Performance Evaluation Report

Regional: Greater Mekong Subregion Regional Communicable Diseases Control Project

Independent Evaluation ADB

Performance Evaluation Report
September 2015

Regional: Greater Mekong Subregion Regional Communicable Diseases Control Project (Cambodia, the Lao People's Democratic Republic, and Viet Nam)

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Note: In this report, "$" refers to US dollars.

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Abbreviations

ADB	–	Asian Development Bank
ADF	–	Asian Development Fund
AHI	–	avian and human influenza
AOP	–	Annual Operational Plan
APSED	–	Asia Pacific Strategy for Emerging Diseases
CDC	–	communicable disease control
CDC1	–	Greater Mekong Subregion Regional Communicable Diseases Control Project, 2006–2009
CDC2	–	Greater Mekong Subregion Regional Communicable Diseases Control Project, 2011–2015
CLV	–	Cambodia, the Lao People's Democratic Republic, and Viet Nam
DMF	–	design and monitoring framework
EMP	–	ethnic minority plan
GAP	–	gender action plan
GMS	–	Greater Mekong Subregion
HPAI	–	highly pathogenic avian influenza
HRD	–	human resource development
HSSP	–	Health Sector Support Programme (Cambodia)
IEC	–	information, education, and communication
IED	–	Independent Evaluation Department
IEM	–	independent evaluation mission
IHR	–	International Health Regulations
IMCI	–	Integrated Management of Childhood Illnesses
KAP	–	knowledge, attitudes, and practices
Lao PDR	–	Lao People's Democratic Republic
MBDS	–	Mekong Basin Disease Surveillance Initiative
MDA	–	mass drug administration
MDG	–	Millennium Development Goal
MOH	–	Ministry of Health
NIPH	–	National Institute of Public Health (Cambodia)
NTD	–	neglected tropical disease
PCR	–	project completion report
PMU	–	project management unit
PPER	–	project performance evaluation report
PPTA	–	project preparatory technical assistance
RCU	–	Regional Coordination Unit (CDC1 and CDC2)
RRP	–	report and recommendation of the President
RSC	–	regional steering committee (CDC1)
SARS	–	severe acute respiratory syndrome
SGIA	–	second generation imprest account
STH	–	soil-transmitted helminths
US-CDC	–	United States Centers for Disease Control and Prevention (Atlanta and field offices)
WHO	–	World Health Organization
WPRO	–	Western Pacific Region Office (WHO)

Contents

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The evaluation was conducted under the supervision of Bob Finlayson, Director, Division 2, and overall guidance of Vinod Thomas, Director General, IED.

Basic Data

GREATER MEKONG SUBREGION REGIONAL COMMUNICABLE DISEASES CONTROL PROJECT (CAMBODIA, THE LAO PEOPLE'S DEMOCRATIC REPUBLIC, AND VIET NAM) (GRANTS 0025/0026/0027)

GRANTS 0025- CAM
Project Preparation and Institution Building

TA No.	Technical Assistance Name	Type	Person-Months	Amount	Approval Date
6194	Technical assistance to Cambodia, the Lao People's Democratic Republic, and Viet Nam for Preparing the Greater Mekong Subregion Regional Communicable Diseases Control	PPTA	18	600,000	20 October 2004

Key Project Data ($ million)	As per ADB Grant Documents	Actual
Total project cost	11.25	10.76
ADB grant amount/utilization	9.00	8.77
ADB grant amount/cancellation	0.00	0.00
Key Dates		
Fact-finding		29 April –5 May 2005
Appraisal		21–24 June 2005
Grant negotiations		12–13 September 2005
Board approval		21 November 2005
Grant signing		27 December 2005
Grant effectiveness		7 March 2006
First disbursement		30 May 2006
Grant closing		17 October 2012

Borrower	Kingdom of Cambodia
Executing Agency	Ministry of Health, Cambodia
Implementing Agency	Multiple agencies

Mission Data

Type of Mission	No. of Missions	No. of Person-Days
Fact-finding	1	7
Appraisal	1	5
Inception mission	1	2
Grant review	5	15
Special grant administration	1	3
Project completion	1	5
Independent evaluation	1	5

ADB = Asian Development Bank, PPTA = project preparatory technical assistance, CAM = Kingdom Of Cambodia.
Source: Asian Development Bank database.

Grant 0026- LAO

Key Project Data ($ million)	As per ADB Grant Documents	Actual
Total project cost	7.50	6.51
ADB grant amount/utilization	6.00	5.92
ADB grant amount/cancellation	0.00	0.00
Key Dates		
Fact-finding		29 April –5 May 2005
Appraisal		27–30 June 2005
Grant negotiations		27–28 September 2005
Board approval		21 November 2005
Grant signing		16 December 2005
Grant effectiveness		7 March 2006
First disbursement		15 August 2006
Grant closing		17 October 2012

Borrower	Lao People's Democratic Republic
Executing Agency	Ministry of Health, Lao PDR
Implementing Agency	Multiple agencies

Mission Data

Type of Mission	No. of Missions	No. of Person-Days
Fact-finding	1	6
Appraisal	1	4
Inception mission	1	3
Grant review	5	16
Special grant administration	2	13
Project completion	1	5
Independent evaluation	1	5

ADB = Asian Development Bank, PPTA = project preparatory technical assistance, LAO = Lao People's Democratic Republic.
Source: Asian Development Bank database.

