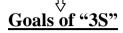
ACMECS Master Plan (2019-2023)

Vision: "Building ACMECS CONNECT by 2023"



Goal 1: Seamless Connectivity Goal 2: Synchronized ACMECS Goal 3: Smart and Sustainable ACMECS

Hardware Infrastructure:

- 1.1 Multi-modal transport (missing links) includes
 - Roads
 - Bridges
 - Rails
 - Ports
 - Air
 - Maritime
 - Inland Waterway
 - 1.2 Digital Infrastructure
 - Internet Broadband/
 Submarine Cable Link
 - Network Integrity and Security
- 1.3 Energy Infrastructure and Connectivity

Software Connectivity:

Action Plans

- 2.1 Trade , Investment and Industry
- 2.1.1 Institutional

Synchronization and

Integrated Interoperability of

Rules and Regulations

including Digital Laws

2.1.2 Integrated Value and

Supply Chain

2.1.3 Promotion of

ACMECS Trade,

Investment and Industry

- 2.2 Financial Cooperation
- Financing through
 ACMECS Fund and
 ACMECS Infrastructure
 Fund and Trust
 - Financial Literacy and Capital Market Cooperation
- Financial Connectivity
 (Payment and Settlement,
 Use of Local Currency,
 FinTech, Cooperation
 between Banks and other
 financial service
 providers)

3.1 Human Resource Development and Application of Modern Technology (Smart Entrepreneur i.e. SMEs / Startups, Smart Agriculture, Smart Tourism, Smart Medical Services, Smart Education, Smart Cities, Cyber Security)

- 3.2 Environmental Cooperation
 - Natural Resources Conservatio
 - Water Resource Management
 - Climate Change
- Disaster Risk Management
- Energy Efficiency and Promotion of Renewable Energy
- 3.3 Sustainable Agriculture
- 3.4 Tourism
- 3.5 Health

BACKGROUND

- 1. The Ayeyawady-Chao Phraya-Mekong Economic Cooperation Strategy (ACMECS), established since 2003, remains a sub-region with immense potential, with an average annual economic growth of 6-8 percent, abundant natural resources and an immense market of over 230 million coupled with a synchronized effort by five Mekong riparian countries' (CLMTV) governments to become a knowledge-based society.
- 2. ACMECS is strategically located, acting as a de facto "land bridge" linking economies and markets of the Indian and the Pacific Oceans. ACMECS plays an increasingly important role to complement and promote intra-regional, ASEAN as well as inter-regional connectivity.
- 3. This Master Plan was developed from previous ACMECS Plans of Action and aims at streamlining operational structure and utilizing full economic potentials of ACMECS. Specific goals, strategy and practical work plan outlined in this Master Plan reflect the current global and regional situation, priorities and needs of the ACMECS countries as well as to address new evolving and fast changing challenges facing the world today.
- 4. This Master Plan will serve as a guideline for clear and well-coordinated work plans among ACMECS countries, while also complementing the Master Plan on ASEAN Connectivity 2025 and the 2030 Agenda for Sustainable Development.

VISION "Building ACMECS Connect by 2023"

- 5. Consistent with the theme of the 8th ACMECS Summit, "Towards an Integrated and Connected Mekong Community", ACMECS countries envision an emerging competitive Mekong economy with the following key characters:
- (i) Seamless multidimensional connectivity (physical, digital, institutional, and people-to-people).
- (ii) Integrated and synchronized Mekong economies.
- (iii) Investment in human resources development and innovation.
- (iv) Multi-faceted security including water, food and energy security as well as inclusive and sustainable development

GOALS "3S": Seamless – Synchronized - Smart & Sustainable

- 6. To materialize the above visions, the ACMECS Countries have identified three aspiring goals, the "3S" namely: Goal 1 "Seamless Connectivity", Goal 2 "Synchronized ACMECS Economies" and Goal 3 "Smart and Sustainable ACMECS". In this connection, the member countries have identified a draft list of prioritized projects under Goals 1 and 2 to be implemented under the first phase of the ACMECS Master Plan as appears in <u>Annex A.</u> Projects under Goal 3 will be implemented concurrently.
 - (1) <u>Seamless Connectivity</u> comprises mainly, among others, hardware infrastructures from Multi-modal transports link including roads, rails, bridges, ports, air, maritime and inland waterway connectivity, as well as infrastructures designed for Digital Connectivity. Infrastructures designated for subregional energy interconnection shall also be included in this goal.

- (2) <u>Synchronized ACMECS Economies</u> requires the operationalization of ACMECS Software connectivity which seeks to emplace policies, measures, agreements, legal and institutional mechanisms to promote ACMECS Policy harmonization toward a freer flow of goods, services, investment and people. Software connectivity comprises 2 aspects, namely (i) Trade, Investment and Industrial Cooperation and (ii) Financial Cooperation, which will enable ACMECS to become a logistic hub with seamless value/supply chain, and a sustainable financing scheme.
- (3) <u>Smart and Sustainable ACMECS</u> "Smart ACMECS" focuses on development of human capital and application of modern technology in the strategic areas, including among others, smart cities, entrepreneurship (MSMEs/Startups), agriculture, tourism, medical services and education. "Sustainable ACMECS" focuses on the promotion of environmental cooperation, efficient and sustainable development and management of water and related resources and sustainable activities in other strategic fields of ACMECS i.e. agriculture, industry, tourism, health, renewable energy and climate change.

<u>Goal 1</u>: Seamless Connectivity (Hardware Infrastructure)

7. Seamless connectivity through development of hardware infrastructure is crucial for the seamless movement of goods and tradable services within ACMECS, ASEAN and beyond. ACMECS aims to become global gateway bridging the Indian and the Pacific Oceans through new and existing transport systems including economic corridors, deep sea ports, railways, road and bridges, inland waterways, maritime, and air transports. Enhanced digital infrastructure will facilitate and increase future transaction, trade and financing activities while integrated energy network would ensure subregional energy security. Hardware infrastructure connectivity will ultimately transform the five ACMECS member countries into one well-engineered platform where effective value and supply chain is central to its agenda.

(1.1) Multi-modal transport

8. ACMECS countries shall identify key missing links required for ACMECS Multi-modal transport infrastructures including roads, bridges, rails, ports, air and, maritime and inland waterway; as appears in Annex B-1.

(1.2) Digital infrastructure

- 9. Digital infrastructure is defined as infrastructure for Digital Connectivity and its related investment, in particular for development of communication networks, internet broadband, and consortium of submarine cables, as well as software to promote network integrity and security.
- 10. Digital infrastructure is fundamental to supporting trade, facilitating investments and broadening markets through its ability to facilitate information exchange, to connect people, to support delivery of services and reduce the business and trade-related transaction cost.
- 11. Possible Action Plans under Digital infrastructure appears in Annex B-2.

1.3 Energy Infrastructure and Connectivity

- 12. Energy Infrastructure and Connectivity is defined as infrastructure investment for promoting the development of regional energy market integration including both power transmission lines, oil and gas pipelines, and terminals to serve the goal of energy interconnection within ACMECS countries with a view to promote subregional energy security, accessibility and sustainability.
- 13. Possible Action Plans under Energy Infrastructure and Connectivity appears in Annex B-3.

<u>Goal 2</u>: Synchronized ACMECS Economies (Software Connectivity)

- (2.1) Trade, Investment and Industrial Cooperation includes Institutional synchronization and Integrated interoperability of rules and regulation on border trade, services and investment as well as strategic investment to promote Integrated value and supply chain in the subregion.
 - 2.1.1 Institutional synchronization and integrated interoperability of rules and regulations including Digital Laws among ACMECS countries focuses on the harmonization and simplification of rules and regulations, including cross-border procedures, standards and conformity assessment procedures, and operationalization of tools to address non-tariff barriers with a view to improve and simplify border procedures and align trade facilitation in line with international best practices and facilitate intrasubregional transactions of goods, services, investment, and the movement of persons across borders.
- 14. Possible Action Plans under Institutional synchronization and integrated interoperability of rules and regulations including Digital Laws appears in <u>Annex C-1.A.</u>
 - 2.1.2 Integrated value and supply chain focus on development of ACMECS brand and the promotion of investment and cooperation in ACMECS economic zones (EZs). These strategic plans aim to stimulate production diversification and efficiency as well as strategic collaboration among ACMECS countries based on their respective national. An ACMECS integrated value and supply chain will narrow development gaps within and among ACMECS countries as greater opportunities in investment, trade, employment and growth will be available. Additionally, it will contribute to inclusive growth, creating ACMECS Brand Identity which is key to ACMECS' Competitiveness in the global market.
- 15. Possible Action Plans under Integrated value and supply chain appears in Annex C-1.B.

2.1.3 Promotion of ACMECS Trade, Investment and Industry

Possible Action Plans will be further discussed in the Coordinating Committees' Meetings.

(2.2) Financial Cooperation

16. The Master Plan requires closer cooperation between ACMECS countries to reduce regulatory diversity, enhance development of financing infrastructure, promote green financing and create an ecosystem that will foster seamless collaboration. Financial cooperation includes financing through ACMECS Fund and ACMECS Infrastructure Fund and Trust and from other financial institutions such as ADB, AIIB, World Bank and IMF, financial literacy, capital market cooperation and financial connectivity will lead to greater management of financial resources to facilitate trade and investment among ACMECS members.

2.2.1 Financing through ACMECS Fund and ACMECS Infrastructure Fund and Trust

- 17. The Master Plan aims to enhance financing capabilities and offer new sources of finance for the undertaking of projects under the ACMECS Master Plan. Member countries agree to explore ways and means to establish an ACMECS Fund and an ACMECS Infrastructure Fund and Trust taking into account the needs and readiness of the ACMECS countries. ACMECS Fund and ACMECS Infrastructure Fund and Trust will increase liquidity of fund and also symbolize ACMECS' self-reliance and centrality. The proposed ACMECS Fund and ACMECS Infrastructure Fund and Trust are envisaged to facilitate private and public sector participation and development as well as promote subregional economic integration. The ACMECS Fund and the ACMECS Infrastructure Fund and Trust could also ensure best practices in execution arrangements for priority infrastructure projects.
- 18. Possible Action Plans under Financing through ACMECS Fund and ACMECS Infrastructure Fund and Trust appears in <u>Annex C-2.</u>
 - 2.2.2 Promote financial literacy and awareness through practical education, tools, training, media outreach, and campaign.
- 19. Possible Action Plans under Promote financial literacy and awareness appears in Annex C-2.

2.2.3 Capital Market Cooperation

- 20. ACMECS Capital Market Cooperation offers an innovative approach to access its infrastructure financing and resources, unlocking potential growth of the subregion.
- 21. Possible Action Plans under Capital Market Cooperation appears in Annex C-2.

2.2.4 Financial Connectivity

2.2.4.1 Payment and Settlement

22. Cooperation on payment and settlement aims to link payment infrastructure and services across ACMECS countries in order to provide more efficient cross-border services and lower transaction costs between ACMECS countries.

23. Possible Action Plans under Payment and Settlement appears in Annex C-2.

2.2.4.2 Use of Local Currency

- 24. The use of local currencies in ACMECS countries aims at facilitating intra-ACMECS trade and investment, lowering exchange rate risk, and enabling ACMECS countries to further integrate to seamless connectivity.
- 25. Possible Action Plans under Use of Local Currency appears in Annex C-2.

2.2.4.3 Fintech

- 26. Cooperation on Fintech aims to facilitate cross-border financial innovation and services to increase of efficiency, accessibility, and reduce costs in financial systems.
- 27. Possible Action Plans under Fintech appears in Annex C-2.

2.2.5 Cooperation between Banks and other financial service providers

- 28. Cooperation between banks (both public and private) and other financial service providers will further enhance and facilitate communications, accelerate financial transactions, and promote the exchange of expertise and best practices among ACMECS's financial institutions which will in turn promote intra-ACMECS trade and investment.
- 29. Possible Action Plans under Cooperation between Banks appears in Annex C-2.

