Greater Mekong Subregion Economic Cooperation Program

Overview of the GMS Regional Investment Framework (2013–2022)

Vientiane, Lao People's Democratic Republic 10-11 December 2013





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How to reach us: GMS Secretariat Southeast Asia Department Asian Development Bank Fax: +63 2 636 2226 E-mail: gms@adb.org Web address: http://www.adb.org/countries/gms/main

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by Subsector (as % of Total Project Cost)

4: Energy Investment and TA Requirements

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Abbreviations

ADB	_	Asian Development Bank
ASEAN	_	Association of Southeast Asian Nations
CAM	_	Cambodia
CASP	-	Core Agriculture Support Program
CBEZ	_	cross-border economic zone
CBTA	_	cross-border transport agreement
CEP	-	Core Environment Program
EWEC	_	East-West Economic Corridor
GMRA	-	Greater Mekong Railways Association
GMS	-	Greater Mekong Subregion
GMS-IS	_	Greater Mekong Subregion– Information Superhighway
GMS-SF	_	GMS Strategic Framework
HRD	_	human resource development
ICT	_	information and communications technology
km	_	kilometer
km ²	—	square kilometer
kV	_	kilovolt
LAO	_	Lao People's Democratic Republic
MYA	_	Myanmar
PPP	_	public-private partnership
PPTA	_	project preparatory technical assistance
PRC	_	People's Republic of China
RETA	_	regional technical assistance
RIF	_	Regional Investment Framework
RPCC	_	Regional Power Coordination Center
R-PPTA	_	regional project preparatory technical assistance
RPTCC	_	Regional Power Trade Coordination Committee
SEF	_	Subregional Energy Forum
SEZ	_	special economic zone
SFAP	_	strategic framework and action plan
SPS	_	sanitary and phytosanitary
TA	_	technical assistance
TBD	_	to be determined
T&D	_	transmission and distribution
THA	_	Thailand
TSS	_	Tourism Sector Strategy
TTF	_	Transport and Trade Facilitation
TVET	_	technical and vocational education and training
VIE	_	Viet Nam

Introduction

he Regional Investment Framework (RIF) puts into operation the new Greater Mekong Subregion Economic Program Strategic Framework (GMS-SF) (2012-2022) that was approved at the 4th Greater Mekong Subregion (GMS) Summit in December 2011. The RIF translates the strategic directions of the GMS-SF into a pipeline of investment and technical assistance projects for the third decade of the GMS Program, from 2013 to 2022. The RIF covers a wide range of sectors including transport, energy, environment, agriculture, human resource development, information and communication technology, tourism, transport and trade facilitation, and urban development.

The guiding principles for developing the RIF were (i) ensuring that proposed investments for corridor development are demand driven; (ii) striking a balance between promoting external connectivity and domestic connectivity; (iii) adopting a multisector approach and emphasizing the software requirements of trade and transport facilitation; (iv) recognizing new and emerging priority areas, such as urban development linked to corridors, special economic zones, logistics centers, and multimodal transport linkages; and (v) prioritizing specific geographic areas based on sound criteria and strategic sequencing of projects.

How the RIF was Prepared

The RIF was prepared through a bottom-up approach based on extensive country inputs and consultations. The preparation process began with initial assessments of each sector, supported by (i) sector road maps, projects, and plans developed by the GMS sector forums, working groups, and task forces; and (ii) preliminary pipelines of subregional projects included in ADB country partnership strategies and country operations business plans. The identification, screening, and selection of projects for inclusion in the RIF was also subject to numerous consultations, culminating in the final RIF to be endorsed at the 19th GMS Ministerial Conference in Vientiane, Lao People's Democratic Republic in December 2013.

How the RIF will be Used

As a comprehensive, forward-looking and strategic framework, the RIF embodies the collective aspiration of the GMS countries to expand and deepen their cooperation program in the coming decade. The RIF will also remain a living framework that will be regularly reviewed and updated to maintain its relevance and responsiveness as a planning tool for subregional initiatives in an ever-dynamic GMS.

The more than 200 potential investment and technical assistance (TA) projects included in the RIF reflect the tremendous level of interest and commitment among the GMS countries to strengthen subregional cooperation. To translate the RIF pipeline into concrete projects, an implementation plan will identify priority projects for implementation over the next 5 years. By focusing on projects ready for implementation over the near-term, monitoring and evaluation activities can concentrate on project-specific outputs and outcomes in the context of broader impacts on subregional cooperation and connectivity. A realistic and achievable implementation plan will also facilitate the mobilization of financial resources from development partners, the private sector, and other sources.

Summary of Regional Investment Framework Pipeline of Potential Projects

he RIF pipeline of potential projects is consistent with the spirit of the new GMS Strategic Framework's focus on the broadening and deepening of the GMS corridors, and transforming them into true economic corridors through key strategic sectoral and multisectoral interventions. At the same time, the pipeline aims to address pressing issues, and tap opportunities offered by emerging trends.

While traditional connectivity infrastructure projects remain prominent in the pipeline, many projects proposed under the RIF are markedly different from traditional GMS projects. For example, while the transport pipeline is still dominated by roads to fill remaining connectivity gaps, railways now feature prominently in the RIF given their benefits in terms of efficiency and environmental sustainability. Greater focus has also been given to multimodal and intermodal transport projects, including logistics centers and crossborder facilities. The RIF emphasizes the importance of software development and implementation, particularly in transport and trade facilitation, which is crucial in realizing the benefits of physical connectivity.

The energy sector focuses on developing the subregional power market, and on promoting environment friendly renewable energy and energy efficiency. The information and communication technology (ICT) sector focuses on the development of ICT applications while continuing to strengthen network infrastructure. Tourism has developed a multisector approach in improving related infrastructure and emphasizing software support for sustainable tourism management and to promote the subregion as a single destination. The RIF also responds to emerging concerns and challenges in the agriculture and environment sectors, such as prudent management of natural resources and the environment, strengthening climate change resilience, enhancing agricultural competitiveness, and promoting food safety and security. The RIF recognizes the importance of human resource development, and puts a greater focus on skills development as well as the prevention and control of communicable diseases, including HIV/AIDS.

Project Pipeline

The overall RIF pipeline of potential projects, with an initially estimated total cost of \$51.5 billion, largely reflects the traditional infrastructure projects that further enhance physical connectivity within the GMS, but also includes nontraditional multisector and software-related projects.

Investment

The transport sector maintains the highest share in terms of estimated total cost of investment projects, with 86.0% (Figure 1). Transport is followed by the energy sector, at 6.2%, the agriculture sector at 2.4%, and the tourism sector at 1.4% of the estimated total cost of investment projects in the RIF (\$51.3 billion).

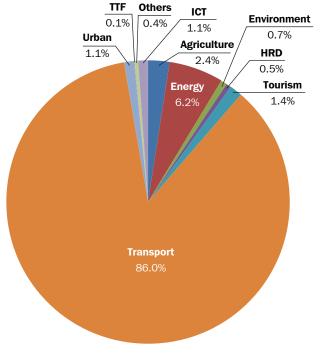


Figure 1: Sectoral Distribution of RIF Investment Projects, Based on Estimated Total Cost

HRD = human resource development, ICT = information and communications technology, TTF = transport and trade facilitation. Source: ADB estimates.