Grant 0027- VIE

Key Project Data ($ million)	As per ADB Grant Documents	Actual
Total project cost	20.00	17.13
ADB grant amount/utilization	15.00	14.78
ADB grant amount/cancellation	0.00	0.00
Key Dates		
Fact-finding		12–21 May 2005
Appraisal		13–16 June 2005
Grant negotiations		5–7 October 2005
Board approval		21 November 2005
Grant signing		7 April 2006
Grant effectiveness		7 July 2006
First disbursement		4 October 2006
Grant closing		17 October 2012

Borrower	Socialist Republic of Viet Nam
Executing Agency	Ministry of Health, Viet Nam
Implementing Agency	Multiple agencies

Mission Data

Type of Mission	No. of Missions	No. of Person-Days
Fact-finding	1	9
Appraisal	1	4
Inception mission	1	4
Grant review	5	19
Special grant administration	2	3
Project completion	1	4
Independent evaluation	1	5

ADB = Asian Development Bank, PP = project preparatory, VIE = Socialist Republic of Viet Nam.
Source: Asian Development Bank database.

Executive Summary

The economic impact of cross-border transmission and the spread of emerging and epidemic infectious diseases on tourism, trade, and productivity can reach billions of US dollars. Within the framework of the Greater Mekong Subregion (GMS) economic cooperation program, the Asian Development Bank (ADB) supported a grant-financed project to help three GMS countries—Cambodia, the Lao People's Democratic Republic (Lao PDR), and Viet Nam (CLV)—mitigate increased risks from greater transmission of communicable diseases resulting from greater connectivity for goods and services.

The intended impacts of the project were to (i) improve containment of epidemic diseases at the local, national, and regional levels; and (ii) reduce the burden of common endemic diseases by about 15% in 26 provinces targeted by the project. The intended outcomes were (i) timely and adequate control of epidemics that are likely to have a major impact on public health and the economy in the region; (ii) improved coverage of prevention and care of communicable diseases in vulnerable populations, in particular for poor women and children living in border areas; and (iii) improved know-how, policies, standards, and coordination among countries to improve communicable disease control (CDC) through effective intergovernmental cooperation by building capacity in the Ministries of Health (MOHs), regional policy dialogue, and operations research. The project outputs were (i) comprehensive national surveillance and response systems, (ii) expanded and integrated CDC for vulnerable groups, and (iii) productive regional coordination for CDC.

The total project cost at appraisal was estimated at $38.75 million, with $11.25 million allocated for Cambodia, $7.50 million for the Lao PDR, and $20.00 million for Viet Nam. ADB provided three separate grants totaling $30.00 million that financed 77.4% of the total cost, with the balance being sourced from government contributions of $7.85 million equivalent and a World Health Organization (WHO) contribution of $0.90 million. The project was appraised in 2005, started in 2006, and closed in 2012. It was designed to be implemented over 4 years with an original closing date of 2010. It was extended by a further 2 years, resulting in a 50% time overrun.

This report presents findings of the performance evaluation of the GMS Regional Communicable Diseases Control Project (CDC1) based on four core evaluation criteria (relevance, effectiveness, efficiency, and sustainability) and the additional criterion of impact. Overall, the project was rated *successful*.

The project was *relevant*. Launched in the wake of outbreaks of emerging diseases such as severe acute respiratory syndrome (SARS) in 2003, and avian and human influenza (AHI) in 2004, the project was relevant for reducing collective vulnerability to communicable disease threats that cross national borders. Support for strengthening individual country capacity to respond to communicable disease threats, and fostering cooperation and information exchange at the regional level, was appropriate for regional public goods. With anticipated growth in trade and tourism, resulting from increased connectivity between countries, the continued importance of building country capacity and regional cooperation in CDC was reinforced.

The project was aligned with government health policies and strategies in the CLV countries, ADB's strategy and programs for the countries, and its strategic objectives. While the project design was largely appropriate, alternative designs for the regional component of the project were not considered during formulation. This lack of preparatory analysis contributed to weakness in the Regional Coordination Unit (RCU) during project implementation in its efforts to engage with other organizations working to improve regional collaboration to control emerging and epidemic diseases. In addition, concerns about possible duplication of efforts with other development partners were not adequately addressed in the design phase.

The project was *effective*. All three countries strengthened the capacity of their CDC systems to rapidly assess the emergence of epidemics and take timely action to control their spread. CLV countries improved coverage of prevention and treatment of endemic diseases in the project provinces, reducing the burden of disease in the target populations. The workshops and meetings organized by the RCU encouraged interaction between experts in the CLV countries, and built trust and familiarity among counterpart colleagues in these countries. This laid the foundation for future collaboration and coordination of regional and cross-border CDC.

The project was *efficient*. Despite the ambitious objectives and plans, nearly all of the targeted outputs were largely delivered on time, and within budget. In each country, existing government personnel and institutions planned and implemented project activities, ensuring organizational efficiency. Although it is difficult to identify, measure, and value project benefits, the estimated impact of the 2003 SARS outbreak suggests a high economic return on investment for control of epidemics.

The project is *likely sustainable*. Country progress toward compliance with the International Health Regulations (2005) provides evidence of institutional sustainability for strengthened national surveillance and response systems. Improved CDC for vulnerable groups is less likely to be sustained in the absence of continued funding. For regional collaboration, cross-border exchange of information has the most potential for sustainability, while lack of funding will constrain continuation of joint training, cross-border meetings, and joint outbreak investigations. Knowledge products generated and posted to the GMS CDC1 website have outlived the duration of the project as the second phase of ADB support for CDC is being implemented, but longer-term sustainability is uncertain. Financial sustainability is more likely in Viet Nam than in Cambodia and the Lao PDR, where dependence on development partner health financing is high.