Goal 3: Smart and Sustainable ACMECS
(Human Resource Development and
Environmental Cooperation)

- 30. "Smart ACMECS" focuses on development of human capital in the strategic areas, including among others, entrepreneurship (MSMEs/Startups), agriculture, tourism, medical services education, smart cities and cyber security with a view to enhance innovative mindsets and skill while "Sustainable ACMECS" focuses on the promotion of environmental cooperation, efficient and sustainable development and management of water and related resources, and sustainable activities in other strategic fields of ACMECS i.e., agriculture, industry, tourism, health, renewable energy and climate change.
- 31. In this connection, Thailand will officially launch the New Economy Academy (NEA) for ACMECS as an extension of her human development center established by the Ministry of Commerce of Thailand. The NEA will serve as capacity building and training platform to enhance entrepreneurship skills for all ACMECS nationals.
- 32. Smart and Sustainable ACMECS will help eradicate poverty, generate economic prosperity through inclusive growth. The Goal is also expected to materialize innovative society and ease ACMECS countries out of the low and medium income trap.

3.1 Human Resource Development and Application of Modern Technology

- 33. Cooperation on human resource development (HRD) and application of modern technology to improve skills and enhance competitiveness of ACMECS's regional market to meet the requirements of global markets. HRD should also be extended to cover other strategic areas of cooperation such as agriculture, education, health and environment which will contribute to the narrowing of economic disparity among ACMECS countries, promote prosperity and sustainable development in the sub-region. The enhanced HRD shall also complement those efforts made at the ASEAN level particularly contributing to the ASEAN integration.
- 34. Possible Action Plans under Human Resource Development appears in Annex D-1.

3.2 Environmental Cooperation

- 35. Cooperation on environmental issues aims to enhance cooperation related to water resources management as well as environmental protection, natural resources conservation, waste management and sustainable use of natural resources of the Ayeyawady, Chao Phraya and Mekong rivers. It shall also address other issues involving environmental challenges such as climate change, natural disasters, as well as the promotion of renewable energy. This will ensure that the well-beings of the peoples of ACMECS countries are accompanied by balanced, dynamic economic growth and sustainable development.
- 36. Possible Action Plans under Environmental Cooperation appears in Annex D-2.

3.3 Sustainable Agriculture

- 37. Cooperation on sustainable agriculture aims to enhance agricultural productivity, diversification and commercialization, animal health, sustainable management of land and water, fisheries, forestry and wildlife resources in ACMECS countries with a view to promote ACMECS to become a reliable regional center for food security.
- 38. Possible Action Plans under Sustainable Agriculture appears in Annex D-3.

3.4 Tourism

- 39. Cooperation on the development of smart and responsible tourism and the realization of the "Five Countries, One Destination" concept among ACMECS countries will strengthen people-to-people connectivity through promotion of mutual understandings and respects of different cultures, promote sustainable development, social inclusion and regional integration.
- 40. Possible Action Plans under Tourism appears in Annex D-4.

3.5 Health

41. Cooperation on health aims to respond to common health needs and emerging health challenges faced by ACMECS countries. The cooperation shall ensure effective readiness and improved response capacity to prevent and control emerging and re-emerging infectious diseases in cross-border areas with a view to promote a healthy, caring and sustainable ACMECS.

42. Possible Action Plans under Health appears in Annex D-5.

Roles of ACMECS Development Partners

- ACMECS countries welcome the long standing commitments of its Development Partners and other external partners to implement this Master Plan. The suggested areas of cooperation with potential development partners appear in <u>Annex 2</u>.
- ACMECS countries agree to promote overall and closer coordination (finance and assistance both in cash and kind) between ACMECS and its development partners through existing Mekong programs and frameworks namely Greater Mekong Subregion Cooperation (GMS), Mekong-Japan, Mekong-Lancang, Mekong-ROK, Mekong-Ganga, and Lower Mekong Initiative (LMI), Friends of the Lower Mekong (FLM).
- ACMECS countries realize the importance of coordination and improvement of resource mobilization to avoid overlapping activities.
- ACMECS countries agree to explore possibility to streamline the organizational structures of all Mekong subregional frameworks such as organizing ACMECS Summit back-to-back with other Summits of Mekong subregional frameworks (GMS, Mekong-Japan, Mekong-Lancang).

Follow-up and Assessment

- The implementation of ACMECS Master Plan shall be follow-up and reviewed at least annually by the following Coordinating Committees:
- (i) Coordinating Committee on Infrastructure Connectivity, responsible for the 1st pillar: "Seamless Connectivity"
- (ii) Coordinating Committee on Facilitation Software Connectivity, responsible for the 2nd pillar: "Synchronized ACMECS Economies"
- (iii) Coordinating Committee on Human Resource Development and Sustainable Development, responsible for the 3rd pillar: "Smart and Sustainable ACMECS"
 - ACMECS chair will hold Coordinating Committee meetings of the 3 pillars at least once a year back-to-back with Senior Official Meeting (SOM), or as appropriate.

Note:

- 1. ACMECS shall retain the existing areas of cooperation established under ACMECS (1. Trade and Investment Facilitation 2. Agriculture 3. Transport 4. Tourism 5. Human Resource Development 6. Public Health 7. Industrial and Energy Cooperation 8. Environmental Cooperation), and the lead country of each area of cooperation remains the same, but acts as Prime Mover of the relevant sector under the Coordinating Committees. The Working Groups and areas of cooperation should be open ended to allow for interested Co-Prime Movers.
- 2. The Action Plan as annexed to the ACMECS Master Plan is a living document whereby ACMECS member countries can make improvement, prioritize and submit their plans/projects as appropriate to be reported to the annual SOM. Coordinating Committees shall further discuss areas of mutual concern as appears in Annex B to D.

(Cambodia)

- Draft -

<u>List of prioritized projects to be implemented under</u> <u>ACMECS Master Plan (2019 - 2020)</u>

Goal 1	Goal 2	
Seamless Connectivity	Synchronized ACMECS Economies	
1.1 Multi-modal transport missing links	2.1.3 Promotion of ACMECS Trade,	
(A) Road 1. Seeking fund for upgrade NR 74 and NR 7 into 4 Lane from Trapeang Srae Border Gate, Kratie to Trapeang Kriel International Check Point, Stung Treng connecting to Laos. 2. Seeking fund for upgrade NR 78 into 4 Lane from Stung Treng Province to Ratanakkiri at O Yaday International Check	Investment and Industry 1. Training course on practical tools and technique for productivity enhancement (Cambodia-Vietnam-Lao) 2. Development and Implementation of Water safety plan for urban & peri-urban areas of ACMECS countries. 3. Study visit on best practices on SMEs development policy and productivity movement (ACMECS countries)	
Point, connecting to Vietnam. (B) Rail 1. Completing feasibility study and seeking fund for the new railway link which is a part of the Singapore-Kunming in Cambodia from Bat Doeng to Snoul connecting to Loch Ninh, Vietnam, distance about 255km. 2. Completing feasibility study and seeking fund for construction of the new railway link from Snoul – Stung Treng connecting to Laos border, distance about 273km. (D) Air Transport 1. Rehabilitation of Steung Treng Airport 2. To improve the air connectivity	movement (ACMES Countries)	

among ACMECS countries

- 3. Capacity building framework on aviation security in the ACMECS countries
- 4. Enhancement of aviation safety oversight in the ACMECS countries
- 5. Kompong Chhnang Logistic for air cargo

(E) Inland Waterway

1. Completing the feasibility study and Seeking fund for rehabilitation of waterway from Phnom Penh – Kratie.

(Lao PDR)

<u>List of prioritized projects to be implemented under</u> <u>ACMECS Master Plan (2019 - 2020)</u>

Goal 1	Goal 2
Seamless Connectivity	Synchronized ACMECS Economies
1.1 Multi-modal transport missing links	
(A) Road	
1. NR 17 Improvement project. the section	
start from Luangnamtha-Xiengkok(Lao-	
Myanmar Friendship Bridge). The Road is	
on the Public Works Transport	
Development plan and its also in National	
development plan. This road will link	
India to Vietnam through Myanmar and	
Laos.	
2. The project to Improve NR Road No 11 from Thakkhek (Khamoune-Nakorn Phanom Friend ship Bridge) Along Mekong River to Savannakhet-Mudaham Friendship Bridge and Connect to Se ban Nuan. (This is know as National Road No 11, along mekong river)	

- Draft -

<u>List of prioritized projects to be implemented under</u> <u>ACMECS Master Plan (2019 - 2020)</u>

ACMIDES Musici Flam (2017 - 2020)			
Goal 1	Goal 2		
Seamless Connectivity	Synchronized ACMECS Economies		
1.1 Multi-modal transport missing links	2.1 Trade, Investment and Industry		
 (A) Road 1. Upgrade bottlenecks in the original alignment of the East West Economic Corridor (EWEC) including Myanmar. 2. Upgrade bottlenecks of ASEAN Highway-2 (AH2) (A part of Hai Phong 	2.1.1 Institutional Synchronization and Integrated and Interoperability of Rules and Regulations including Digital Laws 1. To improve public-private dialogue on services trade, in particular as regards regulatory frameworks with the aim to accelerate the contribution of trade in		
Port (Hanoi-Meiktila) to Thilawa Port)	services to the economy.		
 East–West Economic Corridor Eindu–Kawkareik Road Improvement Mae Sot–Myawaddy Border Crossing Project and Infrastructure Improvements (with Thailand) Thaton – Payagyi Road Improvement Project Thaton – Eindu Road Section Dawei SEZ – Phuraron Road 	 2.1.2 Integrated Value and Supply Chain 1. To identify strategic fruit and vegetable for export and develop export promotion strategy for selected items. 2. To create markets for high-quality vegetables, by improving market 		
8. Phyargyi – Bawnatgyi Access Roads (B) Rail 1. Feasibility study for the missing link of Dawei-Htiki – Ban Phunam Ran (Thai), which is proposed spur line of Singapore Kunming Rail Link (SKRL) with technical assistance by Development partners. 2. Feasibility study for upgrading of Dawei Maydamyina axisting line.	information systems)formal and informal (to convey information on quality and quantity demand in addition to price data.		

– Mawlamyine existing line

(C) Ports

- 1. Port at Wang Pon
- 2. Kyainglatt Port Development
- 3. Feasibiity Study on Mawlamyine Port Improvement

(D) Air transport

- 1. Yangon International Airport Development Project: Taxiway A.C. overlay work
- -Phase I including first part of International Terminal (Grid 7-27), New Domestic Terminal, Apron A, Car Parkings, Utilities Building, Link Bridge and road & round about
- -Phase II including Apron A to Apron B, Relocation of Cargo Ware House, Extension of International Terminal (Grid 27-28), Jet Fuel Tank and Hydrant System, Construction of Hangar, General Aviation Terminal, Store, Workshop & Office for Hangar, Pedestrian Underpass, VIP, CIP Terminal Building.
- -Phase III including Second Part of International Terminal (Grid 1-7), 6 Lane Road from Parking A to Traffic Signal, Renovation of existing International Building, Multistoreyed Car Parking.
- 2. Mandalay International Airport Development Project: new cargo warehouse construction
- 3. Kawthaung Airport Development Project: to be implemented by PPP scheme for the development, financing and operation of the airport
- 4. Mawlamyine Airport Development Project: to be implemented by PPP scheme for the development, financing and operation of the airport.