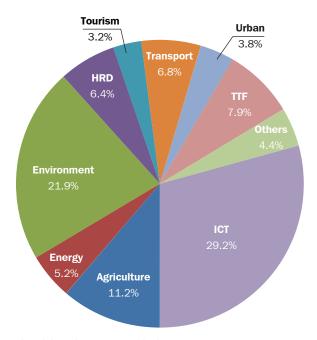


Figure 2: Sectoral Distribution of RIF TA Projects, Based on Estimated Total Cost

 $\label{eq:ICT} \mbox{ICT} = \mbox{information} \mbox{ and communications technology, } \mbox{TTF} = \mbox{transport} \mbox{ and trade facilitation}.$ Source: ADB estimates.

Technical Assistance

In terms of number of projects, the RIF TA pipeline, which consists of 92 projects, is dominated mostly by the softer sectors such as human resource development (HRD) and the environment, as well as software, institutional, and capacity-building needs of the other sectors (Figure 2).

In terms of share in the estimated total project costs of \$222 million, the ICT projects dominate the TA pipeline, with 29.2% of the total; followed by environment, 21.9%; agriculture, 11.2%; and transport and trade facilitation, 7.9%.

Sector Pipeline Features

Transport

he key thrusts of the RIF transport sector pipeline are to complete and expand the GMS transport corridors and to ensure that they become true economic corridors, a strategic thrust of the new GMS Strategic Framework (GMS-SF). The pipeline, however, recognizes that economic corridor development requires a multisector approach, and that transport development needs to be closely coordinated with other sector initiatives.

The RIF transport sector pipeline benefited from the findings of a GMS transport and logistics assessment prepared as part of the RIF process. The assessment's and recommendations kev findings include: (i) corridors should be prioritized according to their contribution to regional connectivity, trade, and development; (ii) some corridors should be realigned to improve their links with centers of economic activity and trade flows, including their connectivity with important gateway ports given that maritime transport still dominates trade; (iii) economic corridors require multisector approaches, and transport components of multisector development projects should be pursued, (e.g., integrated urban development projects, special economic zones, etc.).

In view of these findings and consistent with the priorities of individual GMS countries, the pipeline focuses on the following:

- filling the remaining gaps in the corridors, including their effective extension into Myanmar to accelerate its integration with the rest of the subregion;
- maximizing multimodal transport linkages via roads, railways, ports, and inland water transport;

- prioritizing projects that strengthen GMS connectivity, increase trade, and promote inclusive growth;
- giving greater attention to other important aspects of transport development, e.g., adequate maintenance of transport assets and enhancement of road safety;
- expanding the horizon of connectivity, including linkages with South and Central Asia.

Given the importance of the multisector approach, the pipeline contains integrated ports development; development or improvement of cross-border facilities; and development of logistics facilities, e.g., inland container depots and coastal terminals.

The pipeline also includes initiatives to build institutional capacities, e.g., the establishment of the Greater Mekong Railways Association (GMRA), development of a transport database, and establishment of research laboratories for roads and bridges construction.

The pipeline consists of 90 projects, for the period 2013–2022, with an estimated cost of \$44.1 billion, including:

- 78 investment projects at \$44.1 billion
- 12 technical assistance projects at \$15.2 million.

Within the transport sector, railways dominate the transport investment pipeline, followed by road infrastructure (Figure 3).

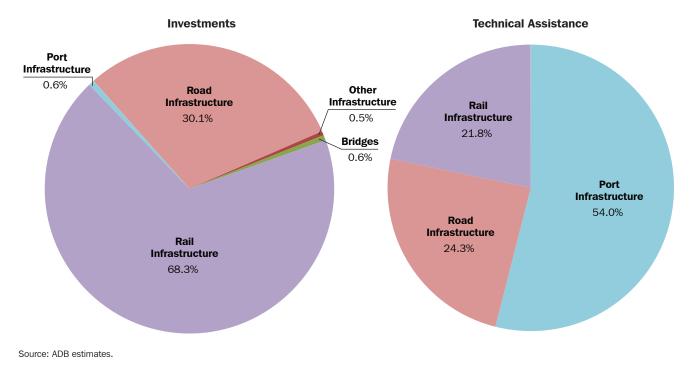


Figure 3: Transport Investment and TA Requirements by Subsector (as % of Total Project Cost)

Energy

The aim of the GMS energy sector is to maintain an integrated approach to delivering sustainable, secure, and affordable energy in the GMS. It is grounded in the GMS Expanded Energy Road Map (2009) and the GMS-SF 2012–2022. The expanded road map and SF focus on four major strategic objectives for promoting energy cooperation in the GMS, encouraging GMS-SF countries to (i) enhance energy access for all sectors and communities; (ii) develop and efficiently use indigenous, low carbon, and renewable resources; (iii) improve energy supply security through cross-border trade; (iv) promote public–private partnerships (PPP) and private sector participation (e.g., small and medium-sized enterprises).

Guided by the strategic objectives articulated under the GMS Expanded Energy Road Map and GMS-SF 2012–2022, the proposed energy pipeline focuses on promoting the following strategic thrusts and priorities:

- regional power integration and interconnection projects (e.g., transmission and distribution [T&D] projects);
- (ii) regional market development projects;

- (iii) hydropower project development;
- (iv) grid development projects for economic corridor and rural development;
- (v) pilot plants under PPP framework;
- (vi) establishment of Regional Power Coordination Center (RPCC); and harmonized performance standards, grid codes, market rules, and the like;
- (vii) coherent renewable energy (RE) and energy efficiency (EE) plans, and environmentally sustainable development of GMS electricity infrastructure;
- (viii) continued support to the Subregional Energy Forum (SEF).

The pipeline covers 21 projects with an estimated cost of \$3.20 billion, including:

- 13 investment projects at \$3.2 billion, and
- 8 technical assistance projects at \$11.5 million.

The lion's share of energy investments are on transmission and distribution (Figure 4). Many transmission and distribution projects are intended to evacuate or export hydropower across the border, helping displace traditional fossil fuel sources.

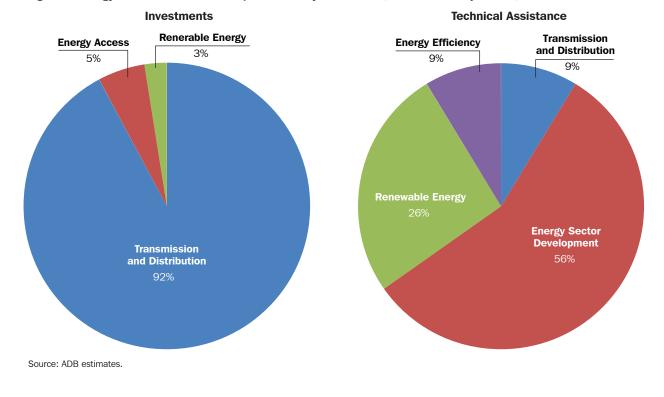


Figure 4: Energy Investment and TA Requirements by Subsector (as % of Total Project Cost)

Agriculture

The vision for the GMS agriculture sector under the Core Agriculture Support Program II (CASP II) (2012–2020) is: "The Greater Mekong Subregion is recognized globally as the leading producer of safe food, using climate-friendly agricultural practices and integrated into global markets through regional economic corridors."

The broad strategy of CASP II is to increase subregional agricultural competitiveness and agribusiness investment in the economic corridors. This will be facilitated through modernized agri-food trading system that provides links to regional and global markets. The foundation of the strategy includes agricultural research and technology that emphasizes climatefriendly agricultural development, private sector involvement to ensure sustainability, and institutional mechanism to enhance regional cooperation.