The project had a *significant* impact on population health, and contributed to the countries' progress toward selected health Millennium Development Goals (MDGs). The CLV countries met or exceeded project targets for reductions in infant and under-five year old mortality, and prevalence of HIV. While project contribution to these achievements is plausible, the entire reduction cannot be attributed to the program. Further contributing factors toward these achievements are overall improvements in socioeconomic conditions, including maternal and child health services, and funding for health MDGs which was available from other sources. In light of these results, ADB and borrower performance is rated *satisfactory*.

A number of recommendations made in the project completion report have largely been incorporated into the follow-on second phase of the project supported by ADB. Knowledge products generated and accumulated through the evaluated and follow-on project could be consolidated and the website and contents handed over to

an established regional organization that has the capacity and resources to host an information clearinghouse on CDC. The products can then be updated continuously to reflect the most current information available, ensuring the sustainability of ADB's investments and the continued delivery of project outputs.

The evaluation did not seek to ascertain whether ADB should continue to be involved in the health sector in the GMS, or more specifically in control of communicable diseases. Should ADB choose to support similar projects in the future, the evaluation recommends that partnerships with established organizations or programs with a longer-term presence in regional collaboration for CDC be explored. Complementary ADB support for health management information systems, geographic information systems, and curriculum development for field epidemiology would be essential. For any new regional initiative on CDC, strengthening links between animal and human health, and addressing the emerging issue of food safety would be crucial. Pandemic preparedness is best supported in the context of disaster preparedness, with a multisector and multi-hazard approach, and business continuity plans.

CHAPTER 1
Introduction

A. Evaluation Purpose and Process

1. This project performance evaluation report (PPER) assesses the performance of the first phase of the Asian Development Bank (ADB) program of grants provided to the Ministries of Health (MOHs) in Cambodia, the Lao People's Democratic Republic (Lao PDR), and Viet Nam (the CLV countries) through the Greater Mekong Subregion Regional Communicable Diseases Control Project (GMS CDC1).[1] These grants aimed to improve communicable disease control (CDC) at the regional, national, and provincial levels, in partnership with the Western Pacific Regional Office of the World Health Organization (WHO WPRO). Details on the project design are in the design and monitoring framework (DMF) (Appendix 1).

2. The project was assessed using the four core evaluation criteria (relevance, effectiveness, efficiency, and sustainability), and one additional criterion (impact) as specified in the ADB evaluation guidelines.[2] The extent the project contributed to the development of regional public goods for health was also assessed.[3] Lessons, issues, and findings drawn from this evaluation will feed into an Independent Evaluation Department (IED) thematic evaluation study on ADB's efforts to promote regional cooperation and integration. The PPER was scheduled for preparation 2 years after completion of the project in October 2012 and 1 year after preparation of the self-assessed project completion report (PCR) by the operations department in October 2013.

3. Overall, the PCR rated the project *successful* based on the four core evaluation criteria, and the additional criterion of impact.[4] Launched in the wake of outbreaks of emerging diseases, such as severe acute respiratory syndrome (SARS) in 2003 and avian and human influenza (AHI) in 2004, the project was rated *highly relevant* for regional public health security. The project aimed to implement strategic areas of WHO's revised International Health Regulations (IHR) approved in May 2005,[5] and the Asia Pacific

[1] ADB. 2005. *Report and Recommendation of the President to the Board of Directors: Proposed Grant to the Kingdom of Cambodia, the Lao People's Democratic Republic, and the Socialist Republic of Viet Nam for the Greater Mekong Subregion Regional Communicable Diseases Control Project.* Manila.

[2] ADB. 2006. *Guidelines for Preparing Performance Evaluation Reports for Public Sector Operations* (amended in March 2013). Manila.

[3] The PPER aims to assess the extent to which the project contributed to (i) the development of harmonized criteria and guidelines for the detection and control of communicable diseases, (ii) increased standardization of data collection systems for disease surveillance and of policies for information sharing within and between the CLV countries, and (iii) coordination of GMS-CDC1 project activities with the disease control activities of other development partners.

[4] ADB. 2013. *Completion Report: Greater Mekong Subregion Regional Communicable Diseases Control Project.* Manila.

[5] WHO. 2005. *International Health Regulations*. Geneva.

Strategy for Emerging Diseases (APSED).[6] The PCR rated the project *effective* in achieving most of the targeted outcomes and outputs, and *efficient* in resource utilization in all three countries. It considered the project *likely sustainable* as the governments were highly committed to the control of emerging diseases, dengue, HIV/AIDS, and other infections of regional importance, and to stronger regional and cross-border cooperation under its IHR and APSED obligations. The project was assessed by the PCR to have had a *substantial impact* in areas such as the control of AHI; dengue; neglected tropical diseases (NTDs); Integrated Management of Childhood Illness (IMCI), which helped improve diagnostics for better case management of children; and regional networking to improve CDC.