(Thailand)

<u>List of prioritized projects to be implemented under</u> <u>ACMECS Master Plan (2019 - 2020)</u>

Goal 1	Goal 2
Seamless Connectivity	Synchronized ACMECS Economies
1.1 Multi-modal transport missing links	2.1 Trade, Investment and Industry
(A.1) EWEC routes	Common Projects under the Working Group on Trade and Investment Facilitation (WGTIF) 2.1.1 Institutional Synchronization and Integrated and Interoperability of Rules and Regulations including Digital Laws 1. Establishment of One-Stop-Service (OSS) for at Border Areas 2. Promoting Single Stop Inspection Implementation in Major Border Areas 3. Promotion of Border Trade 4. Cross-Border Facilitation and Management 2.1.2 Integrated Value Chain 1. Cooperation among ACMECS Business Councils 2. Exchange of Trade and Investment Information including the Special Economic Zone 3. Cooperation on E-Commerce 2.1.3 Promotion of ACMECS Trade, Investment and Industry 1. Promoting Cooperation on Trade and Investment Fairs and Exhibitions 2. Trade and Investment Missions 3. Cooperation on Human Capital Development
(D) Air transport	

- 1. Mae Sot Airport Development Project : runways and aircraft parking space expansion
- 2. Khon Kaen Airport Development Project: new passenger terminal construction and aircraft parking space expansion

1.2 Digital Infrastructure

- 1. Submarine Cable Link
- 2. ACMECS Ring

1.3 Energy Infrastructure and Connectivity

- 1. Transmission Interconnection Project from Lao PDR (Na Bong) to Thailand (Udon Thani 3)
- 2. Transmission Interconnection Project from Lao PDR (Ban Lak 25) to Thailand (Ubon Ratchathani 3)
- 3. Transmission Interconnection Project from Lao PDR (Pak Beng or Pak Nguyen) to Thailand (Tha Wang Pha)
- 4. Transmission Interconnection Project from Thailand (Mae Sot) to Myanmar (Thaton)

Annex A

(Viet Nam)

- Draft
<u>List of prioritized projects to be implemented under</u>

<u>ACMECS Master Plan (2019 - 2020)</u>

Goal 1	Goal 2	
Seamless Connectivity	Synchronized ACMECS Economies	
1.1 Multi-modal transport missing links	2.1 Trade, Investment and Industry	
 Roads The project of construction of the Ho Chi Minh City – Phnom Penh Expressway; The project of study and construction of the Highway connecting Ha Noi (Viet Nam) and Vientiene (Laos). The project of study and construction of the railway connecting Vung Ang (Viet Nam) and Vientiene (Laos). 	 The project of establishment of start-up and employment centers based on the collaboration in technology transfer, education and training between SMEs and institutions towards inclusive development of ACMECS countries. The project of development of human resources for ACMECS enterprises in the field of integrated pollution management. 	

Key Missing Links required for ACMECS Multi-Modal Transport Infrastructures

Mode of Transport	Key Missing Links / Required infrastructures	
Road	- missing links of the existing platforms such as Regional Investment	
	Framework (RIF) Implementation Plan 2020 of GMS, ASEAN Highway	
	Network (AHN), and connection between Economic Zones (EZs) including	
	AHN Missing links and connections between EZs ¹	
	(i) Myanmar: AH112 (Thaton – Mawlamayine – Lahnya – Khlong Loy, 60 km)	
	(ii) Myanmar: AH123(Dawei – Myittar (55.5 km); AH123 Myittar – Thai Border (103.5 km)	
	(iii) Myanmar: AH2 Meiktila – Loilem – Kyaing Tong – Tachilek (307 of 797 km)	
	(iv) Myanmar: AH1 Tamu – Mandalay – Meiktila – Yangon – Bago – Payagyi –	
	Thaton – Myawadi (229 of 1,557 km)	
	(v) Lao PDR: AH15 Banlao – Nam Phao (98 km of 132 km)	
	(vi) Lao PDR: AH12 Nateuy – Oudomxai – Luang Prabang – Vientiane (293 of	
	682 km)	
	(vii)Thailand: Eastern Economic Corridors in Thailand	
	[Thailand's addition on RIF transport priority projects] ²	
	o GMS: Deepening Connectivity of Southern Economic Corridor Project	
	 Phnom Penh–Sihanoukville Highway Corridor Improvements 	
	 Link Road between NR5 and NR6 near Kampong Tralach North of 	
	Phnom Penh	
	o Southern Siem Reap Bypass Road (193.7 km)	
	Construction of Bus/Truck Driving Test Center	
	Muong Ngeune-Hongsa-Chomphet-Luang Phrabang Pang Mana Muong Kah Wiang Hang	
	o Pang Mone-Muong Kob-Xieng Hone	
	 To jointly seeking the fund to conduct feasibility study for the Vientiane-Hanoi Expressway 	
	 Vicinitalic Transit Expressivity Vang Tao Border Crossing Point 	
	 Upgrading NR13N and N13S (Portion through Phon Hong–Vientiane 	
	Capital–Ban Hai); ASEAN Highway AH11 (NR 13S) Lao PDR 320.0	
	Thanaleng Border Crossing Infrastructure Improvement Project	
	 Muong Ngeune–Chomphet–Luang Prabang 	
	 Upgrading of NR8 East—West Transport Route; ASEAN Highway 	
	AH15 (Van Lao–Nan Phao)	
	 Lalay Border Crossing Point (NR15) 	
	 Nam Phao Border Crossing Point (NR8) 	
	Na Phao Border Crossing Point (NR12)	
	 Dak Chung Border – Crossing Point (NR16) 	

¹ Sources: ASEAN Secretariat, "Master Plan on ASEAN Connectivity", Appendix A: Ongoing Efforts that will continue from the Master Plan

on ASEAN Connectivity 2010, Page 79, http://asean.org/storage/2016/09/Master-Plan-on-ASEAN-Connectivity-20251.pdf ² Sources: Asian Development Bank (ADB)," Greater Mekong Subregion Program: Overview of the Regional Investment Framework 2022", 2017, https://www.adb.org/sites/default/files/institutional-document/366446/rif-2022-overview.pdf Based on projects that are not yet identified potential funding sources.

- o Vientiane Hanoi Expressway Project
- Upgrading 13s (portion Savannakhet Province to Bolikhamxay)
 (253 km)
- Upgrade bottlenecks in the original alignment of the East West Economic Corridor (EWEC) including Myanmar.
- Upgrade bottlenecks of ASEAN Highway-2 (AH2) (A part of Hai Phong Port (Hanoi-Meiktila) to Thilawa Port)
- o East-West Economic Corridor Eindu-Kawkareik Road Improvement
- Mae Sot–Myawaddy Border Crossing Project and Infrastructure Improvements (with Thailand)
- Thaton Payagyi Road Improvement Project
- o Bridge on the Kyaington Lyainglin Taunggyi Road (AH2)
- o Thanphyuzayat Three Pagoda Road
- o Thaton Eindu Road Section
- o Thaton Phyargyi Road Section
- o Dawei SEZ Phuraron Road
- Phyargyi Bawnatgyi Access Roads
- EEC (Laem Chabang) Bangkok Mae Sot (SEZ) Myawaddy Yangon (SEZ)
- EEC (Laem Chabang) Bangkok Mukdahan Savannakhet (SEZ)-Lao Bao – Hanoi
- EEC (Laem Chabang) Sakaeo (SEZ) Poipet (SEZ) Phnom Penh Ho Chi Minh City
- EEC (Laem Chabang) Nakhon Ratchasima –Nong Khai Vientiane
 Boten (SEZ)
- Bang Yai–Kanchanaburi Intercity Motorway Project (part of the Laem Chabang-Bangkok-Dawei [Myanmar] corridor)
- o Tak-Mae Sot Highway Improvement Project Thailand
- Lomsak–Phetchabun Highway Improvement Project
- Kalasin–Nakrai–Kamcha I Highway Improvement Project
- o Chiang Rai-Chiang Khong Highway Improvement Project
- Mae Sot–Myawaddy Border Crossing Project and Infrastructure Improvements
- Aranyaprathet Poipet New Road with Border-Crossing Facilities (Thailand Part)
- o 40 GMS Ben Luc–Long Thanh Expressway (Stage 2)
- GMS Ha Noi–Lang Son Expressway
- Second GMS Southern Coastal Corridor
- Second GMS Northern Transport Network Improvement (Luang Prabang—Thanh Hoa)
- National Highway 14D Improvement Project
- Northern East–West Corridor: Son La–Dien Bien –Tay Trang Border Gate (Viet Nam and Lao PDR) connecting the RIF-listed Luang Namtha (Lao PDR) to the Friendship Bridge (Lao PDR–Myanmar) at Xiengkok–Kainglap
- o Hyphon Halon 26 Highway Project
- Construction of Phnom Penh Sihoukville Expressway
- Upgrading of the National Road No. 5 from Pursat to Poipet connecting to Arangyaprathet, Thailand

	0	Completing the feasibility study of the expressway from Phnom Penh –
		Bavet connecting to Ho Chi Minh, Vietnam
Bridge		
	0	Construction of Poipet (Cambodia)–Klong Loeuk (Thailand) Railway
		Bridge
	0	To Jointly construct a bridge across SeLamphao River to connect
		WatPhou Champassak with Angkor Wat in Siem Reap.
	0	Mekong Bridge at KoneTeoune-HouyKeo
	0	Railway on Mekong Bridge at Thanalaeng
	0	5th Mekong Bridge Construction Project at Paksane-Bung Kane
	0	6th Mekong Bridge Construction Project at Saravane – Ubol
	0	7th Mekong Bridge Construction Project at Vientiane Capital-Leuy
		Province
	0	Open Common Conrol Area (CCA)
	0	Mekong Bridge at Bungkan–Paksan
	0	Luang Namtha- Xiengkok Lao-Myanmar Friendship Bridge
		(NR17)
	0	Lao PDR–Myanmar Friendship Bridge over the Mekong at Xianglok
	0	Mekong Bridge for Thanalaeng – Nongkai Railway Project
	0	Lao Myanmar Friendship Bridge over the Mekong River at Xiengkok-
		Kainglap
	0	In Thaton – Eindu Road Section,
		(a) Phaan Bridge (4) Lane [Estimated Cost 33.36 million USD]
		(b) Donthami Bridges (2) Lane [Estimated Cost 2.0 million USD]
	0	In Thaton – Phayargyi Road Section,
		(a) Belin Bridge (4) Lane [Estimated Cost 4.32 million USD]
	0	Cambodia: Poipet – Border Bridge/ Aranyaprathet (6.5 km) Thailand:
		Aranyaprathet – Khlong Luk Bridge (border bridge with Cambodia)
	0	Construction of new border bridge at Stung Bot (Banteay
D - 11		Meanchey, Cambodia)-Ban Nong Ian (Sakeo, Thailand).
Rail	- expansion of rail connections:	
	_	sion of rail connections under SKRL flagship project: ³
	0	Vientiane – Thakek – Mu Gia, 466 km.
	0	Mu Gia – Tan Ap – Vung Ang, 119 km.
	0	Poipet – Sisophon, 48 km.
	0	Phnom Penh – Loc Ninh, 254 km.
	0	Loc Ninh – Ho Chi Minh, 129 km.
	0	completion of projects under construction by 2020: ⁴
	0	Urban railway projects in Hanoi.
	0	Lao-Thai Railway extension Phase II, from Thanalaeng-
		Khamsavath
	0	Lao-Thai Railway project to Link at 2 nd Lao-Thai Friendship Bridge at Savannakhet-Mukdahan
		Lao-Thai Railway project to Link at 3 rd Lao-Thai Friendship Bridge
	0	at Khammouane-Nakon Phannom.