The broad strategy is supported by three strategic pillars and building blocks, namely:

Pillar 1: Building global competitiveness by promoting food safety and modernizing agricultural trade;

- Pillar 2: Promoting climate-friendly agriculture through market-based strategy to ensure food security while rewarding farmers for their ecosystem services; and
- Pillar 3: Promoting agriculture as a leader in providing clean rural renewable energy and cross-border eco-friendly supply chains.

The proposed agriculture pipeline is guided by the strategic thrusts and priorities under the CASP II and includes projects that support the new strategic thrusts and directions under the GMS-SF for 2012–2022, including:

- widening and deepening of the GMS economic corridors through increased agricultural competitiveness and agribusiness investment, creating agribusiness centers in or near corridor towns and rural growth clusters, and expanding cross-border trade for safe agri-food products.
- strengthening of multisector linkages, especially in the context of climate change mitigation and adaptation as a broad development issue relating to bioenergy, agriculture and food security, environment and biodiversity conservation, and strengthening agricultural supply chain to meet the increased food demands, including those of the tourism industry.

• developing capacity, generating and sharing knowledge on regional bio-safety and risk mitigation systems. This include establishing early warning systems for food security, transboundary control of diseases and invasive species, weather-based index insurance model to reduce risks from natural disasters, enhancing the Agriculture Information Network Service as e-trade and knowledge platform, and strengthening institutional arrangements for the Working Group on Agriculture (WGA) secretariat.

The pipeline covers 13 projects with estimated cost of \$1.28 billion, including:

- 5 investment projects at \$1.2 billion, and
- 8 technical assistance projects at \$25.0 million.

Environment

The vision of the GMS environment sector is an environmentally friendly and climate resilient GMS program. It is grounded in the GMS Core Environment Program (CEP) Phase II (2012–2016) and the GMS-SF 2012–2022. The CEP and GMS-SF highlight three priority thematic issues: biodiversity conservation and poverty alleviation; climate change adaptation and mitigation; and capacity development. To address these issues and ensure enhanced environment and development performance in the subregion, the GMS countries have agreed to the following four components of CEP Phase II:

- (i) improved environmental planning systems, methods and safeguards;
- (ii) improved management of transboundary biodiversity conservation landscapes for sustainable livelihoods;
- (iii) enhanced climate resilience and promotion of lowcarbon development; and
- (iv) strengthened institutions and sustainable financing for environmental management.

The RIF environment pipeline focuses on three strategic outcomes through its portfolio of investment and TA projects, namely: (i) deliver biodiversity conservation targets of the GMS-SF, (ii) reduce and mitigate the environmental risks to the RIF program and portfolio, and (iii) enhance climate resilience and sustainability of the RIF investment pipeline and thereby the GMS economic corridors. Guided by the strategic objectives articulated under CEP Phase II and GMS-SF 2012–2022, the proposed environment pipeline promotes the following strategic thrusts and priorities, focusing on:

- (i) feasibility assessments for sustainable forest management, carbon sequestration, and lowcarbon freight transportation;
- (ii) service center development for multisector planning and investment decisions;
- (iii) integrated management approaches (e.g., landscape, protected area, ecosystem-based, and natural resource management);
- (iv) ecosystem-based climate change adaptation and greenhouse gas mitigation ;
- (v) various livelihood interventions and sustainable financing solutions; and
- (vi) various organizational and institutional development activities to enable effective environment management.

The pipeline covers 13 projects with an estimated cost of \$408.6 million, detailed as follows:

- 5 investment projects at \$360.0 million, and
- 8 technical assistance projects at \$48.6 million.

Human Resource Development

Human resource development (HRD) cooperation in the GMS covers the following subsectors: education, health, labor and migration, and social development.

The GMS HRD Strategic Framework and Action Plan (HRD SFAP) for 2013–2017 was endorsed by the 11th Meeting of the GMS Working Group on HRD (November 2012, Myanmar). The HRD SFAP, which was subsequently endorsed by the 18th GMS Ministerial Conference (December 2012, PRC) focuses on seven strategic thrusts:

- (i) capacity development in the economic corridors,
- (ii) cooperation in technical and vocational education and training,
- (iii) cooperation in higher education and research,
- (iv) addressing regional health issues,
- (v) facilitating safe cross-border labor migration,
- (vi) mitigating social costs in the economic corridors, and
- (vii) strengthening of institutions and mechanisms for GMS HRD cooperation.

The action plan outlines several planned investment and TA projects that support the broad objectives and thrusts of the new GMS-SF for 2012–2022.

The HRD pipeline consists of both regional and national projects with regional dimensions, and includes proposed projects aimed at meeting the skills requirements for the GMS work force, particularly in urban growth centers and other areas along the corridors. These include projects that support capacity development, particularly in technical and vocational education and training, mutual recognition of core competencies and portability of qualifications for jobs and occupations, harmonization of teacher training standards, and establishment of quality assurance mechanisms.

The pipeline also emphasizes multisector linkages in skills and competency training for the work force in key sectors like tourism; food and drug safety requirements for the agriculture and trade sectors, prevention and control of cross-border transmission of communicable diseases and HIV, strengthening resilience to climate change in the health sector, and social protection for migrant workers and vulnerable populations.

The pipeline covers 15 projects with estimated cost of \$295.7 million, including:

- 3 investment projects at \$281.4 million, and
- 12 technical assistance projects at \$14.3 million.

Investment projects in the HRD sector are for education and health projects (Figure 5).

Urban Development

The GMS-SF 2012–2022 provides a central role for the urban sector through its emphasis on corridor development and multisector investments. One GMS analytical work on the preparation of the RIF, reported during the 18th GMS Ministerial Conference in December 2012, highlighted the importance of multisector investment projects anchored on developing urban centers and urban–rural connectivity along GMS corridors.

The proposed projects under the RIF urban pipeline are typically a combination of hardware aspects (physical infrastructure) and software aspects (strategic planning, capacity development, and decentralization) in pursuit of competitive, green, and inclusive towns and cities in the region.

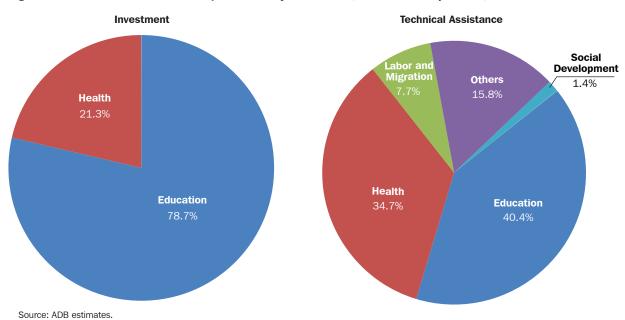


Figure 5: HRD Investment and TA Requirements by Subsector (as % of Total Project Cost)

The RIF urban development pipeline includes projects that support the new strategic thrusts and directions under the GMS-SF 2012–2022, including:

- (i) widening and deepening of the GMS economic corridors by improving urban–environmental infrastructure, upgrading of urban roads, rehabilitating river ports, and implementing flood control measures. They will transform the towns into economic hubs and/or enhance productivity of existing economic enterprises in these towns;
- (ii) strengthening of multisector linkages in the context of climate change with energy, agriculture, and environment sectors through multisector investments such as water supply, waste water treatment, and solid waste management, which will among others, help reduce the carbon footprint of these towns, making them cleaner and greener, and more liveable; and
- (iii) developing capacity, generating knowledge, and managing through activities such as strengthening institutional capacities for management of public investments and developing climate resilience.