4. The PPER prepared by IED provides an independent evaluation of the project and was based on a review of project documents, including five PCRs.[7] Relevant publicly available data and publications were reviewed, and discussions held with ADB staff in headquarters and the CLV country resident missions, staff at WHO WPRO headquarters and CLV countries, staff at selected bilateral and multilateral institutions in the CLV countries, and staff at central, provincial, and lower levels of government.[8]

[6] WHO. 2010. *Asia Pacific Strategy for Emerging Diseases*. Manila.

[7] One consolidated PCR for the project, three individual country PCRs, and one PCR for the regional coordination unit (RCU).

[8] Independent Evaluation Mission (IEM) dates were 13 September to 7 October 2014. Other stakeholders interviewed included at least one country representative for the United States Centers for Disease Control and Prevention (US-CDC) in each of the CLV countries and a representative of the International Organization for Migration in Cambodia and Viet Nam. One project province was visited for 1 day in each of the CLV countries—Kampot province in Cambodia, Luang Prabang province in Lao PDR, and Hanoi/Ha Tay province in Viet Nam. It was originally envisioned to visit a non-project province in each country. This plan was discontinued after the site visit to the non-project province (Preah Sihanouk) in Cambodia did not yield useful information for purposes of comparison with the project province, nor was it comparable in other potentially important regards with the project province.

CHAPTER 2

Design and Implementation

A. Formulation

5. The project's concept paper was based on high-level policy commitments on regional cooperation for CDC and initial input from the MOHs of each of the CLV countries. The needs and priorities of the CLV countries drove the subsequent development of the project through the work of the project preparatory technical assistance (PPTA) with principal counterparts and steering committees in each of the three countries and a regional steering committee for the Regional Coordination Unit (RCU) component.[9] Although the formulation period was short, the project document provided sufficient detail to support approvals of the project by recipient governments and ADB.

B. Rationale

6. The rationale for a GMS CDC project had its roots in (i) countries' needs to achieve Millennium Development Goal targets, to be better prepared for emerging diseases like SARS and highly pathogenic avian influenza (HPAI),[10] and to plan and implement actions to meet the requirements of the IHR 2005; (ii) ADB's commitment to make investments to support connectivity and lower trade barriers to facilitate economic growth in and among GMS countries;[11] and (iii) ADB's commitment to complement lending to facilitate economic cooperation in the GMS.[12]

7. The proposed project aimed to help the CLV countries mitigate increased risks from greater transmission of communicable disease resulting from increased connectivity for goods and services—especially through building and improving roads, railroads, and waterways. The rationale for ADB to support efforts to offset increased risks of the spread of communicable diseases (whether epidemic or endemic) associated with economic development and climate change in the GMS countries was sound at the time of appraisal and remains so at the time of this performance review.[13]

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[9] ADB. 2004. *Project Preparatory Technical Assistance for the Greater Mekong Subregion Communicable Diseases Control Project*. Manila. (TA 6194-REG).

[10] From 2002 to 2004, emerging infectious diseases SARS and HPAI spread throughout the People's Republic of China and Southeast Asia.

[11] Harmonization of standards and development of facilities needed for the delivery of essential public services (including health and sanitation) were identified as potential areas for regional cooperation). ADB. 2004. *Enhancing the Fight against Poverty in Asia and the Pacific: The Poverty Reduction Strategy of the Asian Development Bank*. Manila.

[12] ADB. 2004. *The Greater Mekong Subregion: Beyond Borders: Regional Cooperation Strategy and Program (2004–2008)*. Manila; ADB. 2006. *Regional Cooperation and Integration Strategy*. Manila. ADB. 2008. *Strategy 2020: The Long-Term Strategic Framework of the Asian Development Bank, 2008-2020*. Manila; ADB. 2009. *Strategic Framework and Action Plan for Human Resource Development in the Greater Mekong Subregion (2009–2012)*. Manila; ADB. 2011. *The Greater Mekong Subregion Economic Cooperation Program Strategic Framework (2012–2022)*. Manila; ADB. 2013. *Strategic Framework and Action Plan for Human Resource Development in the Greater Mekong Subregion (2013–2017)*. Manila.

[13] As a result of climate change, existing health threats could intensify and new health threats could emerge.

C. Impacts and Outcomes

8. The intended *impacts* of the project were to (i) improve the containment of epidemic diseases at local, national, and regional levels; and (ii) reduce the burden of common endemic diseases by about 15% in 26 provinces targeted by the project. The intended *outcomes* were (i) timely and adequate control of epidemics that are likely to have a major impact on public health and the economy in the region; (ii) improved coverage of prevention and care of communicable diseases in vulnerable populations, in particular for poor women and children living in border areas; and (iii) improved know-how, policies, standards, and coordination among countries to improve CDC through effective intergovernmental cooperation.

D. Outputs

9. The project outputs were defined as follows:

(i) **comprehensive national surveillance and response systems**, including institutional structures, preparedness, surveillance, and response; laboratory services; and human resource development (HRD)—in all three countries nationwide;

(ii) **expanded and integrated CDC for vulnerable groups** in 35 provinces (five in Cambodia, six in the Lao PDR, and 15 in Viet Nam; an additional nine provinces were added in the Lao PDR after the start of the project); and

(iii) **productive regional coordination for CDC** through capacity building of MOHs, regional policy dialogue, support for regional institutions in operations research for HIV/AIDS control and other fields in support of this dialogue, and project management.