³ Sources: The Economic Research Institute for ASEAN and East Asia (ERIA), "The Comprehensive Asia Development Plan 2.0 (CADP 2.0)", Page 25, http://www.eria.org/RPR_FY2016_01.pdf
⁴ Sources: The Economic Research Institute for ASEAN and East Asia (ERIA), "The Comprehensive Asia Development Plan 2.0 (CADP 2.0)", Page 25, http://www.eria.org/RPR_FY2016_01.pdf

- Lao-Thai Railway project to Link at Vangtao-Chongmek Border Check Point.
- o High Speed Railway project Lao-China, Thai-China
- Seeking for new railway lines investment from Snuol-Stung Traeng Connection to the Lao Border 273Km
- To jointly seeking fund to construct the Thakaek 0 Mu Gia railway line project
- Lao PDR and Vietnam may jointly propose the railway section My
 Thuy Port Dong ha Lao Bao Savannakhet as another spur line in SKRL
- o Vientiane Boten Railway Project
- To conduct feasibility study for the missing link of Dawei-Htiki (Borda)
 Ban Phunam Ran (Thai), which is proposed spur line of Singapore Kunming Rail Link (SKRL) with technical assistance by Development partners.
- To conduct feasibility study for upgrading of Dawei Mawlamyine existing line
- Single Rail Transfer Operator Development Project of Laem Chabang Port (by Port Authority of Thailand)
- The Construction of a New Railway Line from Den Chai to Chiang Rai and Chiang Khong
- The Construction of a New Railway Line from Baan Pai (Khon Kaen) to Mahasarakham, Roi Et, Mukdahan, and Nakhon Phanom
- o Ho Chi Minh City Loc Ninh (Cambodia's Border) Railway
- Vientiane Thakhek Mu Gia Railway Project (450 km) Mu Gia Vung Ang
- Completed feasibility study and seeking fund for the new railway link is a part of the Singapore-Kunming in Cambodia from Bat Doeng to Snoul connecting to Loch Ninh, Vietnam, distance about 255km.
- Rehabilitation of the railway from Phnom Penh to Poipet connecting to Arangyaprathet, Thailand shall completed by 2018.
- Completed feasibility study and seeking fund for construction of the new railway link from Snoul – Stung Treng connecting to Laos border, distance about 273km.
- Seeking fund for preliminary study on railway link to the new container terminal at the New Phnom Penh Port.

Port

- enhance infrastructure, maritime services and performance of the priority ports as follows:
- Sihanoukville Port Access Road Improvements
 Improving the existing port in Bokeo Province which including Banmom Port and Houeixai Port.
 - o To coordinate in managing and operating the Vung Ang Port
 - Xiengkok River Port
 - o Ban Mom River Port Lao PDR 12.0
 - o Houei Sai River Port
 - o Pakbeng River Port (Oudomxay Province)
 - o Khokchong River Port (same as Luang Prabang River Port)
 - Navigation Channel Improvements: Lower Mekong from Luang Prabang to Savannakhet (MRCs)

- Port Construction and Improvement from Vientiane to Savannakhet
 (Vientiane Port, Paksan Port, Thakhek Port, and Savannakhet Port)
- o Port at Wang Pon
- Kyainglatt Port Development
- o Bhamo Port Development
- o Monywa Port Development
- o Pakokku Port Development
- Magwe Port Development
- o Feasibiity Study on Mawlamyine Port Improvement
- o Ports in Rayong, Chonburi, Chachoengsao (EEC)
- o Ports in Chiang Saen or Chiang Kong in Chiang Rai Province
- Ports Connectivity Ranong Yangon
- Tha Laem Chabang Port Development Project, Phase 3—Feasibility Study
- Coastal Terminal Development Project of Laem Chabang Port
- O Construction of the multipurpose port at Sihanouk Ville Autonomous Port under load from Japan.
- Completed the construction of new container terminal Phnom Penh Port under soft load from China.

Air Transport

- develop airport facilities, particularly runways and warehouses
 - Joint Utilization of Savannakhet Airport
 - To revitalize air linkage between Yangon and Vientiane and encourage the possible air linkage between Mandalay and Luang Prabang.
 - Yangon International Airport Development Project: taxiway A.C. overlay work
 - Phase I including first part of International Terminal (Grid 7-27), New Domestic Terminal, Apron A, Car Parkings, Utilities Building, Link Bridge and road & round about
 - Phase II including Apron A to Apron B, Relocation of Cargo Ware House, Extension of International Terminal (Grid 27-28), Jet Fuel Tank and Hydrant System, Construction of Hangar, General Aviation Terminal, Store, Workshop & Office for Hangar, Pedestrian Underpass, VIP, CIP Terminal Building.
 - Phase III including Second Part of International Terminal (Grid 1-7), 6 Lane Road from Parking A to Traffic Signal, Renovation of existing International Building, Multi-storeyed Car Parking.
 - Mandalay International Airport Development Project: new cargo warehouse construction
 - Bagan-Nyaungoo Airport Development Project: to be implemented by eco-friendly airport.
 - Heho Airport Development Project: to be implemented by PPP scheme for the development, financing and operation of the airport
 - Kawthaung Airport Development Project: to be implemented by PPP scheme for the development, financing and operation of the airport
 - Mawlamyine Airport Development Project: to be implemented by PPP scheme for the development, financing and operation of the airport
 - Mae Sot Airport Development Project: runways and aircraft parking space expansion
 - o Khon Kaen Airport Development Project: new passenger terminal

construction and aircraft parking space expansion
 Rehabilitation of Steung Treng Airport
 To improve the air connectivity among ACMECS countries
 Capacity building framework on aviation security in the ACMECS
countries
- increase intra-subregional direct flights to strategic cities in ACMECS
- harmonize and improve air navigation systems and procedures
- expand inland waterways transport services in ACMECS
- explore additional shipping routes
- reinforce linkages with global and subregional trunk routes and domestic
shipping routes
11 0
 Feasibility study on waterway improvement in the Ayeyarwady river
between Mandalay to Bhamo
 Feasibility study on waterway improvement in the Chindwin river
between Confluence to Homalin
 Installation of Aids to Navigation from Yangon to Nyaung U
 Installation of Aids to Navigation in the Chindwin river from
Confluence to Homalin
 Installation of Aids to Navigation in the Ayeyarwady river from
Mandalay to Bhamo
 Installation of Automatics Identification Systems (AIS) in the
Ayeyarwady river from Yangon to Mandalay
 Creating the software on DTI for Phnom Penh Port.
 Completed the feasibility study on rehabilitation on waterway from
Phnom Penh – Kratie

(1.2) Digital infrastructure

Action Plans:

- (i) Establish ACMECS Broadband Corridors by identifying and developing locations in member countries to enhance higher quality broadband connectivity with a view to enable seamless broadband services and application across ACMECS. Thus, greatly lessening the digital divide and narrowing development gaps within ACMECS countries by 2023.
- (ii) Promote network integrity, information security and data protection by jointly developing common regulatory frameworks and establishing common minimum standards to ensure integrity of networks across ACMECS by 2023.
- (iii) Communication Networks and Interoperability
 - 1. A feasibility study of Multi-Modal Transport System Development
 - 2. A feasibility study of Import and Export Logistic Information System
- (iv) Internet Broadband (lessening digital divide)
- (v) Network Integrity and Security (regulatory frameworks)
- (vi) Promote Submarine Cable Link to connect ACMECS countries to the international submarine cable systems and the Internet system of Thailand
- (vii) Promotion of Digital ACMECS Ring
 - 1. To establish the direct internet network connectivity among the ACMECS countries for exchanging internet traffic within the ACMECS region.
 - 2. To connect the private data network of the ACMECS countries and create the virtual ACMECS data network for supporting the government and private sector information exchange among the member countries.

(1.3) Energy Infrastructure and Connectivity

Action Plans:

Enhance existing power and energy interconnections, taking into account health, safety and environment, as follows:

(i) Promote transmission of electricity from export-oriented power plants to cross-border areas and explore technical feasibility and viability of high voltage transmission line and sub-station in ACMECS Countries by expediting the following priority projects:

RIF priority projects⁵:

- (1) East-West Corridor Power Transmission and Distribution Project in Lao PDR
- (2) Continued Projects in Rural Electrification and Off-Grid Power Development in the Northern Part of Lao PDR
- (3) Design and Funding of a Backbone Grid for Lao PDR
- (4) Conventional Rural Electrification Programs in Myanmar
- (5) 500 kV Line from Mawlamyine to the Main Grid in Myanmar
- (6) Transmission Interconnection Project from Lao PDR (Luang Namtha) to Myanmar (Shan State with possible extension)
- (7) Transmission Interconnection Project from Lao PDR (Na Bong) to Thailand (Udon Thani 3)
- (8) Transmission Interconnection Project from Lao PDR (Ban Lak25) to Thailand (Ubon Ratchathani 3)
- (9) Transmission Interconnection Project from Lao PDR (Pak Beng or Pak Nguyen) to Thailand (Tha Wang Pha)
- (10) Transmission Interconnection Project from Lao PDR (Ton Pheng) to Thailand (Mae Chan)
- (11) Transmission Interconnection Project from Lao PDR to Vietnam (Nam Mo 1 and Nam Mo 2)

Future Prospects⁶:

Hydropower plants: Nam Ou 1, Nam Ou 3, Nam Ou 4, and Nam Ou 7 in Lao PDR

Recognizing the interconnectivity and power trading with neighbouring borders and contribute towards energy security and enhance the economic prosperity.

(ii) Interconnect existing and new oil and gas pipelines of ACMECS countries, taking into account the need to synchronize national technical and security regulation requirements, address differences in the processes and quality of supply, distribution, management and access to natural oil and gas across the countries. Also maintain the economic and social development, energy security and enhancing sharing of

⁵ Sources: Asian Development Bank (ADB)," Greater Mekong Subregion Program: Overview of the Regional Investment Framework 2022", 2017, https://www.adb.org/sites/default/files/institutional-document/366446/rif-2022-overview.pdf These projects are not yet identified potential funding sources.

Sources: The Economic Research Institute for ASEAN and East Asia (ERIA), "The Comprehensive Asia Development Plan 2.0 (CADP 2.0)", Page 26, http://www.eria.org/RPR_FY2016_01.pdf

technical knowhow within ACMECS countries, taking into account Energy Infrastructure for the future energy development and seek for further development of existing gas pipelines between Myanmar and Thailand as well as extend modern energy technologies and to cooperate and coordinate in the field of energy infrastructure and connectivity in accordance with international standards.

(2.1) Trade, Investment and Industrial Cooperation

2.1.1 Institutional synchronization and integrated interoperability of rules and regulations including Digital Laws

Action Plans:

(i) Improve cross-border facilitation and management through projects that compliment other existing subregional cooperation in particular the Greater Mekong Sub-region (GMS) Cross-Border Transport Agreement (CBTA). This should start with the inter-operationalization of commercial traffic rights, single-stop and single-window inspection at key border checkpoints. [Myanmar] Also, to improve processes for customs clearance and inspections by accelerating implementation of WTO Customs Valuation Agreement, increasing use of ICT in Customs Procedures.

Jointly cooperate together between relevant authorities of ACMECS countries to establish the "Single Stop Inspection" at the border areas, promote the use of technology in certification procedures for better flow of cargos and quick custom clearance.

(ii) Operationalize trade facilitation initiatives in the area of standards and conformance through reduction of Technical Barriers to Trade (TBT) focusing on lessening differences between national laws, standards, and conformity assessment procedures towards a broader horizontal approach at the subregional level. This should be done through the harmonization of national standards with international ones and develop mutual recognition arrangements (MRAs) among ACMECS countries, especially for the priority integration sectors i.e. prepared food, automotive, electrical and electronic equipment, healthcare products, rubber-based and wood-based products. The activities under this action plan should not be redundant or overlapping with the work or activities carried out by ACCSQ and its product working groups (PWGs).