The pipeline consists of 8 projects, for 2013–2025, with an estimated cost of \$588.5 million, including:

- 3 investment projects at \$580.0 million, and
- 5 technical assistance projects at \$8.5 million.

Tourism

To provide more focused direction to subregional cooperation in tourism, a GMS Tourism Sector Strategy (TSS) was endorsed by the GMS tourism ministers in 2005. The primary objectives of the strategy are "to develop and promote the Mekong as a single destination, offering a diversity of good quality and high-yielding subregional products that help to distribute the benefits of tourism more widely; add to the tourism development efforts of each GMS country; and contribute to poverty reduction, gender equality and empowerment of women, and sustainable development, while minimizing any adverse impacts."

In 2011, based on the findings of a midterm review of the TSS, the GMS tourism ministers and the 4th GMS Summit endorsed a refocused TSS and road map for 2011–2015. A key feature of the refocused TSS is the development of thematic, multi-country tour circuits

linked to the subregion's iconic Mekong River Tourism Corridor.

The proposed tourism pipeline is informed by the new strategic thrusts and priorities under the Refocused Tourism Strategy and the tourism sector assessment done in 2011. It covers projects that support the new strategic thrusts and directions under the GMS-SF for 2012–2022, including:

- (i) widening and deepening of the GMS economic corridors through the development of areas along and contiguous to the corridors by improving tourism-related access infrastructure and lastmile tourism access infrastructure (river ports, highways, tourist service centers, etc.);
- (ii) strengthening of multisector linkages, especially in the context of climate change as a broad development issue relating to energy, agriculture, food security, and environment by improving environmental services in cross-border tourism centers (sanitation and solid and waste water management), promoting sustainable tourism development in biodiversity conservation corridors, urban development centers, and coastal marine areas; and strengthening tourism supply chain to meet the demands of the tourism industry; and
- (iii) developing the institutional capacity of the Mekong Tourism Coordinating Office, managing knowledge on sustainable tourism in the GMS, and subregional marketing program.

The pipeline covers 18 projects with estimated cost of \$740.7 million, including:

10 investment projects at \$733.6 million, and 8 technical assistance projects at \$7.1 million.

Transport and Trade Facilitation

The GMS Transport and Trade Facilitation (TTF) pipeline is guided by the Transport and Trade Facilitation in the GMS: Issues and Proposed Program of Actions which was endorsed by the 16th GMS Ministerial Conference in Ha Noi, Viet Nam in August 2010. The pipeline covers projects that also support the new strategic thrusts and priorities under GMS Strategic Framework 2012–2022 as follows:

- (i) expand and streamline exchange of traffic rights arrangements;
- (ii) enhance coordinated border management by simplifying, standardizing, and harmonizing customs procedures and operations in participating countries; supporting in drafting/revising bilateral cross border trade agreements; and facilitating implementation of the Single Window/Single Stop Inspection at checkpoints;
- (iii) enhance the sanitary and phytosanitary regime for the GMS trade through an investment on the modernization of SPS agencies;
- (iv) strengthen national and subregional institutions for trade facilitation through partnership with the private sector and technical assistance;
- (v) develop effective regional trade logistics strategy by strengthening the capacity for logistics small and medium enterprises along the GMS corridors; and
- (vi) build capacity and improve the legal and regulatory framework by promoting transparency throughout the trade logistics chain through improving/building database on markets and institutionalizing information sharing mechanisms among entities.

The pipeline consists of 10 projects, for 2013–2020, with an estimated cost of \$49.1 million, including:

- 1 investment project at \$31.5 million, and
- 9 technical assistance projects at \$17.6 million.

Information and Communications Technology

The goal of the GMS Information and Communications Technology (ICT) sector is to improve telecommunications linkages and promote ICT applications among GMS countries. It is grounded in the GMS–SF 2012–2022, targeting lower transaction cost and enhanced competitiveness of the GMS facilitated by increased access to information and communications.

Guided by the GMS-SF 2012–2022, the proposed ICT pipeline focuses on strategic thrusts and priorities that will:

- (i) prioritize and further develop information superhighway (ISN) infrastructure;
- (ii) build capacity for use of advanced technology;

- (iii) advance cooperation on new ICT;
- (iv) promote ICT applications (e.g., e-commerce, e-lending, e-government);
- (v) channel human resources to ensure sustainable sector development; and
- (vi) continue pilot ICT project development in rural areas.

The pipeline covers 9 projects with an estimated cost of \$628.5 million, including:

- 3 investment projects at \$563.5 million, and
- 6 technical assistance projects at \$65.0 million.

Other Multisector/Cross-Border Economic Zones

The GMS-SF 2012–2022 emphasizes corridor development and multisector investments. The pipeline consists of other multisector projects focused on special economic zones (SEZs), and in particular cross-border economic zones (CBEZs) and can be considered as true new generation projects because: (i) all are cross sectoral or multisector; (ii) all are cross-border, involving 2 or more countries; (iii) all are along GMS corridors; (iv) most are a combination of hardware and software interventions; and (v) all are engaging both public and private sector investments.

The pipeline includes projects that support the new strategic thrusts and directions under the GMS-SF 2012–2022, such as:

- (i) widening and deepening of the GMS economic corridors through the development/construction of cross-border economic cooperation zones and industrial parks, and
- (ii) capacity development and knowledge generation and management through competitiveness enhancing trainings for special economic zones operators and business planning/research work particularly to help transform transport corridors into robust economic corridors such as the GMS East West Economic Corridor.

The pipeline consists of 7 projects, for 2013–2018, with an estimated cost of \$219.7 million, including:

- 3 investment projects at \$210.0 million, and
- 4 technical assistance projects at \$9.7 million.
- **10** Overview of the GMS Regional Investment Framework (2013–2022)

Regional Investment Framework Pipeline of Potential Projects

Transport

	Project	Country Coverage	Cost Estimate (\$ Million)
INV	ESTMENT PROJECTS		
Car	nbodia		
Roa	ad Infrastructure		
1.	Poipet–Aranyaprathet New Road with Cross–Border Facilities (CAM Part)	CAM, THA	TBD
2.	Phnom Penh–Sihanoukville Highway Corridor Improvements	CAM	1,000.0
З.	Sihanoukville Port Access Road Improvements	CAM	40.0
4.	GMS: Deepening Connectivity of Southern Economic Corridor Project	CAM	120.0
Rai	I Infrastructure		
5.	Construction of Poipet (CAM)–Klong Loeuk (THA) Railway Bridge	CAM	0.5
6.	Study to Construct a Priority Railway Access to New Phnom Penh Port	CAM	1.0
7.	Railway from Batdoeung (Cambodia) to Lock Ninh (Viet Nam)	CAM, VIE	1,100.0
Oth	er Infrastructure		
8.	Construction of Multipurpose Terminal in Sihanoukville	CAM	90.0
	Subtotal (Investment Projects: Cambodia)		2,351.5
Peo	ople's Republic Of China		
Roa	ad Infrastructure		
1.	Longling–Ruili Expressway	PRC	1,750.0
2.	Jinghong–Daluo Expressway	PRC	2,040.0
3.	Yunnan Pu'er Regional Integrated Road Network Development Project	PRC	500.0
Rai	I Infrastructure		
4.	Dali–Ruili Railway	PRC	4,700.0
5.	Yuxi–Mohan Railway	PRC	7,700.0
Inla	Ind Waterways		
6.	Further Maintenance and Improvement of the Upper Mekong River Navigation Channel from the PRC (at Landmark 243) and Myanmar to Luang Prabang, in the Lao PDR	PRC, LAO, MYA	TBD
	Subtotal (Investment Projects: PRC)		16,690.0