10. In the report and recommendation of the President (RRP) approved in 2005, the subcomponents for the third component on improving regional cooperation were further defined as (i) dialogue on CDC to build regional coordination; (ii) support for intercountry applied or operations research and development of linkages among public health and scientific institutions; and (iii) project management. In November 2007, these subcomponents were regrouped into the following categories: (i) improving institutional arrangements, strategies, and plans for regional cooperation; (ii) regional knowledge management and HRD; and (iii) information sharing and cross-border cooperation in CDC. The new grouping preserved the original intent and content of the subcomponents but was believed to provide a more useful match between organizational functions. Project management was subsumed under the revised first subcomponent (footnote 4).

E. Cost, Financing, and Executing Arrangements

11. The total project cost at appraisal was estimated at $38.75 million, with $11.25 million being allocated for Cambodia, $7.50 million for the Lao PDR, and $20 million for Viet Nam. ADB provided three separate grants totaling $30.00 million that financed 77.4% of the total cost, with the balance being sourced from government contributions of $7.85 million equivalent and a WHO contribution of $0.90 million.

12. At project closing, total costs were $34.40 million (underspend of 12%), inclusive of ADB's contribution of $29.47 million. Some 98.2% of ADB's appraised contribution was expended and 100% of WHO's appraised contribution. The grant

recipient countries contributed 51.3% of the appraised amount by the end of the project. Cambodia contributed 86.9% of its appraised counterpart contributions, while the Lao PDR contributed 31.1% and Viet Nam 41.8% (Appendix 2, Table A2.1).[14] Counterpart country contributions were significantly lower than estimated at appraisal in the Lao PDR and Viet Nam because of the tax-free importation of vehicles, lower than expected recurrent costs, and government mobilization of additional non-project resources for outbreak control.

13. The project established similar institutional and financial arrangements in the three countries to strengthen national surveillance and response systems, and improve CDC for vulnerable groups. Any differences reflected variations in (i) the organization of the public health sectors; (ii) the responsibilities and existing capacities of human resources and institutions dealing with CDC in each country; (iii) the existence or absence of a development partner-supported sector-wide approach; and (iv) the availability of other development partner financing for various inputs that could be financed through the GMS CDC1 project.

14. The MOH was the executing agency for each country. Oversight for the projects was provided by an existing steering committee (in Cambodia and Viet Nam) or a steering committee created for the project (in the Lao PDR). The MOH department with the broadest responsibility for CDC was designated the national-level implementing agency. The project was implemented through MOH departments, provinces, and institutions in each country, which were charged with the implementation of development partner efforts—including existing support from ADB (e.g., the Health Sector Support Project in Cambodia and the Strengthening Preventive Health System in Viet Nam).[15] National institutes and provinces associated with the project were designated implementing agencies (Appendix 2, Table A2.2).

15. A national imprest account was established with MOHs in Cambodia and Viet Nam and with the Ministry of Finance in the Lao PDR. Second generation imprest accounts (SGIAs) were established with project provinces in Cambodia and Viet Nam, with national institutes in Viet Nam, and for the project management unit (PMU) in the Lao PDR. Where SGIAs were not established, the PMUs provided budget on an ongoing basis (e.g., national institutes in Cambodia and the Lao PDR) or on a needs basis (e.g., for non-project provinces for control of outbreaks of diseases included in the project, such as dengue) (Appendix 2, Table A2.3).

16. To strengthen regional cooperation in CDC, a regional steering committee (RSC) was created during project formulation and it continued to meet every six months, with the location of the meetings rotating among the three countries. The RSC was chaired by the minister or vice-minister of the host country for each meeting and membership included representatives from national steering committees, PMU or project directors, ADB, and WHO WPRO. The role of the RSC was to provide input to RCU staff on the selection of activities to facilitate (i) building regional capacity and cooperation for CDC, and (ii) use of pooled funds for regional activities. In addition, the RSC meetings provided an opportunity for policy dialogue and discussion of common country problems on project implementation.

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[14] See discussion on Covenants in paras 28-32.

[15] ADB. 2002. *Report and Recommendation of the President to the Board of Directors: Proposed Loan to the Kingdom of Cambodia for the Health Sector Support Project*. Manila; ADB. 2005. *Report and Recommendation of the President to the Board of Directors: Proposed Loan and Asian Development Fund Grant to the Socialist Republic of Viet Nam for the Preventive Health System Support Project*. Manila.

17. The RCU was based in Hanoi, with a single full-time professional staff and two to three full-time support staff. It hired short-term technical or administrative assistance for specific activities. RCU activities comprised $4.3 million or 11% of the total project funds. ADB managed a pooled fund created from amounts subtracted from each country's grant. Contributions required from each country for all regional activities, such as technical fora and workshops, were $1.3 million (30%) for Cambodia, $0.9 million (20%) for the Lao PDR, and $2.2 million (50%) for Viet Nam. The contributions were made according to the above formula for all activities except intercountry research, where contributions from any given country were determined on a case-by-case basis. Advances from the pooled fund were based on the needs for RCU salaries and administrative expenses and according to estimated budgets for activities agreed upon by the RSC. WHO WPRO used its contribution to the project to engage international experts.

F. Procurement, Construction, and Scheduling

18. The project was appraised in 2005, had a start date of January 2006, and was originally scheduled to be implemented over a 4-year period. The original closing date was 2010, and the project was extended by 2 years (50% overrun). Project funds covered training courses and workshops at the regional, national, and provincial levels; and procurement of supplies and equipment for health facilities and laboratories in the CLV countries. The project grant agreements required ADB-financed goods and services to be procured according to ADB's Procurement Guidelines and relevant laws in each country.[16] In some cases, procurement contracts permitted contractors to provide after-sales support for laboratory equipment maintenance and supply of spare parts.

