems



Capitalizing on Emerging Innovation for Growth

FARMING
benefits:
IMPACT

- Families & Communities
- Agricultural Value Chain
- Rural Development

INNOVATION
solutions:
OUTCOME

- Technology Adaptation
- Agripreneurship

EMPOWERED MINDS
solvers:
OUTPUT

- Students
- Specialists & Experts

OPEN COLLABORATION
culture:
INPUT

- Partnerships: Academe-Industry-Government
- Donors & Co-Funders
- Co-Enablers/Promoters
- Co-Implementers

Capitalizing on Emerging Innovation for Growth

INDEX
- baseline & impact studies

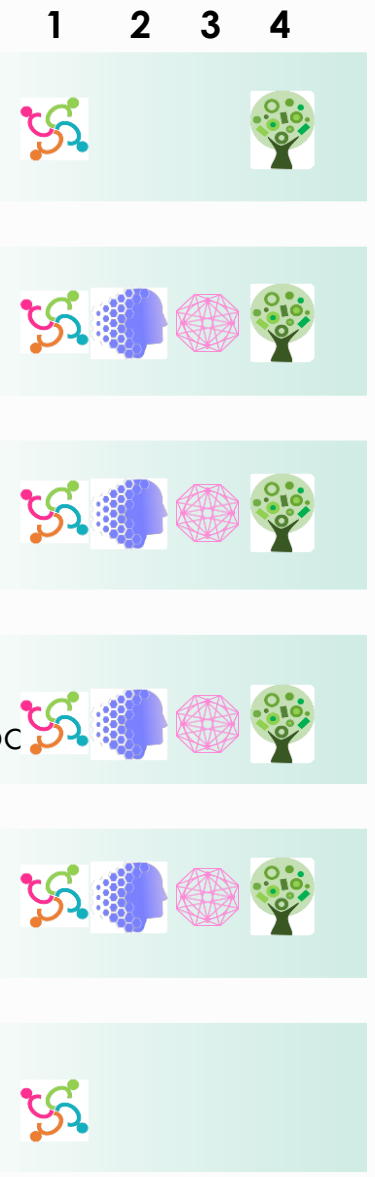
SERVES
- experts as innovation enablers

IDEATES
- competition on innovation

BLOCKS
- prototyping, tech bank & maker spc

A4LIFE
- agribusiness incubation

SHARING
- Open collaboration platform



1 **Collaboration**

2 **Empowered Minds**

3 **Innovation**

4 **Farming**

Capitalizing on Emerging Innovation for Growth

The need to support local capacity toward being self-sufficient through well-planned local food production systems.

Across GMS, policy and research support are needed towards:

- development of new and relevant crop varieties and livestock breeds
- seed and livestock production and distribution of technologies
- agricultural systems technologies like water management, pests and diseases management, weather and climate forecasting, etc.
- post-harvest management like drying, processing, and storage
- farm produce transport and logistics systems
- facilities supporting food quality, nutrition, and safety maintenance
- diversified farming, as well as support livelihoods complementary to that of major crops and livestock produced, etc.

Capitalizing on Emerging Innovation for Growth

There is a need to support more studies and activities related to improving design of financial technologies for farmers, and encouraging wider participation in these financial systems like loans and credit systems and agricultural insurance facilities, among others.

Encourage more programs and budget allocation from governments, as well as private initiatives related to agriculture, such as farm- based small-and-medium enterprises.

There is a need for a massive promotion of sustainable and responsible consumption pattern that provides strong signals for agricultural products that support and observe cleaner production, environmental conservation, and social inclusion.

Capitalizing on Emerging Innovation for Growth

The growing interest in agriculture needs to be sustained with more targeted capacity building activities of relevant government agencies and groups to specifically promote and generate more agri- entrepreneurs

More studies must be done to ensure the balance between trade priorities and food security goals particularly under the tenets of ASEAN Economic Cooperation. Analyses toward effective coordination mechanisms among countries to reduce trade and food insecurities both at the national and regional levels must be continuously pursued

END OF PRESENTATION

Thank You.