	Project	Country Coverage	Cost Estimate (\$ Million)
Lao	People's Democratic Republic		
Roa	ad Infrastructure		
1.	Upgrading of NR1A (Portion from Lantui to Bounneau)	LAO	91.0
2.	Upgrading NR13 (Portion from Oudomxay to Pakmong)	LAO	82.0
3.	Upgrading NR13N and N13S (Portion through Vang Vieng-Vientiane Capital- Thabok); ASEAN Highway AH11 (NR13S)	LAO	280.0
4.	Upgrading of NR8 East–West Transport Route; ASEAN Highway AH15	LAO	80.0
5.	Luang Prabang–Samneua Second Northern GMS Transport Network Improvement Project	LAO	70.0
6.	Luang Prabang–Dien Bien Phu (Under Lao PDR–Viet Nam Bilateral Assistance)	LAO	90.0
7.	Muong Ngeune–Chomphet–Luang Prabang	LAO	90.0
8.	Muong Ngeune–Xieng Hone–Muong Kob–Pak Tha	LAO	150.0
9.	Pakse-Champassak-Muong Khong 14A	LAO	120.0
10.	Phiafay–Attapeu: NR18A; ASEAN Highway–AH132; East–West Transport Route	LAO	130.0
11.	Luang Namtha–Xiengkok–Lao–Myanmar Friendship Bridge: NR17	LAO	150.0
Rai	I Infrastructure		
12.	Detailed Feasibility Study and Detailed Design of Vientiane–Thakhek–Muya Railway Project	LAO	15.0
13.	Thanalaeng–Nongkai Railway Extension Project	LAO	50.0
14.	Vientiane–Boten Railway Project	LAO	7,200.0
15.	Savannakhet-Lao Bao Railway Project	LAO	4,200.0
Brid	Iges		
16.	Mekong River Bridge at Xiengkok (Lao PDR)–Kainglap (Myanmar) Along the ASEAN–India Highway	LAO, MYA	23.0
17.	Mekong River at Pakbeng (Along NR2)	LAO	54.0
18.	Mekong Bridge at Paklay	LAO	25.0
19.	Mekong Bridge at Luang Prabang	LAO	90.0
20.	Mekong Bridge at Paksan-Bungkane (with Thailand)	LAO, THA	TBD
21.	Selamphao Bridge, at the end of NR14A between Lao PDR and Cambodia	CAM, LAO	30.0
22.	Mekong Bridge for Thanalaeng–Nongkai Railway Project	LAO	TBD
Bor	der Crossing Facilities		
23.	Nam Phao Border-Crossing Point (NR8)	LAO	8.0
24.	Na Phao Border-Crossing Point (NR12)	LAO	10.0
25.	Lalay Border–Crossing Point (NR15)	LAO	12.0
26.	Dak Chung Border–Crossing Point (NR16)	LAO	10.0
27.	Vang Tao Border–Crossing Point	LAO	15.0
28.	Thanaleng Border–Crossing Infrastructure Improvement Project	LAO	25.0
Por	t Infrastructure: River Ports		
29.	Xiengkok River Port	LAO	15.0
30.	Ban Mom River Port	LAO	12.0
			Continued on next nage

			Cost Estimate
	Project	Country Coverage	(\$ Million)
31.	Houei Sai River Port	LAO	13.0
32.	Pakbeng River Port	LAO	15.0
33.	Luang Prabang River Port	LAO	15.0
	Subtotal (Investment Projects: Lao PDR)		13,170.0
Муа	anmar		
Roa	ad Infrastructure		
1.	East-West Economic Corridor Eindu-Kawkareik Road Improvement	MYA	130.0
2.	Loilem–Kyaington Road Section (GMS Road Section of R7 and Secondary Road of Corridor)	MYA	359.0
3.	Thaton–Payagyi Road Improvement Project	MYA	128.0
4.	Thilawa–East Dagon Road Improvement Project	MYA	41.0
5.	East Dagon-NR1 Road Improvement Project	MYA	58.0
6.	Ruili (PRC)–Kyaukpyu (Myanmar) Highway	MYA	1,000.0
7.	Daluo (PRC)–Tachilek (Myanmar) Highway	MYA	93.0
Rai	I Infrastructure		
8.	Bago–Dawei Track Upgrading Project	MYA	100.0
Bric	Iges		
9.	Bridge on the Kyaington–Lyainglin–Taunggyi Road (AH2)	MYA	15.8
10.	Chaunghneikkcwa–Hlaingbwe (Kawkareik) Road	MYA	5.2
11.	Mekong River Bridge at Xiengkok (Lao PDR)–Kainglap (Myanmar) Along the ASEAN–India Highway	LAO, MYA	16.0
Oth	er Infrastructure (Cross-Border Facilitation, inland container terminal, et	tc.)	
12.	Mae Sot–Myawaddy Border Crossing Project and Infrastructure Improvements (Myanmar part)	MYA, THA	30.0
Por	t Infrastructure: River Ports		
13.	Improvement of Inland Ports	MYA	60.0
	Subtotal (Investment Projects: Myanmar)		2,036.0
Tha	iland		
Roa	ad Infrastructure		
1.	Aranyaprathet–Poipet New Road with Border-Crossing Facilities (Thailand part)	CAM, THA	TBD
2.	Bang Yai–Kanchanaburi Intercity Motorway Project	THA	300.0
3.	Mae Sot–Myawaddy Border Crossing Project and Infrastructure Improvements(Thailand part)	THA	TBD
4.	Chiang Rai–Chiang Khong Highway Improvement Project	THA	80.0
5.	Tak-Mae Sot Highway Improvement Project	THA	90.0
6.	Lomsak–Phetchabun Highway Improvement Project	THA	120.0
7.	Kalasin–Nakrai–Kamcha I Highway Improvement Project	THA	140.0
Bric	lges		
8.	Mekong Bridge at Bungkane–Paksan (with Lao PDR)	LAO, THA	TBD
			Continued on next page

	Project	Country Coverage	Cost Estimate (\$ Million)
Rail	Infrastructure		
9.	The Construction of a New Railway Line from Den Chai to Chiang Rai and Chiang Khong	THA	2,582.0
10.	The Construction of a New Railway Line from Baan Pai (Khon Kaen) to Mahasarakham, Roi Et, Mukdahan, and Nakhon Phanom	THA	1,410.0
Por	Infrastructure: Seaports		
11.	The Laem Chabang Port (LCP) Development Project, Phase 3	THA	TBD
12.	Coastal Terminal Development Project of Laem Chabang Port	THA	58.5
13.	Single Rail Transfer Operator Development Project of Laem Chabang Port	THA	92.4
	Subtotal (Investment Projects: Thailand)		4,872.9
Viet	Nam		
Roa	d Infrastructure		
1.	Southern Coastal Corridor (additional financing)	VIE	37.0
2.	Central Mekong Delta Connectivity	VIE	886.0
3.	GMS Kunming–Haiphong Transport Corridor—Noi Bai–Lao Cai Highway (additional financing)	VIE	196.0
4.	GMS Ben Luc-Long Thanh Expressway Periodic Financing Request (PFR) 2	VIE	623.0
5.	Second GMS Southern Coastal Corridor	VIE	373.0
6.	National Highway 14D Improvement Project	VIE	130.0
7.	GMS Ha Noi-Lang Son Expressway	VIE	1,400.0
8.	Second GMS Northern Transport Network Improvement (Luang Prabang– Thanh Hoa) (additional financing)	VIE	145.0
9.	GMS Road Corridors Maintenance	VIE	120.0
Rail	Infrastructure		
10.	Second Yen Vien–Lao Cai Railway Upgrading Project, including the Railway from Lao Cai Station to Hekou Station (PRC)	VIE	149.0
11.	Ho Chi Minh City-Loc Ninh (Cambodia Border) Railway	CAM, VIE	900.0
	Subtotal (Investment Projects: Viet Nam)		4,959.0
	Total (Investment Projects)		44,079.4