The action plans also include:

Promoting mutual recognition or exploring harmonization to streamline the differences of standards and other conformity,

- a) Bilateral Agreement/ MOU on Goods in Transit between the Kingdoms of Cambodia and Thailand.
- b) Sign Bilateral Protocols on SPS between ACMECS countries for agriculture products, fisheries, and poultry.
- c) Significantly promote and stimulate the refining, execution and harmonization of common standards, conformity assessment, rules and regulations and other procedures that are conducive for business establishment and operations with assurance of necessary protection against fraud and or unfair business conducts in ACMECS.
- d) Strengthen the use of standardization, compliance and evaluation by linking the public procurement, incentives, and other subsidies in ACMECS countries.
- e) Support the SMEs and encourage them to register their businesses formally while providing special assistance and attention from the government and international partners for SMEs with priority to access for finances, ease of intellectual properties

application and protection, other trainings to improve productivity, information on linkages to large industries, best practices sharing, etc.

- f) To establish guidelines for SPS management according to international practices and develop SPS Management Capacity in relevant agencies accordingly
- g) To plan upgrading laboratories and laboratory policies in order to develop more SPS laboratories
- h) To develop and implement an arrangement for the control and eradication of disease and pests, in line with Article 6 of the WTO SPS Agreement
- i) To improve public-private dialogue on services trade, in particular as regards regulatory frameworks with the aim to accelerate the contribution of trade in services to the economy
- (iii) Address non-tariff measures (NTMs) to facilitate trade and investment by
 - a) Reduction of protective measures stemming from non-tariff measures (NTMs) through the creation of a NTM database,
 - b) Identification of NTMs by ACMECS countries,
 - c) Setting of schedule for NTM (Non –Tariff Measures) elimination by ACMECS countries,
 - d) Developing guidelines to govern, inter alia, the Import Licensing Procedure (ILP) that is consistent with the provisions under World Trade Organization (WTO), ASEAN, GMS and ACMECS frameworks,
 - e) Establishing Notification Procedures on new initiated non-tariff measures,
 - f) Circulating of Legal Document which attempts to create, amend or remove non-tariff measures.
 - g) Establishing sub-working group to take charge of facilitating, resolving and monitoring on the reports members or private companies with regards to Non-tariff barrier,
 - h) Knowledge and Best Practice sharing for addressing on Non-Tariff Barrier.
- (iv) To ensure the emergence of highly competitive cross-border trade regime where business men follow good business practices and trade qualified good and services
- (v) Compilation of Digital Laws within ACMECS
 - a) To provide a database of laws and descriptions of digital laws within ACMECS.
 - b) To exchange, learn, and monitor progress in the development of digital law within ACMECS. (Thailand)
- (vi) To organize seminar on food safety managements, standards and regulations among ACMECS countries, with the view towards an agreement on food standard and regulation harmonization

To promote the effective implementation of the existing regional and international land transportation agreements.

(2.1) Trade, Investment and Industrial Cooperation

2.1.2 Integrated value and supply chain

Action Plans:

(i) Encourage cooperation in subregional supply or value chain production of potential products relevant to each ACMECS countries' strength with a view to develop a true ACMECS brand. The priority potential products/industries of ACMECS brand are identified, among others as food processing, assembling industry, packaging industry, agriculture, textile, automotive, electrical and electronic equipment, and healthcare products.

The possible actions include:

- a) Promote value chain connectivity on food processing industry, assembling industry, and packaging industry.
- b) To identify strategic fruit and vegetable for export and develop export promotion strategy for selected item-
- c) To create markets for high-quality vegetables, by improving market information systems (formal and informal) to convey information on quality and quantity demand in addition to price data.
- d) To support to public and accredited private laboratories, establish new laboratories to test physical analysis, phytosanitary and fumigation, chemical residues, food quality testing.
- e) To establish a programme for branding and promotion of Investment and cooperation in ACMECS.
- f) To create an Industry-wide collaborative culture that puts the customer experience first.
- g) To encourage skilled and young people to remain in the rural areas and provide an adequate work force for investment and cooperation in economic zone.
- h) To work together and with government to ensure effective planning, policies and investment.
- (ii) Jointly develop Quality ACMECS through trusted products and services in SMEs, promote SMEs cooperation and linkage to regional and international market and continue to build SMEs Clusters and Industrial Cluster, encouraging and helping startups to commercialize their products to the market. Also, improve the capacity of SMEs to catch up with the trend in science & technology and market information in order to customize products and services that can complement to the requirement of large industries and regional demand at competitive rate, quality and services.
- (iii) Promote investment in ACMECS Economic Zones which serve as distribution centers of goods among ACMECS countries and beyond, while encourage importing raw materials or parts within ACMECS. ACMECS governments are encouraged to adopt public-private nexus policies and other supporting measures such the One Stop Service Center (OSS). [Cambodia] In addition, strengthening the cooperation with international partners to attract potential investors to invest preferably in infrastructure, logistics, and other industrial sector such as new materials, energy, agriculture equipment, tech-based products, research and hi-tech industry especially medical care among others, which can

leverage ACMECS industry towards a skill-based, decent job creation and the new investment, production and supply chain hub in the region.

- (iv) Enhance cooperation among Economic Zones (EZs) within ACMECS Countries starting with those located along the East-West and Southern Economic Corridors by promoting intra-regional policy coordination and infrastructure investment to support EZs. Potential linkage between ACMECS Economic Zones are identified as follows:
- (v) Establishment agricultural cooperatives investment opportunity through product certification and market assistant.
- (vi) Development value creation/addition capacity for actors among agricultural value chain.
- (vii) Strengthening the value chain of agricultural products by introducing six sector industrializations concepts.

Connected Industry
Agriculture Manufacturing and
Logistics
High-technology industries i.e.
Tigit technology industries i.e.

- i) Special Economic Zones (SEZs) development cooperation
- Expand the establishment of Economic Zone (EZs) to the border areas along with well-developed infrastructure, logistics and precise schemes that are conducive to conduct the businesses, linking to local SMEs and creating jobs, improving the economic and attracting FDI.

⁷ Sources: Asian Development Bank (ADB), "The role of Special Economic Zones in improving effectiveness of GMS Economic Corridors", Page 9, November 2016, https://www.adb.org/sites/default/files/institutional-document/214316/role-sez-gms.pdf

(2.2) Financial Cooperation

2.2.1 Financing through ACMECS Fund and ACMECS Infrastructure Fund and Trust

Action Plans:

- O To explore possible ways and means to establish ACMECS Fund and ACMECS Infrastructure Fund and Trust to finance key projects identified. In this connection, Thailand invites ACMECS countries to explore venues and opportunities to utilize her capital market and related facilities to raise fund for ACMECS Fund and ACMECS Infrastructure Fund and Trust in financing subregional infrastructure projects upon request of ACMECS countries.
- o To Exchange experiences on the mechanism of ACMECS Infrastructure Fund and Trust.
- To carry feasibility studies to issue the Green Bonds for the Infrastructure development in ACMECS.

Thailand will host the 1st meeting of senior financial officers to discuss the Terms of Reference (TOR) and detailed operation of the ACMECS Fund and ACMECS Infrastructure Fund and Trust as well as related matters of common concern within 2018 in Thailand.

Thailand's explanation on ACMECS Infrastructure Fund and Trust, see Attachment-1

2.2.2 Promote financial literacy and awareness through practical education, tools, training, media outreach, and campaign.

Action Plans:

- (i) Create platforms for SMEs, financial institutions, and the public sector to exchange and share information on financial knowledge, financial management, measures to improve financial system, necessary procedures and requirements to secure and access the loans/funds, and other alternative sources of loans/funds in supporting the businesses.
- (ii) Capacity Building and Financial Literacy.
- (iii) To enhance the effectiveness and reach of knowledge sharing.
- (iv) To promote integrity, transparency, accountability and the prevention of corruption in the public sector including the management of public finance.
- (v) To improve internal resource mobilization and increase fiscal space.

2.2.3 Capital Market Cooperation

- (i) Promote development plan for an integrated ACMECS capital and stock market through the following actions:
 - a) enhance capital market infrastructure and cooperation to channel subregional private savings into subregional investment in physical infrastructure projects

- b) promote cooperation among ACMECS capital market operators and regulators
- c) provide capacity building for ACMECS countries, especially on the financing mechanism via capital market
- (ii) Enhance existing subregional capital market cooperation, in particular the Mekong Capital Market Cooperation (MCMC) which will serve as platform for policy makers and regulators from all five ACMECS countries to promote investment confidence.

2.2.4 Financial Connectivity

2.2.5.1 Payment and Settlement

Action Plans:

Promote interoperability in payment and settlement infrastructure as well as linkages in these services to facilitate trade and investment among ACMECS countries.

2.2.5.2 Use of Local Currency

Action Plans:

- (i) Encourage the use of local currencies for cross-border trade transactions and investment transactions and information sharing on foreign exchange rules and regulations among ACMECS countries by promoting bilateral cooperation to ensure effective implementation of the use of local currencies among ACMECS countries to ensure effective implementation of the use of local currencies among ACMECS countries. by promoting bilateral cooperation to ensure effective implementation of the use of local currencies among ACMECS countries. (Lao PDR)
- (ii) Foster banking facilities and financial services of ACMECS countries in order to facilitate cross-border trade transactions. Promote harmonization of rules and regulations Reduce regulatory barriers to facilitate the use of local currencies for trade and investment transactions.

2.2.5.3 Fintech

Action Plans:

Encourage jointly-developed digital technology platforms and linkages products—that can facilitate trade and investment, as well as remittance between ACMECS countries.

2.2.5.4 Cooperation between Banks and other financial service providers

Action Plans:

Promote Cooperation between financial institutions or enhance specialized banks between ACMECS member countries.

(3.1) Human Resource Development and the Application of Modern Technology

3.1.1 Smart Entrepreneur i.e. SMEs and Startups (local products and high-technology industries)

- Promote skill development for ACMECS entrepreneurs, especially SMEs and Startups in the potential local products/industries/services through innovation, thus enhancing ACMECS' access to the global markets and increase their competitiveness.
- Promote training and knowledge exchanges on Smart Devices and robotics inter alia driverless vehicles, industrial robotic arms, etc.
- Set up regular exchange program among Young Entrepreneurs of ACMECS member countries.
- Capacity building on e-commerce to promote ACMECS countries' products to the global market.
- O Upgrade the capacity building for ACMECS government officers and entrepreneurs in the management of science & technology, electric and electronic tools, chemical's usage and handling, rules and regulations of standard with a focus on know-how to inspection, verification, calibration, testing and evaluation thus allowing them to apply them both in policy planning and good manufacturing practices that corresponding to ACMECS common interest.
- Regularly promote the exchange of technical experts, joint-laboratory, study visits, business partnership cooperation, products and services research and development in ACMECS and international countries to encourage and explore innovative ideas in science, technology and business.
- o Promote the knowledge of Inclusive Business (IB) models for ACMECS entrepreneurs and provide training support in IB planning and operation, which then promote the sustainable job creation and benefits to the poor people and communities in terms of economic and social well-being.
- O Promote training on access to finance for businesses and financial services for entrepreneurs, which can improve their knowledge and capacity in developing and expanding the businesses into the formal standard that corresponds to the law and regulations of ACMECS countries and attracting more local and international investors.
- To enable a creative, public, private partnership structure to integrated planning and collaborative delivery.
- To establish the mapping and adult of creative sector.
- o To enhance the creative networks for all creative sectors, support virtual connections, meet-ups, showcasing and idea exchange at enterprise event.
- o To tailor existing business supports.
- O To negotiate differences/gap in rules and procedures among ACMECS five countries with inter-country and intra-country programmes in order to reduce time required to start a business registration and Cost of Business Start-Up Procedures in accordance with Ease of Doing Business Indicators by ASEAN Regional principles for Good Business Registration Practices & World Bank

- Doing Business 2016, (Key Takeaways for Regional Principles in AMS are in Attachment-1)
- To build MSMEs Development Network with Development Partners such as India, China, Japan, BIMSTEC & GMS and other AMS
- To create Efficient Supply Chain Mechanism with Cooperation to set up interchange program of Technical Assistance to SMEs/Startups throughout Supply Chain i.e., contract farming mechanism (raw to products) to produce finished goods of SMEs/Startups,
- To establish and implement Industrial Estate and Economic Zones by Sister Cities along the Corridors by closer relationship between private sectors and all stakeholders of ACMECS structuring public-private partnership,
- O To build Linkage Plans to facilitate the implementation on Goals of ASEAN Strategic Action Plan for SME Development 2016-2025 (SAP-SMED) adopted by the ASEAN Coordinating Committee on Micro, Small and Medium Enterprises (ACCMSME) to enhance equitable economic growth through the development of MSMEs/Startups in each country,
- To supplement programmes by cooperating with ACMECS plan so as to implement the Goal E of SAP-SMED, i.e., Promote Entrepreneurship and Human Capital Development; E-1) Entrepreneurial Education and Learning Programmes; E-1-1) Promote Entrepreneurial Education, E-2) Human Capital Development for MSMEs especially for women& youth; E-2-1) Enhance Management and/or Technical Skills of Women and Youth entering into the workforce; E-2-2) Provide a platform to promote and facilitate women's participation in MSMEs.
- Establishment of start-up and employment centers based on the collaboration in technology transfer, education and training between SMEs and institutions towards inclusive development of ACMECS countries.
- Development of human resources for ACMECS enterprises in the field of integrated pollution management.