19. Cost by line item for the project as a whole deviated by more than 20% from the revised estimates for community mobilization (130.9%) and project management (123.9%), and by less than 20% for civil works (40.7%), communications (48.5%), consulting services (60.7%), and vehicle operation and maintenance (65.8%). The line items where costs deviated by greater or less than 20% from appraisal estimated differed by country. The highest and lowest line item deviations for (i) Cambodia were community mobilization (167.0%) and civil works (18.8%), (ii) the Lao PDR were project management (170.7%) and communications (66.7%), and (iii) Viet Nam were system development (178.3%) and vehicle operation and maintenance (38.1%) (Appendix 2, Table A2.4).

20. All the executing agencies faced challenges that increased the time required for major procurements. In Viet Nam, the government required two reviews for each major procurement contract. The RCU staff changed the procedure for solicitation and awarding of operational research grants when the process for the first round was lengthy. All executing agencies reported that ADB procurement procedures were complex (i.e.,., involved many steps), especially when ADB changed procurement instructions and templates within a year. It was difficult to develop staff competent in

[16] ADB. 2005. *Grant Agreement (Special Operations): Greater Mekong Subregion Regional Communicable Diseases Control Project (Cambodia Component) between the Kingdom of Cambodia and the Asian Development Bank*. Manila. (GAS: CAM 36672); ADB. 2005. *Grant Agreement (Special Operations): Greater Mekong Subregion Regional Communicable Diseases Control Project (Lao PDR Component) between the Lao People's Democratic Republic and the Asian Development Bank*. Manila (GAS: LAO 37604); ADB. 2005. *Grant Agreement (Special Operations): Greater Mekong Subregion Regional Communicable Diseases Control Project (Viet Nam Component) between the Socialist Republic of Viet Nam and the Asian Development Bank*. Manila (GAS: VIE 38017).

dealing with ADB requirements because of the limited pool of qualified individuals and frequent staff turnover. Executing agencies recommended that ADB reduce the frequency of changes to procurement procedures and provide training to executing agencies prior to implementing changes in procurement (footnote 4).

G. Design Changes

21. A number of minor changes were made to project design, where sufficient flexibility was provided, to permit CLV countries to direct grant funds to address CDC needs, given disease outbreaks in some years. This flexibility in the allocation of GMS CDC1 funds among a menu of epidemic and endemic communicable disease priorities was helpful after project appraisal, as a number of other development partners started providing significant amounts of funding for HPAI surveillance and investigation. Further, the grant agreements allowed MOHs to use project funds for outbreak control in project provinces—as well as in any province(s) in each country when alternative sources of financing for outbreak control were not available.

22. Country-specific changes in project design were as follows:

(i) **Cambodia:** extension of the closing date by 1 year to permit the use of unexpended grant funds for dengue control and other outbreak responses until the start of the follow-on project (CDC2).

(ii) **Lao People's Democratic Republic:** the project scope was changed to permit some of the project funds to be used for the procurement of laboratory equipment for the Institut Pasteur in Vientiane. Further, $390,000 of financing from the Lao PDR's contingency allowance was added to its grant for the expansion of epidemic and endemic disease control activities to an additional four provinces. Finally, funds from a separate grant for control of HPAI were provided as bridge financing to cover the Lao PDR's financial needs to continue project activities from the end of GMS CDC1 to the approval of CDC2. These funds permitted the expansion of activities to improve CDC for vulnerable groups to an additional five provinces, resulting in a final number of project provinces of 15.

(iii) **Viet Nam:** additional laboratory equipment was purchased for the Institute of Hygiene and Epidemiology in the Central Highlands; and the three institutes of malaria, parasitology, and epidemiology. This change may explain why Viet Nam spent a higher proportion of its project funds on laboratory equipment (23.9%) than Cambodia (6.2%) or the Lao PDR (11.0%) (Appendix 2, Table A2.4).

H. Consultants

23. ADB grant funds financed international consultant input for a regional coordinator (46.0 person-months) and a program coordinator (43.5 person-months) based in Hanoi, a health systems expert (33.0 person-months) based in the Lao PDR (33.0 person-months), and an HIV/AIDS expert (7.5 person-months) based in Cambodia. These consultants were managed by the RCU and required to provide technical assistance (TA) in their areas of expertise and support government counterparts in their country of residence with project management.

24. ADB signed a project implementation agreement with WHO WPRO in February 2006 to recruit international technical experts for surveillance and response (three consultants, one per country for 22.0 person-months each), a dengue fever

expert (22.0 person-months based in Phnom Penh), and an endemic disease expert (22.0 person-months based in Vientiane), with both of the latter being required to provide TA to all three countries. Although WHO was unable to recruit suitable consultants for these technical posts until June 2007, technical staff in WHO country offices provided TA for laboratory and infection control in the Lao PDR and Viet Nam during 2006 and 2007. WHO's counterpart funding supported the services of an outbreak and hospital preparedness expert, a laboratory virologist, a health information system expert, and a health legislation expert, but these experts were not available throughout the project.[17]

25. ADB grant funds financed TA from domestic consultants in Cambodia (132 person-months), the Lao PDR (181 person-months), and Viet Nam (101 person-months). All three countries engaged domestic consultants for monitoring and evaluation and outbreak (and hospital) preparedness. Other expertise sought from domestic consultants varied between countries, reflecting the countries' different programmatic needs, gaps in capacity of MOH personnel, provision of TA from other development partners, or the lack of suitable candidates for advertised positions (Appendix 2, Table A2.5)

26. International and domestic consultant recruitment was done according to ADB's Guidelines on the Use of Consultants. WHO WPRO implemented its own procedures for recruitment of technical consultants, which was done in a manner acceptable to ADB. Recruitment of international consultants was satisfactory, but recruitment was delayed until the second year of the project in at least two of the CLV countries. The executing agencies directly engaged domestic consultants.