	Project	Country Coverage	Cost Estimate (\$ Million)
TEC	HNICAL ASSISTANCE PROJECTS		
1.	Installation of Navigation Aid Equipment	MYA	8.0
2.	PPTA for National Highway 14D Improvement Project	VIE	1.0
3.	Second GMS Northern Transport Network Improvement: Luang Prabang (LAO)–Thanh Hoa (VIE)	LAO, VIE	0.4
4.	GMS Road Corridors Maintenance	All GMS Countries	1.2
5.	Proposed Hoa Lac-Hoa Binh City Expressway PPP Project Feasibility Study	VIE	1.0
6.	Building Institutional Capacity at the Greater Mekong Railway Association	All GMS Countries	0.2
7.	GMS Transport Database Capacity Development	All GMS Countries	TBD
8.	Promotion and Application of the Northeast Asia Logistics Information Service Network (NEAL–NET) in the GMS	TBD	TBD
9.	Strategic Study on the Development and Management of the GMS Motorway Network System	All GMS Countries	TBD
10.	Study on Dry Port Development Plan along International Railway Lines Connecting Thailand with Cambodia, the Lao PDR, and Myanmar	CAM, LAO, MYA, THA	TBD
11.	The Feasibility Study for the Rail Link between Laem Chabang Port and Dawei Deep Sea Port Project	MYA, THA	3.0
12.	Knowledge Transfer between Thailand and GMS member countries on Highway and Bridge Standards and Specifications.	All GMS Countries	0.4
			15.2
			44,094.0

AH = ASEAN Highway; ASEAN = Association of Southeast Asian Nations; CAM = Cambodia; PRC = People's Republic of China; GMS = Greater Mekong Subregion; LAO = Lao People's Democratic Republic; MYA = Myanmar; NEAL-NET = Northeast Asia Logistics Information Service Network; PPP = public-private partnership; PPTA = project preparatory technical assistance; TA = technical assistance; TBD = to be determined; THA = Thailand; VIE = Viet Nam. Source: ADB and GMS countries' estimates.

Energy

	Project	Country Coverage	Cost Estimate (\$ Million)
INVE	STMENT PROJECTS		
1.	Design and Funding of a Backbone Grid for the Lao PDR	LAO	400.0
2.	Reinvestigation of Thailand–Lao PDR–Viet Nam Interconnection	LAO, THA, VIE	278.0
3.	Continued Projects in Rural Electrification and Off-Grid Power Development	CAM, LAO	100.0
4.	Conventional Rural Electrification Programs in Myanmar	MYA	60.0
5.	500 kV Line from Mawlamyine to the Main Grid	MYA	640.0
6.	Demonstration of Second Generation Biofuel Technologies and Associated Biomass Value Chains	All GMS Countries	80.0
7.	Extension of Energy Access in Myanmar from Nodes in Thailand and in the \ensuremath{PRC}	MYA	10.0
8.	Feasibility Study and Extension of the East–West Energy Corridor to Mawlamyine (as part of a concerted and planned extension of the EWEC): Myanmar	MYA, THA	250.0-400.0
9.	Nabong 500 kV Substation Transmission Facility Project	LAO	106.0
10.	Lao PDR–Viet Nam Power Transmission Interconnection (Hatxan–Pleiku)	LAO, VIE	218.0
11.	East–West Corridor Power Transmission and Distribution Project in the Lao PDR	LAO	50.0
Cross	-Border Projects (Submitted to the GMS Regional Power Trade Coordin	ation Committee [RPT	CC])
12.	PRC-Lao PDR-Thailand 500 kV Interconnection	PRC, LAO, THA	600.0-800.0
13.	Viet Nam-PRC 500 kV Power Interconnection	PRC, VIE	400.0-600.0
	Subtotal (In	vestment Projects) *	3,192.0
TECH	NICAL ASSISTANCE PROJECTS		
1.	Support to RPTCC in Completion of Performance Standards, Grid Codes, Market Rules, and Subregional Transmission Expansion Plan	All GMS Countries	1.5
2.	Scoping Study on the Future of the Trans-ASEAN Gas Pipeline	All GMS Countries	1.0
3.	Deployment of Coherent Renewable Energy Action Plans Across the Subregion	All GMS Countries	1.0
4.	Development of Coherent Energy-Efficiency Action Plans Across the Subregion	All GMS Countries	1.0
5.	Provision of Continuing Institutional Support for the Subregional Energy Forum	All GMS Countries	1.0
6.	Development of GMS Coordination Center for Regional Power Trade	All GMS Countries	3.0
7.	GMS: Renewable Energy Development (Phase 2)	All GMS Countries	2.0
8.	Facilitating Regional Power Trading and Environmentally Sustainable Development of Electricity Infrastructure in the GMS (Phase 2)	All GMS Countries	1.0
	s	Subtotal (TA Projects)	11.5
		Total	3,203.5

*Using minimum range.

ASEAN = Association of Southeast Asian Nations; CAM = Cambodia; PRC = People's Republic of China; EWEC = East-West Economic Corridor; GMS = Greater Mekong Subregion; kV = kilovolt; LAO = Lao People's Democratic Republic; MYA = Myanmar; RPTCC=Regional Power Trade Coordination Committee; TA = technical assistance; THA = Thailand; VIE = Viet Nam. Source: ADB and GMS countries' estimates.

Agriculture

	Project	Country Coverage	Cost Estimate (\$ Million)
INVE	ESTMENT PROJECTS		
1.	Climate Friendly Agri-Business Value Chains in the Greater Mekong Subregion (GMS)	All GMS Countries	250.0
2.	Biosafety, Transboundary Diseases Control and Invasive Species Prevention	All GMS Countries	200.0
3.	Enhancing Regional Competitiveness on Food Safety, Quality, and Market Access for Smallholders	All GMS Countries	200.0
4.	Agri-Tourism Value Chains Development	All GMS Countries	250.0
5.	Enhancing Food Security by Building Resilient Food Production System in the GMS	All GMS Countries	350.0
	Subtotal	(Investment Projects)	1,250.0
TEC	HNICAL ASSISTANCE PROJECTS		
1.	Climate-Friendly Agri-Business Value Chains in the GMS	All GMS Countries	2.5
2.	Biosafety, Transboundary Disease Control, and Invasive Plant Species Prevention in the GMS	All GMS Countries	2.5
3.	Enhancing Competitiveness and Trade Facilitation of Agri-Food Products in the GMS	All GMS Countries	2.5
4.	Agri-Tourism Value Chain Development	All GMS Countries	2.5
5.	Enhancing Food Security by Building a Resilient Food Production System in the GMS	All GMS Countries	2.5
6.	Implementing the Greater Mekong Subregion Core Agriculture Support Program (CASP): Phase II	All GMS Countries	2.5
7.	Strengthening Regional Weather-Based Risk Insurance in the GMS	All GMS Countries	2.0
8.	Enhancing Implementation of CASP Phase II (including the Development of CASP Phase III)	All GMS Countries	8.0
		Subtotal (TA Projects)	25.0
		Total	1,275.0