3.1.2 Smart Agriculture

Promote knowledge sharing and training on the use of technology and innovation to increase value, production and processing capacity in agricultural and food products.

[CAM MAFF proposed to delete]

- Promote knowledge sharing and training on the use of technology and innovation to increase value and production capacity in agricultural and food products including training for smart farming by integrating with home grown approach such as Thailand's Sufficiency Economy Philosophy.
- o Promote exchanges of experience and best practices on Agriculture.
- o To develop human resource in crop production and land use sector.
- To provide long and short term oversea and in-country capacity building training to build "human capital" in the agricultural, land conservation and food sector responding to the evolving needs of farmers and the private sector in rural areas.
- o To establish the National Agricultural Research and Extension System (NARES) to facilitate coordination between research and extension.
- To provide training and other support to enable accreditation of private seed certification laboratories to provide quality control and certification from private sector, in addition to services provided by government.
- o Improve capacity of extension staff and farmers in climate smart agricultural practices through training, FFS, and demonstrations.

- o To improve production and uses of biotechnology with microbial products.
- o To improve land management/ Soil and water conservation.
- o To establish GAP Unit and implementation of GAP and OA.
- o To document, share and promote adoption of principles, guidelines, regulations and protocols for GAP with attention to Regional and global markets.
- To build capacity for inspection and certification, including trainings and establishment of National Laboratory for GAP and other standards and protocols.
- To monitor, control, regulate and enforce compliance with GAP, and OA, especially organic farming and pesticide free standards, especially to prevent use of hazardous chemicals in crops
- o To promote connections, harmonize standards and protocols within Regional and Global markets
- To increase production, value-addition, sale and consumption of GAP and OA of agricultural products
- o To build the producer organizations and enhance cooperation for market analysis.
- o To improve efficiency of land use for increasing productivity in the agriculture sector.
- o To reduce transaction costs in related sectors.
- o To develop a system for monitoring food security situation.
- o To enhance ICT service to access weather and agro advisories.
- o Enhance Zero-tillage.
- o To improve quality of residues management and nutrient management.
- To build up capacity on application of climate risk information in reservoir operation and irrigation schemes management
- o Training on innovative agriculture/smart farming by integrating with home grown approach.
- Training on developing ACMECS alliance for agricultural science and technology transfer for accelerating the crop productivity focusing on cassava, maize, soybean, mungbean, vegetables and fruits.
- Training on improvement the value chain of agricultural product processing for small scale farmers by using contract farming mechanism.
- o Training on improvement of safety and quality management for small and medium enterprises (SMEs) in Cambodia.
- o Training on enhancing capacity of agriculture officers and farmers crop management practice, soil fertility improvement, soil conservation, water management, pest management.
- o Training on climate-smart production systems for horticulture crops.
- Training on innovative technology demonstration for livestock productivity enhancement with adaptation climate change.
- To promote cooperation in training and experience exchange on climate smart agriculture (CSA)
- o Training on management skills to adapt with climate change.
- o Training on hi-tech agricultural development.
- o Training on 4.0 agricultural model.

3.1.3 Smart and Sustainable Tourism

Action Plans:

[Lao PDR's comment: to combine with 3.4 Tourism]

- Promote sustainable and responsible tourism (green tourism) and the use of technology to enhance access to services (smart tourism) including but not limited to medical tourism.
- o Make full use of diverse cultures of ACMECS tourism sites to enhance its quality and values. Promote and implement the "one destination" policy scheme.
- o Promote cross-border tourism through "ACMECS single visa" scheme.
- o Promotion of green tourism
- o Promotion of cultural heritage sites/Buddhist trails
- Organize short-term training course with certificate for ACMECS countries' tourguide
- Organize seminar to exchange information on tourism activities among tourist agencies
- o Organize annual interantional tourism expo among ACMECS countries
- o Promote green and susitanable tourism
- o Create tourism routes by connecting tourism destinations
- o Strengthen cooperation on tourism promotion
- Raising awareness on "5 countries 1 destination" brand.
- Coordinate and support each other to organize and participate in international tourism events inside and outside the region.

3.1.4 Smart Medical Services

Action Plans:

[Lao PDR's comment: to combine with 3.5 Health]

- Promote high-skilled medical training such as biomedical, vaccines development and pharmacists.
- Faciliate the establishment of branches and offices of medical institutions in ACMECS countries
- o Create medicine package with reasonable price for ACMECS countries
- o Promote exchanges of medical staff among ACMECS member countries.

3.1.5 Smart Education

- Develop partnership collaboration between educational institutions, business sector and research institutions to further reform education especially on Digitalized and Embedded Technology, Internet of Things, Smart Devices, Robotics, Mechatronics, Health and Bio-med hub, Animation, Bio-technology for food and agriculture etc.
- o To create a platform for Education and Training Program
- o To establish a scientific research network
- o To facilitate the credit transfer and quality assurance
- o To establish virtual learning hub for students

- o To mobilize the fund to support education collaboration
- o Skill Training Development in Technical Vocational Education
- Provide annual scholarships for students of the ACMECS member countries in prioritized sectors including Digitailized and Embedded Technology, Internet of Things, Smart Devices.
- Promote cooperation among research institutes, universities, training centers of the ACMECS member countries through joint research projects, joint research publications.

3.1.6 Smart Energy

Action Plans:

[Lao PDR's comment: to combine with 3.2 Renewable Energy]

- o Promote sharing of knowhow and new technologies for sustainability and energy efficiency such as hydropower and solar energy.
- o To conduct training on energy conservation technology for industries.
- o To reach mutual recognition agreement (MRA) for Lab Testing on Energy performance standard for electrical appliance.
- o To promote training on renewable energy technologies and use of renewable energy to reduce carbon emission and green house effects.

3.1.7 Smart Cities

- To form a smart sister city network in the ACMECS sub-region that share the same goals of development using smart technologies, with possible focus on tourism cities and sustainable in the first phase and jointly pilot a smart city project for the sub-region
- Capacity building for cities to make the action plan for building the green and climate-resilient city.
- Organizing the exchange of experts on urban planning/resilience.
- o Developing an ACMECS public private partnership on smart cities.

3.1.8 Cyber Security

<u>Development of Cybersecurity Technical Collaboration and Common</u> Collaborative Mechanism within ACMECS

- Develop common collaborative mechanisms for Cybersecurity operations within ACMECS
- Conduct Cybersecurity incident drills among organizations in charge of Cybersecurity within ACMECS
- Develop and raise technical skills of ACMECS Cybersecurity personnel to international standards

(3.2) Environmental Cooperation

• Water Resource Management

- o Protect and restore water-related ecosystems, including mountains, forests, wetlands, rivers, watershed, aquifers and lakes.
- Promoting water supply facilities to increase basic drinking water accessibility by households of ACMECS.
- Substantially increase water-use efficiency across all sectors including, agriculture and ensure sustainable withdrawals and supply of freshwater to address water scarcity and substantially reduce the number of people suffering from water scarcity.
- o Increase accessibility of poor households to safe and affordable drinking water
- o Improve water quality by reducing pollution, eliminating dumping and minimizing release of hazardous chemicals and materials to water bodies.
- o Implement integrated water resources management at all levels and through transboundary cooperation.
- Expand international cooperation and capacity-building support to ACMECS countries in water- and sanitation-related activities, projects and programmes, including water harvesting, desalination, water efficiency, wastewater treatment, recycling and reuse technologies.
- Support and strengthen the participation of local communities of ACMECS countries in improving water resource management
- Comprehensive study the potential development space along the Mekong Delta and its strategic development plan
- o Promoting agricultural best practices at the Mekong Delta via using the environmental principle
- ACMECS staff and Key line Agencies have the necessary technical competencies and integrate International Water Resource Management principle into policy making, planning and implementation.
- To promote technology cooperation of water recycling, waste water management and water pollution prevention.
- o To increase accessibility to annual fresh water availability
- To implement training and study tour programmes for technical and knowledge transfer from successful river basin water resources management in Chao Phraya River and Mekong River
- o To promote technology cooperation of integrated water resources management principles, water recycling waste water management and water pollution prevention
- Capacity Building in Integrated Water Resource Management
- o Training programs on water resources management.
- Technical support for decision making on sustainable development of water and related resources in Ayeyawady, Chao Phraya and Mekong rivers.

- Development of the continuous monitoring network and monitoring mechanisms for transboundary pollution and water quality of the Ayeyawady-Chao Phraya— Mekong Rivers
- Assessment of changes in resources and environment and water sources in the basin of the Ayeyawady-Chao Phraya-Mekong rivers to the propose measures for improvement, restoration of natural resources and environment
- o Capacity building for transparency in implementing Paris agreement.
- Cooperation on research and solutions for resolving transboundary environmental issues
- Promote joint efforts on reducing plastic waste on the national and transboudary rivers in ACMECS countries
- Strengthen the cooperation with the Mekong River Commission through technical exchange on river monitoring, joint studies on impact assessments and water use efficiency, disaster management and climate change.
- o Provide technical support for decision making on sustainable development of water and related resources in Ayeyawady, Chao Phraya and Mekong rivers.
- Enhancing ACMECS cooperation on environmental protection and sustainable use of natural resources to achieve the United Nations Sustainable Development Goals (SDGs).

• Climate Change

- o Promote climate resilience through improving food, water and energy security.
- o Reduce sectoral, regional, gender vulnerability and health risks to climate change impacts.
- Ensure climate resilience of critical ecosystems (Tonle Sap Lake, Mekong River, coastal ecosystems, highlands, etc.), biodiversity, protected areas and cultural heritage sites.
- o Promote low-carbon planning and technologies to support sustainable development.
- Improve capacities, knowledge and awareness and education for climate change responses.
- Promote adaptive social protection and participatory approaches in reducing loss and damage due to climate change.
- Strengthen institutions and coordination frameworks for national climate change responses.
- Strengthen collaboration and active participation in regional and global climate change.
- o Mainstream climate change into regional and national policies, investment programmes/project, and plans.
- Enhance regional and international cooperation and partnership on adaptation, including data collection and sharing related to vulnerability and adaptive capacity, monitoring and evaluation, and showcased best practices.
- o Enable implementation of transboundary and gender sensitive adaptation options.