27. The PCR reported that the performance of both international and domestic consultants was *satisfactory*, but noted that coordination between the international consultants engaged by ADB and WHO WPRO within the three countries could have been improved. Government officials interviewed during the independent evaluation mission (IEM) were satisfied with the quality of international and domestic consultants engaged under the GMS CDC1 project. All countries reported difficulty finding suitable candidates for available positions for domestic consultants, as the levels of salaries allowed and cost norms for travel and per diem were too low to attract qualified candidates. Some countries hired younger consultants, some of whom may have been engaged in project administration as well as technical tasks.

I. Grant Covenants

28. The GMS CDC1 grant agreements included 21 covenants for Cambodia and the Lao PDR and 23 covenants for Viet Nam. These covenants were either worded identically, or appeared identical in intent, across the three countries. The covenants required specific actions related to project administration, technical areas, social and environmental safeguards, and regional activities. In addition, the grant agreements included text that the grants were subject to ADB's Special Operations Grant Regulations of 2005.[18] The PCR concluded that the covenants and safeguards were relevant and were fully complied with, except the gender action plan (GAP) and the ethnic minority plan (EMP) (Appendix 3).

[17] Consultants fielded for the surveillance and response positions generally had epidemiology or infectious disease control backgrounds. In Cambodia, the consultants assisted in revising weekly epidemiological report forms that were subsequently distributed to provinces and districts in the six project provinces.

[18] ADB. 2005. *Special Operations Grant Agreement Regulations*. Manila.

29. The PPER does not fully agree with the PCR assessment. All three countries had difficulty complying with the covenant to provide financial audits within 9 months after the end of each fiscal year. While the PCR noted the reason for late provision of audit information was the complexity of collecting information from a large number of implementing agencies at national and provincial levels, the 9-month period provided to the executing agencies was adequate for the task. Second, the Lao PDR and Viet Nam did not comply with grant covenants on the provision of counterpart contributions. The PCR noted that "…the main reason for lower counterpart expenses was tax exemption for vehicles. Other reasons were lower recurrent costs and late approval of the Annual Operational Plan (AOP). It was not due to lack of funds."[19] The PCR assertion that tax exemption should be considered a counterpart contribution seems questionable as the waiver of taxes is a requirement in ADB's Special Operations Grant Regulations 2005 (see para 28) and it could not be considered a counterpart contribution. In addition, the assertion that the Lao PDR and Viet Nam were unable to meet counterpart contribution targets because the AOPs were submitted late contradicts another of the PCR's findings that these two countries fully complied with a different covenant that required the submission of AOPs to ADB by 31 January of each year.[20] The IED study team concludes that while the CLV countries complied with the majority of the grants' covenants, for a variety of reasons they partially complied with some covenants related to the GAP, EMP, counterpart contribution, and finance.

30. Regarding gender, the GMS CDC1 project was classified as supporting gender equity in opportunities. Each country had formulated a GAP, but the PMUs did not systematically document the extent that women were included in project activities (e.g., training)[21] or among project beneficiaries.[22] The lack of data to verify the extent the countries achieved their gender targets was due to (i) inadequate assessment during project formulation of how specific infectious diseases may affect males vs. females differently in the CLV countries, (ii) the lack of identification during project formulation of what data were routinely collected in each country on a gender-disaggregated basis that would be closely associated with project activities; (iii) the failure of ADB to require executing agencies to set up gender-disaggregated data collection and reporting systems as a precondition for first release of grant funds; (iv) the priority of executing agencies during implementation on strengthening infectious disease control on a population-wide basis, rather than being differentiated by gender; and (v) executing agencies' difficulty in identifying qualified national gender consultants who were willing to accept the project's low wage rates and cost norms.

31. In the project documentation, it was recognized the CLV countries had a significant number of ethnic minorities that were generally among the poorest segments of their populations and often lived in physical and cultural isolation. Higher levels of poverty and malnutrition, lower literacy and lack of awareness of health information, and poor access to health providers contributed to ethnic groups having higher infant and child mortality rates and maternal mortality ratios. While the GMS

[19] See Appendix 6 of PCR.

[20] See Appendix 4, Grant Agreement, Schedule 5, Para. 4.

[21] The Lao PDR was the only country that employed a gender specialist consultant for 3 months of the project. However, it was also the only country that maintained records on the numbers of training participants disaggregated by gender.

[22] ADB's Results Framework of 2008, updated in 2013, requires that at least 75% of the quantitative targets in the GAP show improved gender equality results at the impact and outcome level. Source: ADB. 2013. *Results Framework, 2013–2016*. Manila.