 $\label{eq:CASP} CASP = \mbox{Core Agriculture Support Program; GMS} = \mbox{Greater Mekong Subregion; TA} = \mbox{technical assistance.} \\ \mbox{Source: ADB and GMS countries' estimates.} \\$

Environment

	Project	Country Coverage	Cost Estimate (\$ Million)
INVI	ESTMENT PROJECTS		
1.	Global Environment Fund Regional Biodiversity and Forestry Program	All GMS Countries	20.0
2.	Trans-Boundary Biodiversity Landscape Management in Mekong Headwaters, Sino-Vietnamese Limestone Mountains, and Tenasserim Mountains	PRC, THA, VIE	60.0
3.	Low-Carbon Forestry in GMS Economic Corridors	LAO, MYA, THA	120.0
4.	Enhancing Community Competitiveness and Resilience through Ecosystem-Based Approaches	CAM, LAO, VIE	100.0
5.	Low-Carbon Freight Corridors	LAO, VIE	60.0
	Subtotal	(Investment Projects)	360.0
TEC	HNICAL ASSISTANCE PROJECTS		
1.	Core Environment Program and Biodiversity Conservation Corridor Initiative Phase II – Additional Funding	All GMS Countries	7.6
2.	Core Environment Program and Biodiversity Conservation Corridor Initiative Phase II – Supplemental	All GMS Countries	1.0
3.	Core Environment Program and Biodiversity Conservation Corridor Initiative Phase III	All GMS Countries	35.0
4.	Low-Carbon Forestry in GMS Economic Corridors, Regional Project Preparatory TA	LAO, MYA, THA	1.0
5.	Enhancing Community Competitiveness and Resilience through Ecosystem-Based Approaches	CAM, LAO, VIE	1.0
6.	Low-Carbon Freight Corridors	CAM, LAO, THA, VIE	1.0
7.	Enhancing Rural Environmental Governance in the GMS	CAM, PRC, LAO, MYA, VIE	1.0
8.	Establishing Environmentally Sustainable City Partnerships in the GMS	All GMS Countries	1.0
		Subtotal (TA Projects)	48.6
		Total	408.6

CAM = Cambodia; PRC = People's Republic of China; GMS = Greater Mekong Subregion; LAO = Lao People's Democratic Republic; MYA = Myanmar; TA = technical assistance; THA = Thailand; VIE = Viet Nam. Source: ADB and GMS countries' estimates.

Human Resource Development

	Project	Country Coverage	Cost Estimate (\$ Million)
INVE	STMENT PROJECTS		
1.	Cooperation and Development of Higher Education in the Economic Corridors	CAM, LAO	66.0
2.	GMS Communicable Disease Control Project (Phase 3)	CAM, LAO, MYA, VIE	60.0
3.	GMS Technical and Vocational Education and Training (TVET) Development	CAM, PRC, LAO, MYA	155.4
	Subtotal	(Investment Projects)	281.4
TECH	INICAL ASSISTANCE PROJECTS ¹		
1.	Implementing the GMS Human Resource Development Strategic Framework and Action Plan, Phase II	All GMS Countries	2.25
2.	Improving the Access of Cross-border Migrant Workers to Basic Social Services and Enhancing Social Protection for Migrant Workers	All GMS Countries	0.8
3.	Extension of the Technical Skills and Qualifications Recognition Frameworks to Additional Skills Most Critical for the Development of the Economic Corridors	CAM, LAO, MYA, THA, VIE	0.5
4.	Development of Standard Learning Materials for TVET	CAM, LAO, MYA, THA, VIE	0.2
5.	Facilitating Subregional Cooperation in Establishing Quality Assurance Systems in TVET	CAM, LAO, MYA, THA, VIE	0.2
6.	Regional Capacity Development for Strengthening Resilience to Climate Change in the Health Sector in the GMS	CAM, LAO, VIE	4.0
7.	Health Impact Assessment of Developments in the GMS Economic Corridors	CAM, LAO, MYA	0.2
8.	Capacity Building in Labor Migration Management	CAM, LAO, MYA, VIE	0.3
9.	GMS Youth Forum	All GMS Countries	0.2
10.	Cooperation and Development in Higher Education in the Economic Corridors	CAM, LAO	1.8
11.	GMS Communicable Diseases Control Project (Phase 3)	CAM, LAO, MYA, VIE	0.8
12.	GMS TVET Development	CAM, PRC , LAO, MYA	3.1
		Subtotal (TA Projects)	14.3
		Total	295.7

ASEAN = Association of Southeast Asian Nations; CAM = Cambodia, PRC = People's Republic of China; GMS = Greater Mekong Subregion; LAO = Lao People's Democratic Republic; MYA = Myanmar; SFAP = Strategic Framework and Action Plan; TA = technical assistance; THA = Thailand; TVET = technical and vocational education and training; VIE= Viet Nam.

Source: ADB and GMS countries' estimates.

¹ PRC and Thailand are interested to participate in some activities in terms of knowledge sharing.

Urban Development

	Project	Country Coverage	Cost Estimate (\$ Million)	
INVE	INVESTMENT PROJECTS			
1.	Corridor Towns Development Project II	CAM, LAO, VIE	250.0-300.0	
2.	Corridor Towns Development Project III	MYA	80.0	
З.	Corridor Towns Development Project IV	CAM, LAO, VIE	250.0-300.0	
	Subtotal (Ir	vestment Projects)*	580.0	
TECH	TECHNICAL ASSISTANCE PROJECTS			
1.	Corridor Towns Development Project II	CAM, LAO, VIE	2.0	
2.	Corridor Towns Development Project III	MYA	1.5	
3.	Strengthening Urban Planning in the GMS Corridor Towns Development Project	CAM, LAO, MYA, VIE	1.5	
4.	Cross-Border Economic Zones Development	All GMS Countries	1.5	
5.	Corridor Towns Development Project IV	CAM, LAO, VIE	2.0	
	S	ubtotal (TA Projects)	8.5	
		Total	588.5	

*Using minimum range.

CAM = Cambodia; GMS = Greater Mekong Subregion; LAO = Lao People's Democratic Republic; MYA = Myanmar; TA = technical assistance; VIE = Viet Nam. Source: ADB and GMS countries' estimates.

Tourism

	Project	Country Coverage	Cost Estimate (\$ Million)
INVE	STMENT PROJECTS		
1.	GMS Tourism Infrastructure for Inclusive Growth	CAM, LAO, VIE	120.0
2.	GMS Tourism Infrastructure for Inclusive Growth II (Formerly Pro-Poor Tourism Development along the Southern Economic Corridor)	CAM, LAO, MYA, VIE	130.0
З.	Tourism Infrastructure Development in the Green Triangle Development Area	CAM, LAO, VIE	75.0
4.	Tourism Infrastructure Development in the Emerald Triangle Development Area	CAM, LAO, THA	75.0
5.	Construction of the Sino–Vietnamese Detian-Ban Gioc Waterfalls International Tourism Cooperation Zone	PRC (Guangxi), VIE	200.0
6.	GMS Tourism Technical and Vocational Education and Training Demonstration Project	All GMS Countries (except MYA)	50.0
7.	People's Republic of China–ASEAN Tourism Industry Park	PRC (Guangxi)	37.0
8.	Goose Spring Scenic Area, Jingxi County, Guangxi	PRC (Guangxi), VIE	6.6
9.	Pro-Poor Tourism Development	MYA	20.0
10.	Strengthening Tourism Vocational Training Institutions	MYA	20.0
Subtotal (Investment Projects)		733.6	