- o Support access and mobilization of fund for climate change adaptation.
- o Enhance monitoring, data collection and sharing. Strengthen capacity on development of climate change adaptation strategies and plans.
- o Improve outreach of MRC products on climate change and adaptation.
- Support access to adaptation finance of ACMECS countries to the international funding sources.
- Research and study the potential of Climate Change adaptation best practices along the Mekong Basin.
- o Exchange of good practices on climate change
- o To promote Eco-innovation and Eco-labeling in the area of food and beverage, plastic, textile, pulp and paper, agricultural, husbandry and fishery products.
- o Promotion of green environment by using clean technology in various sectors of production, storage and transportation.
- To improve knowledge and awareness on regional climate change and its effects on national economy
- Strengthening collaboration of research and study to support policy making and implementation, as well as building capacity of local researchers
- Capacity Building in Assessment of Greenhouse Gas Emission from Wastewater Treatment System
- Share information on cross-border natural resources, water and climate change issues to have harmonization of interests among Mekong countries
- Encourage the participation of business sector in the ACMECS projects of green technology, digital technology.
- o Introduce ecosystem-based tools for adaptations to climate change in ACMECS

Disaster Reduction

Action Plans:

- To conduct feasibility survey for Ayeyawady river basin areas and Mekong river basin of Myanmar border areas
- o To install the water level gauging system at Mekong river basin of Myanmar border areas
- o To install automatic water level and rainfall monitoring system in Ayeyawady river basin areas and Mekong river basin of Myanmar border areas
- o To develop the risk maps of the disaster prone areas
- To develop impacts based forecasting system
- Technical exchange between Ayeyawady, Chao Phraya and Mekong river basins on disaster risk management

Renewable Energy

Action Plans:

 Related and best practices/experiences ordinate and share information, data of energy production and consumption among the ACMECS countries.

- Research and form strategic renewable energy plan (especially hydro power and solar energy) and incentive mechanism for facilitating production and consumption of renewable energy, energy efficiency and energy mix
- o Promote capacity building of ACMECS countries on energy efficiency, renewable energy technology and innovation, and mixed energy
- Enhance investment in energy infrastructure and clean energy technology [Lao PDR's comment: propose to move to 1.3 Energy Infrastructure]
- o Extend green public transport for connectivity through renewable energy uses
- Promote cooperation among ACMECS to facilitate access to clean energy research and technology, including renewable energy, energy efficiency and advanced and cleaner fossil-fuel technology
- o Research and propose feed-in tariff and net metering system and technology to encourage energy users and industrial sector toward solar energy
- o Engage with private and public sector for mobilizing more funds/resources in renewable energy investment
- Upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes
- o Promote solar energy to off-grid/remote areas
- o Increase substantially the share of renewable energy in the ACMECS countries in endorsing energy mix (Renewable energy share in total final energy consumption)
- o Promote research and establish regional and national policy dialogue mechanism on Water-Food-Energy and Environment.

• Cross-sectoral issues

 Promote research and establish regional and national policy dialogue on Water-Food-Energy and Environment Nexus; provide support on building policy analysis and policy making capacity.

Concept paper of HRD Programme in wind energy

The main objectives of this project are:

- (1) To develop curriculum, training materials and training aids and to conduct research on wind energy and its implementation technologies suitable in Myanmar's context
- (2) to provide training for government officials from relevant departments and participants from privat e sector working in wind energy related areas in Myanmar by using research outputs from objectiv e (1).
- (3) to exchange academic expertise and technology between Yangon Technological University and Ho Chi Minh City University of Technology as supervised by one partner university from the Republic of Korea
- (4) to share common issues, challenges and lessons learnt in promotion of wind energy and find possib le regional collaboration strategy for wider promotion of wind energy in rural electrification and g reen growth

Action Plan

Two working groups will be formed namely, Project Working Group (PWG) and Technical Working Group (TWG). PWG involves executive levels officials from YTU and HCMUT as well as representatives from MI. It will be co-chaired by the Rector of YTU and MI. TWG involves participating staffs from YTU, local and international consultants.

Project activities and timeline will be confirmed by the PWG. Project Home Base is in Yangon Technological University. The project involves three main parts: (i) research and development of wind energy technologies: curriculum for training, design, manufacturing, assembly, installation and performance testing, (ii) capacity enhancement of relevant government officials and private sector working in wind energy-related departments and organizations, and identification of common regional issues and challenges in Mekong Region.

In the first part, the curriculum syllabus and training materials will be jointly prepared by the TWG after first PWG meeting by video conferencing. Then, PWG will liaise with relevant government departments and private sector in Myanmar to invite nomination of staffs and participants for the training programme on wind energy technologies: design, manufacture, test, install and site visit. TWG will also hold first video conferencing to prepare the first draft of curriculum syllabus and confirmed later after two months by video conferencing as well. Then, research on literature will be conducted to obtain wind energy map of Myanmar. Using wind energy resource map, laboratory-scale horizontal axis wind turbine will be designed. Procurement of necessary equipment, tools and materials will also be started to purchase necessary items for constructing wind turbines and conducting research on testing of performance. After completing design of wind turbine, 2 sets of wind turbines will be manufactured, assembled and research will be conducted to characterize their performance. They will be used as laboratory equipment for the training purpose. The effectiveness of the design will be verified by the measure of available power output and efficiency under different operating conditions. After the design confirmation, computer programme for the design of horizontal axis wind turbines will be developed. At the end of this phase, the curriculum, training materials such as wind turbines and computer programs for the design are ready for the use in the training program.

Curriculum development will be mainly done by YTU with advice from an international consultant. Inputs, academic experiences and lessons learnt from HCMUT will also be considered in the curriculum development and wind turbine design. Literature research on wind energy map will be done by YTU and checked and confirmed by the international consultant. Before manufacturing, the design will be discussed and confirmed by the TWG and international consultant. Therefore, international consultants from ROK and HCMUT will fly to Yangon. Representative from MI will also monitor the progress of the project implementation via a video conference as the PWG.

The second part of the project focuses on the capacity development of targeted staffs from relevant government departments as well as participants from the private sector including young entrepreneurs. Target number of trainees is around 40. The training will be held in YTU in two different months. The duration of each training is 14 days. The first part of training will focus on the enhancement of knowledge and awareness on the renewable energy resources, wind energy and wind turbine design and implementation technologies. The second part will focus on the development of practical skills necessary for implementing wind turbines, i.e. manufacturing, assembly, performance testing and maintenance of the turbines. Site visit will be also involved so that trainees have an opportunity to observe practical application of wind energy for specific purpose.

Finally, before the project closure, common regional issues and challenges in promoting wind energy will be identified and shared between Myanmar and Vietnam. International consultant will further suggest possible future regional collaboration to promote the sustainability of the project outcomes to realize the implementation of wind energy in Mekong Region.

Training will be jointly done on YTU campus by local consultants, staff member from YTU and international consultants. Training will be done in two separate programmes and hence international consultants will need to fly twice to Yangon for the meeting. All parties concerned will join the final project closing meeting which will be held at the end of the project. Outcomes of the project and lessons learnt, major impacts by the project will be evaluated and reflected in the final meeting. Moreover, further collaborative directions among Mekong Region will also be discussed in the final meeting.

The implications from this project can be applied wider to similar context in the Mekong region and YTU can arrange wider cooperation with Mekong countries as it is deemed appropriate. Some of potential partners in Mekong countries involve:

- (1) Institute of Technology of Cambodia
- (2) National University of Laos
- (3) Hanoi University of Science and Technology
- (4) Thammasat University
- (5) Asian Institute of Technology

(3.3) Sustainable Agriculture

3.3.1 Enhancement of Agricultural Productivity, Diversification and Commercialization.

Action Plans:

- Enhance capacity in formulating and implementing development plan for agricultural production and supporting services with efficient manner
- Improve soil fertility, land use zoning and classification for effective agricultural land use, and reduce soil degradation and adapt to climate change.
- o Increase rice productivity to ensure food security and rice exportation through the development and utilization of good quality rice seed and proper techniques with the efficient manner.
- o Promote agricultural research and extension aiming to increase crop yield.
- o Improve the product quality, strengthening capacity of agricultural cooperatives in connection with contract farming system.
- o Improve sustainable agricultural land management and utilization.
- o Provide extension services to farms with commercial potential.
- o Promote the export of agricultural products
- To strengthen the farmer's education on challenges of agriculture production like as food safety and security, climate change adaptation and rural livelihoods
- o To produce the high-yielding and good quality seed by using advanced breeding techniques and modernized inputs and equipment
- o Promote smart agriculture that is adaptable to climate change
- Exchange experience in developing agricultural production model, agricultural zone planning and water supply for agriculture planning.

3.3.2 Promote Animal Production and Animal Health

- o Improve effectiveness of research and extension.
- Improve capacity of animal disease and zoonosis prevention, thereby ensuring the supply of animal and meat with sanitation and safety, and increasing export potential.
- To strengthen the advanced technology for the productivity of animal products to ensure food security
- To upgrade the capacity and services of veterinary diagnosis laboratories for animal health improvement
- o To implement expansion of Artificial Insemination (AI) services for increased production of livestock and genetic upgrading

3.3.3 Sustainable Fisheries Resources Management

Action Plans:

- o Promote the fisheries resources protection and conservation efforts by effective law enforcement,
- Eliminate all types of illegal fishing activities and strengthening fisheries management capacity.
- o Promote the aquaculture development for ensuring the sustainable fisheries resources.
- o Improve the quality and safety of fishery products for domestic uses and export.
- o To conduct research and development in fisheries, aquaculture, postharvest, processing, and marketing of fish and fisheries products, socio-economy and ecosystem to provide reliable scientific data and information
- 3.3.4 Sustainable Forestry and Wildlife Resource Management

Action Plans:

- Strengthen the sustainable management of forestry and wildlife through law enforcement.
- o Promote reforestation and create the protected forest and wildlife conservation.
- Promote cooperation in sustainable forest management, forest restoration, trade and international markets related to forest and wildlife products and Non-Timber Forest Products (NTFP)
- 3.3.5 Strengthening Institutional Capacity, enhancing efficiency of supporting services and Human Resource Development

Action Plans:

- Improve the effectiveness of institutional management, service delivery, and strengthen the capacity for agricultural education and training for the sustainable agricultural development.
- o Empowering women for food security and sustainable agriculture.
- 3.3.6 Promote the export of processed agricultural products and investment in agriculture

Action Plans:

 Develop support and coordinating mechanisms for the establishment and operation of agro-industrial zones (Paddy, maize, cassava, sugarcane, soya beans, cashews, peppers, mangoes, bananas, vegetables, fruits and other potential crops) in order to gather the production, processing and packaging for local markets and export

- Develop and improve the procedures for applications for the establishment of wood processing bases for domestic use and export for the purpose of encouraging the development of forest product processing from legal, private sector sources.
- Boosting the productivity and quality of agricultural products through contract farming mechanism.
- To conduct capacity building training regionally for the growers in order to produce value added products from fruits and vegetables produce to reduce losses and produce value added products which are abundant in the country
- To build capacity for inspection and certification, including trainings and establishment of National Laboratory for GAP and other standards and protocols
- o Promote investment in high-tech agriculture and in safe and enviornment-friendly food chain in compatible with Global GAP
- 3.3.7 Executive meeting under 2018 ACMECS Project Plan
- 3.3.8 Workshop on Land Use Planning for Sustainable Agriculture under ACMECS
- 3.3.9 On-site implementation on Land Use Planning process in ACMECS Countries
- 3.3.10 Monitoring on implementation of the Land Use Planning in ACMECS Countries

(3.4) Tourism

Action Plans:

- To promote the realization of the "Five Countries, One Destination" concept through the integration of offline (publication, printing materials) and online (internet, social media) and encourage the utilization of the existing tourism arrangement among the ACMECS countries as well as develop tourism route/corridors connectivity to promote Ancient capitals, cultural heritage sites/Buddhist trails.
- To promote responsible tourism policy with the aims of creating favourable condition for tourism business and the use of cultural and natural assets for tourism product development.
- O Promote the cooperation between the public and private sector with involvement of international and more governmental organization to enhance the intraregional sustainable linkages, improve the quality of services and tourism products based on active participation of the local communities by thinking, acting and responsible together.
- Sharing the best practice and knowledge to further intensify ACMECS tourism cooperation and mutual assistance with soft-infrastructure and hardinfrastructure development.
- Exchanging information pertaining to policies ,regulatory and legal frameworks related to good governance of environmentally sustainable and socially responsible tourism development, investment opportunities and sharing of economic data of relevance to each other to attain the development of ACMECS region as a single world-class destination; and the inclusive socio-economic growth also requires the environmentally sustainable and socially responsible tourism development.
- o To upgrade the quality of tourism industry through travel services.
- o To build the tourism marketing platform.
- o To strengthen the quality and service of i-travel service system.

The tourism sector should be divided by two sub-sector as followings:

3.4.1 Agro-Tourism

Action Plans:

 Promote the agro-processing as the agro-tourism sites by improvement the product development.

3.4.2 Eco-Tourism

- o Promote ecotourism and community welfare
- Promote tourism operators to adopt renewable energy proportion in their operation, especially in transport

- Feasibility study to identify potential of ecotourism in destination ACMECS Countries
- Mapping and selection key attractiveness for short and medium and long term actions and through workshop with participation of local people/community and public and private sector for decision making and priority action for sustainability of ACMECS Countries.
- o SWOT and cost and benefit analysis
- o Planning, development and design by the expert for ecotourism in the area for endorsement by potential bodies

Smart Tourism

- o Smart tourism on Destination Marketing Organization (DMO) for maximizing profit and maintaining quality experience of travel
- o Challenge and effect on travel management though digitalization and traveler's empowerment
- The use of artificial intelligence (AI) in the business travel market to improve customer's support and service.

PLAN OF ACTION ON ACMECS TOURISM COOPERATION (2019-2023)

No.	CONTENT	OBJECTIVES	ACTIVITIES		FOCAL POINT
1.	TOURISM PROMOTION AND MARKETING	To promote the realizations of the "Five countries, One destination" concept, joint tourism marketing and promotion schemes	 Designing and using ACMECS logo and slogan for the ACMECS region Organizing art events and performance activities, showcasing regional cuisine, setting up joint booth at the international tourism fairs and events in the ACMECS region and beyond Developing and distributing marketing materials (printed publications, CDs and films) and doing marketing through other networks (radio, television and internet) Organizing FAM trips for travel agencies, investors and media agencies Organizing joint conferences on tourism promotion 	Cambodia Thailand Vietnam	Thailand and Vietnam
2.	TOURISM PRODUCT LINKAGES	To encourage the utilization of the existing tourism arrangements among the ACMECS countries such as Thailand- Lao PDR- Viet Nam Operation of tourism Road Transport as well as develop new tourism corridors (Bagan - Chiang Mai – Luangprabang-Vientiane-Siem Reap- Hue)	 Project of utilizing "trail of civilizations" to promote culture and heritage tourism product Project of Tourism Corridors on Bagan - Chiang Mai-Luangprabang-Vientiane-Siem Reap- Hue Project of initiating new air linkages 		Cambodia
3.	TOURISM INFROMATION EXCHANGE	To improve the respective ACMECS countries' tourism websites and information database	- Revamping the current tourism websites of ACMECS countries and to establish the dynamic ACMECS website		Myanmar

4.	TOURISM PRODUCT DEVELOPMENT	To develop the various forms of tourism products thereby not only the natural and cultural resources are preserved, but also they can be showcased to tourists, and culture and historical theme tourism packages taking the visitors through a number of ACMECS countries	 Drafting the combined tourism packages across the region Developing new tourism attractions Developing and promoting the natural, cultural and historical theme packages 	Myanmar
5.	HUMAN RESOURCE DEVELOPMENT	To promote human resource development in the tourism sector	 Project for skilled training courses on community based tourism development, tour guiding skills, tourism destination marketing, tourism planning and management, hospitality management Developing the guidelines for the private training schools to follow the regional service standards 	Thailand
6.	TOURISM SAFETY	To promote tourist safety in ACMECS destinations	 To develop safety guidelines for the tourism sector in the ACMECS countries To train the tourism personnel for safeguarding tourists 	Vietnam
7.	PRIVATE SECTOR INVOLVMENT	To encourage more involvement of the private sector and development partners in tourism development cooperation	 Relaxation of the tax, revenue on tourism sector to attract more investment from, within and outside of the region To encourage the private sector to be involved in the CSR activities To empower the local people to be able to involved more in the tourism activities 	Lao PDR

(3.5) Health

Action Plans:

The objective is to forge closer national and regional cooperation at all levels. Within ACMECS and with other regional cooperation frameworks, such as ASEAN+3 Field Epidemiology Training Network (FETN), GMS and the Mekong Basin Disease Surveillance Cooperation (MBDS), to prevent and control the spread of infectious diseases by enhancing national and regional preparedness and response capacity through integrated approaches as follows:

- o Maintain and strengthen national and regional surveillance and response capacity, including laboratory capacity both in human and animal sectors;
- Promote prevention and control of emerging and re-emerging infectious diseases in cross-border areas target to mobile population and workers;
- o Facilitate and Strengthen cooperation among the ACMECS countries and with other existing regional frameworks, such as ASEAN+3 FETN, GMS and MBDS, on human capacity building, information sharing and disease surveillance, prevention and control at cross-border checkpoints, taking into account the core capacity requirements under the International Health Regulation (2005) for designated airports, ports and ground-crossings;
- Advance national coordinating epidemic preparedness plans of the ACMECS countries, particularly at border provinces and border checkpoints;
- Cooperate on migrant health issues such as prevention and control of HIV/AIDS. TB, and Malaria among ACMECS countries;
- Improve nutrition, reduce hidden hunger due to micronutrient deficiencies and stunting through implementation of coherent policies and better coordinated actions among ACMECS countries;
- Promote long term sustainable strategies for healthy nation such as Food fortification (e.g. rice fortification, home fortification by micronutrient sprinkles, salt iodization) and empower people and create an enabling environment for making informed choices about food products for healthy dietary practices and appropriate infant and young child feeding practices;
- Promote awareness on environmental health risks and information sharing in new disease
- o Regularly control air, water and soil, and also all the physical, chemical, biological and social features of our surroundings and point sources
- Prevention of food contamination, food spoil and food hygiene at markets and cross boundary of the ACMECS Countries
- Control and take strict measures for chemical use of vegetable, fruit and cosmetics in ACMECS countries.
- Promote cross-border corporation *in* food safety and combating substandard and counterfeit drugs, health supplements and cosmetics.
- Strengthen cooperation in training and capacity building for health workers in each country.

- o Strengthen cooperation in health promotion, health communication and education.
- Exchange of information and cooperation in the field of training, scientific research and professional exchange in non-communicable disease control.
- o To undertake activities for the safety of consumers in local and international markets in ACMECS countries
- To work in cooperation among ACMECS countries to create the environment where the consumers are fully aware of their rights and the ways to live in healthy life

Possible area	ns of cooperation with Potential De	evelopment Partners
1. Infrastructure	1. Software Connectivity	3.1 Smart Entrepreneur (SMEs/
1.1High-technology	2.1 Trade & Investment	Startups)
hardware infrastructure	2.1.1 Institutional	(ROK,CHN, IND,JAP)
(CHN/JAP/ROK)	Synchronization and	
	Interoperability of rules	3.2 E-Commerce
	and regulation	(CHN, US)
	(CHN/JAP)	
		3.3 Smart Agriculture
	2.1.2 Integrated value	(CHN/JAP)
	chain	
	(CHN/JAP/ROK/US)	3.4 Sustainable Energy
		(US/JAP/CHN)
		(OS/SIII / CIII V)
		3.5 Smart and Sustainable
		Tourism
		(ROK/TH/JAP)
		(HOIS III/OIII)
		3.6 Medical Service
		(IND/US/ JAP/ROK)
		3.7 Vocational and University
		Education
		(US/JAP/IND)
		3.8 Financial Literacy
		(CHN/JAP/US)
1.2 Digital Infrastructure	1.2 Financing Cooperation	
(US/JAP/IND)	1.2.1 ACMECS	
,	Infrastructure Fund	
	and Trust	
	(TH/ CHN/ JAP)	
	122 C. WIN 1.4	
	1.2.2 Capital Market	
	Cooperation (TH / JAP /CHN)	
	(ITI/JAF/CTIN)	
	1.2.3 Other Financial	
	Connectivity	
	(US/JAP/ROK)	
1.3 Energy Infrastructure	- /	
and Connectivity		
(US/JAP/CHN)		

Infrastructure Fund and Infrastructure Trust

I. Infrastructure Fund (IFF) / Infrastructure Trust (IFT)

Infrastructure Fund and Infrastructure Trust is the financing instrument which is structured to invest in brownfield assets (income generating infrastructure assets). IFF/IFT will support the sponsor on fund raising while provides the investor or unit holder a fairly stable return.

Principles of IFF/IFT

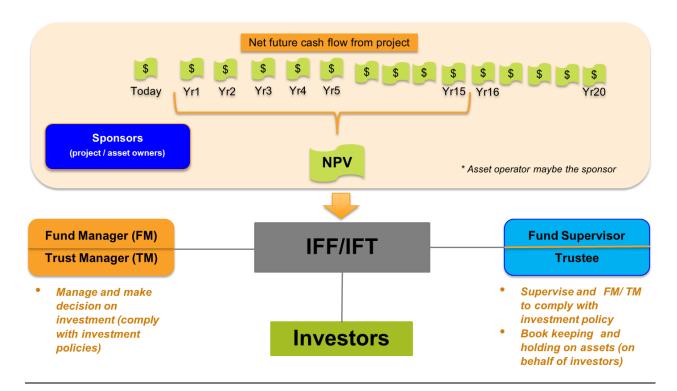
- IFF/IFT is a vehicle for investment in brown field public utility projects.
- A qualified brown field project includes income generating public utility projects usually backed by government long term concession contracts.
- Investment could be made on securitization of the future cash flow in order to retain the ownership of the projects.
- Liabilities to deliver the dividend are based on the operating performance of project; do not incur
 default risk.
- Liabilities are not considered as interest bearing debt or public debt.

II. Action plans

- Forming working team:
 - Relevant regulators and government agencies*
 - o Potential sponsors/ project owners
 - Financial advisors
 - Legal advisors
- Identify the targeted project:
 - Brown field (single or multiple assets)
 - o Positive operating cash flow
- Prepare the structure of IFF/IFT
 - Trust manager / Fund manager
 - o Trustee
 - o Auditor
- Prepare filing for IPO and listing
- Go IPO

^{*}co-work among regulators and government agencies of the project country to develop criteria and intermediary parties, in case home country would like to further develop this product.

III. IFF / IFTstructure



V. Permitted asset types of investment for IFF/IFT

Basic Public Utilities means constructions or service systems necessary for economic and social development, namely:

- Railroad
- Waterworks
- Airport/ Airfield
- Telecommunications
- Irrigation System
- Pipeline transportation system
- Electrical Grid
- Road / Expressway / Toll-way / Concession way
- Deep Sea Port
- Alternative Energy
- Natural Disaster Prevention System
- Multi-infrastructure project with joint benefit to the community or interconnected communities

Attachment-2

Key Takeaways for Regional Principles in AMS are as follows:

- 1. Review, reform law where required. (e.g re-registration example cited by NZ). Customer orientation should be the rationale of regulatory reform aside from revenue generation.
- 2. Integrated (or inter-operable) database or common database across key agencies.
- 3. Centralized registration system. Prevent local government from introducing additional conditions and requirements should be uniform, similar across the country.
- 4. Mystery/illegal shopper
- 5. Clarity of MSME Registration law versus other types of business entities
- 6. Provision of incentives
- 7. Shared data across all ASEAN countries
- 8. To have common terminology for classification of business entities
- 9. Easy access of information and having service centres to information about registration.

(Reference source: ASEAN Regional Principles for Good Business Registration Practices)