	Project	Country Coverage	Cost Estimate (\$ Million)
TEC	HNICAL ASSISTANCE PROJECTS		
1.	Strengthening the Mekong Tourism Coordinating Office	All GMS Countries	0.2
2.	Preparing the GMS Tourism Infrastructure for Inclusive Growth II (formerly Pro-Poor Tourism Development along the Southern Economic Corridor)	CAM, LAO, MYA, VIE	1.4
3.	Tourism Infrastructure Development in the Green Triangle Development Area	CAM, LAO, VIE	0.7
4.	Tourism Infrastructure Development in the Emerald Triangle Development Area	CAM, LAO, THA	0.7
5.	Preparing the new GMS Tourism Sector Strategy 2016–2026	All GMS Countries	0.8
6.	Strengthening the Coordination of Regional Tourism Product Development and Promotion in the GMS	All GMS Countries	0.3
7.	Harmonizing GMS Tourism-Related TVET	All GMS Countries	2.0
8.	Capacity Building Support for Pro-Poor Tourism Development	MYA	1.0
	s	ubtotal (TA Projects)	7.1
		Total	740.7

ASEAN = Association of Southeast Asian Nations; CAM = Cambodia; PRC = People's Republic of China; GMS = Greater Mekong Subregion; LAO = Lao People's Democratic Republic; MYA = Myanmar; THA=Thailand; TA = technical assistance; TVET = technical and vocational education and training; VIE = Viet Nam. Source: ADB and GMS countries' estimates.

Transport and Trade Facilitation

	Project	Country Coverage	Cost Estimate (\$ Million)
INVE	ESTMENT PROJECTS		
1.	Modernization of Sanitary and Phytosanitary (SPS) Agencies for Trade Facilitation Project	CAM, LAO	31.5
	Subtotal	(Investment Project)	31.5
TECI	INICAL ASSISTANCE PROJECTS		
1.	Trade Facilitation through Partnership with the Private Sector	CAM, LAO, MYA, THA, VIE	1.5
2.	Strengthening Capacity Building for Logistics Small and Medium Enterprises along GMS Corridors	PRC, VIE	TBD
З.	Modernization of SPS Agencies for Trade Facilitation Project	CAM, LAO, MYA	1.5
4.	Strengthening Bilateral Cross- Border Trade Agreements and Coordination Mechanism	All GMS Countries	2.0
5.	Strengthening the cooperation among Cambodia, Lao PDR and Viet Nam in the Development Triangle Area	CAM, LAO, VIE	1.0
6.	GMS Trade and Investment Information Service Platform	All GMS Countries	2.5
7.	Commodity Fairs in GMS Countries	Selected GMS Countries	5.0

	Project	Country Coverage	Cost Estimate (\$ Million)
8.	Support for Implementing the Action Plan on Transport and Trade Facilitation in the GMS (Subprojects 2 and 3)	All GMS Countries	4.1
9.	Facilitation of the Implementation of the "Single Window/Single Stop Inspection" (SWI/SSI) at the Lao Bao (Viet Nam)—Dansavanh (Lao PDR) Checkpoint	LAO, VIE	TBD
	Subtotal (TA Projects)		17.6
		Total	49.1

CAM = Cambodia; PRC = People's Republic of China; GMS = Greater Mekong Subregion; LAO = Lao People's Democratic Republic; MYA = Myanmar; SPS = sanitary and phytosanitary; SSI = single-stop inspection; SWI = single-window inspection; TBD = to be determined; THA = Thailand; VIE= Viet Nam. Source: ADB and GMS countries' estimates.

Information and Communications Technology (ICT)

	Project	Country Coverage	Cost Estimate (\$ Million)	
INVE	NVESTMENT PROJECTS			
1.	Greater Mekong Subregion–Information Highway (GMS-IS) Phase II in Cambodia	CAM, PRC	58.5	
2.	Time-Division Long-Term Evolution Demonstration Network in the Lao People's Democratic Republic	PRC, LAO	5.0	
3.	GMS-IS Phase II in Myanmar	PRC, MYA	500.0	
	Subtotal (I	nvestment Projects)	563.5	
TECI	TECHNICAL ASSISTANCE PROJECTS			
1.	Broadband Development Strategies and Implementation Programs of the GMS	All GMS Countries	10.0	
2.	Training in Mobile Internet Technologies and Applications in the GMS	All GMS Countries	10.0	
З.	Training in Broadband Network Construction in the GMS	All GMS Countries	10.0	
4	Training New-Generation IT Talent in the GMS	All GMS Countries	15.0	
5.	Workshops on E-Commerce Cooperation and Exchanges in GMS	All GMS Countries	10.0	
6.	Training in New ICT Technologies and Businesses in the GMS	All GMS Countries	10.0	
	S	ubtotal (TA Projects)	65.0	
		Total	628.5	

CAM = Cambodia; PRC = People's Republic of China; GMS = Greater Mekong Subregion; GMS-IS = Greater Mekong Subregion–Information Superhighway; ICT = information and communications technology; IT = information technology; LAO = Lao People's Democratic Republic; MYA = Myanmar; TA = technical assistance. Source: ADB and GMS countries' estimates.

Other Multisector/Cross-Border Economic Zones

	Project	Country Coverage	Cost Estimate (\$ Million)	
INVI	ESTMENT PROJECTS			
1.	Joint PRC—Viet Nam Cross-Border Economic Zones (CBEZs)	PRC, VIE	150.0	
2.	PRC and Thailand Industrial Park Cooperation	PRC, THA	TBD	
З.	Construction of a Phnom Penh New Port Special Economic Zone	CAM	60.0	
	Subtotal (I	nvestment Projects)	210.0	
TEC	TECHNICAL ASSISTANCE PROJECTS			
1.	Capacity Building for CBEZs	PRC, LAO, MYA	2.0	
2.	Joint Feasibility Study of the PRC and Viet Nam CBEZs	PRC, VIE	2.0	
3.	Research on Nanning-Singapore Economic Corridor transportation and business planning	GMS Countries	4.2	
4.	Feasibility Study for Thakhek Special Economic Zone	LAO, THA	1.5	
	S	ubtotal (TA Projects)	9.7	
		Total	219.7	

CAM = Cambodia; CBEZs = cross-border economic zones; PRC = People's Republic of China; GMS = Greater Mekong Subregion; LAO = Lao People's Democratic Republic; MYA = Myanmar; THA = Thailand; TA = technical assistance; TBD= to be determined; VIE = Viet Nam. Source: ADB and GMS countries' estimates.

The Regional Investment Framework (RIF) puts into operation the new Greater Mekong Subregion Economic Program Strategic Framework (GMS-SF) (2012–2022) that was approved at the 4th Greater Mekong Subregion (GMS) Summit in December 2011. The RIF translates the strategic directions of the GMS-SF into a pipeline of investment and technical assistance projects for the third decade of the GMS Program, from 2013 to 2022. The RIF covers a wide range of sectors including transport, energy, environment, agriculture, human resource development, information and communication technology, tourism, transport and trade facilitation, and urban development.

As a comprehensive, forward-looking and strategic framework, the RIF embodies the collective aspiration of the GMS countries to expand and deepen their cooperation program in the coming decade. The RIF will also remain a living framework that will be regularly reviewed and updated to maintain its relevance and responsiveness as a planning tool for subregional initiatives in an ever-dynamic GMS.