CDC1 project did not solely target areas with high proportions of ethnic populations, several of the project provinces had a high proportion of ethnic groups.[23]

32. Similar to the GAP, the PMUs were unable to provide data showing compliance with all EMP targets. This shortfall in data was due largely to (i) lack of population health statistics, including indicators of ethnicity; (ii) the primary focus of executing and implementing agencies on control of disease outbreaks—often first detected along economic corridors—rather than being reported by ethnic groups; and (iii) governments' sensitivity about targeting activities based on ethnicity, as their goal was ethnic integration.

[23] Ethnic populations comprised signification proportions of the populations in two of five target provinces in Cambodia, three out of six target provinces in the Lao PDR, and two out of 15 target provinces in Viet Nam. Source: ADB. 2013. *Completion Report: Greater Mekong Subregion Regional Communicable Diseases Control Project.* Manila.

CHAPTER 3

Performance Assessment

A. Overall Assessment

33. Overall, the project is rated *successful* by IED, based on the equally weighted individual assessment criteria of relevance, effectiveness, efficiency, and sustainability. The rating is consistent with the PCR, except on the relevance criterion (Appendix 4). Other criteria of impact and ADB and borrower performance are discussed, but not formally rated.

Overall Performance Assessment

Criterion	Weight (%)	Assessment	Rating Value	Weighted Rating
Relevance	25	Relevant	2	0.5
Effectiveness	25	Effective	2	0.5
Efficiency	25	Efficient	2	0.5
Sustainability	25	Likely sustainable	2	0.5
Impact		Significant		
ADB Performance		Satisfactory		
Borrower Performance		Satisfactory		
Overall Rating	100			2.0

ADB = Asian Development Bank.
Note: Highly successful ($\geq$2.7), successful (2.7 > S $\geq$1.6), less than successful (1.6 > LS $\geq$ 0.8), unsuccessful (<0.8).
Source: IED study team.

B. Relevance

34. The PPER rates the overall project *relevant*. At the time of approval and at evaluation, the project's impact and outcome were consistent with government sector strategies in the CLV countries, ADB's strategy and program for the countries, and ADB's strategic objectives (Appendix 5, Table A5.1). Support for strengthening individual country institutional capacity to respond to communicable disease threats, while fostering cooperation and information exchange at the regional level, was appropriate for providing these forms of regional public goods. The project was consistent with the fourth pillar of ADB's 2006 Regional Cooperation and Integration Strategy, calling for cooperation in regional public goods, which could lead to improved population health through strengthened collective action in the health sector.[24]

35. The project was also consistent with ADB's strategic action plans for HRD in the GMS, which aimed to address cross-border issues directly linked to GMS integration,

[24] ADB. 2006. *Regional Cooperation and Integration Strategy*. Manila.

such as cross-border transmission of communicable diseases.[25] ADB's 2011 strategic framework reconfirmed the importance of CDC for subregional integration.[26]

36. The project was consistent with the needs of CLV countries to meet their obligations under IHR 2005. IHR spells out obligations and provides guidance for WHO member countries to assess and manage serious health threats that have the potential to spread beyond their borders.[27] Member countries are required to strengthen core surveillance and response capacities at the primary, intermediate, and national level, as well as at designated international ports, airports, and ground crossings. Beyond the project completion date, the project was consistent with APSED 2010, which aimed to facilitate CLV country progress toward meeting obligations under IHR.[28] Investments in better disease-surveillance systems and in laboratory testing capacity were essential to detect routine and epidemic diseases, and development of human resources was crucial for timely response to contain epidemics.

37. Officials in key ministries in the CLV countries considered the project to be relevant to country development needs at the time of appraisal and at evaluation. With anticipated increases in trade and tourism resulting from greater connectivity between countries, the officials reinforced the continued importance of building country capacity and regional cooperation in CDC. Staff in multilateral and bilateral institutions concurred with the views of government officials on the relevance of the project. For example, in Cambodia, the project was specifically credited with raising the profile of CDC, and the subsequent strengthening of the CDC Department in the MOH.

38. Evidence suggests that country ownership of the project was high in the three countries. For example, in Cambodia where a sector-wide approach was adopted, the project was aligned with the Health Sector Strategic Plan, and it was managed using a common framework (e.g., AOPs) to avoid duplication and to align development partner inputs to the development needs of the country. In the Lao PDR, good coordination ensured that even if multiple development partners operated in the same province, they funded different activities and targeted different populations. At the operational level, executing and implementing agencies in the CLV countries clearly saw the CDC1 project as their own as they developed AOPs from the menu of approved project areas. Further, the countries participated in the RSC to provide guidance on the selection of topics for regional meetings, workshops, and study tours, and selection of regional operations research studies supported through the RCU.

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[25] ADB. 2009. *Strategic Framework and Action Plan for Human Resource Development in the Greater Mekong Subregion, 2009–2012*. Manila; and ADB. 2013. *Strategic Framework and Action Plan for Human Resource Development in the Greater Mekong Subregion, 2013–2017*. Manila.

[26] ADB. 2011. *The Greater Mekong Subregion Economic Cooperation Program Strategic Framework, 2012–2022*. Manila.

[27] Under the IHR, once a WHO member country identifies an event of concern, the country must assess the public health risks of the event within 48 hours. If the event is determined to be notifiable under the IHR, the country must report the information to WHO within 24 hours. Also required is real-time dialogue among governments of affected countries and WHO to propose real-time, evidence-based actions at borders. Member countries are required to strengthen eight core capacities in public health aimed at more rapid detection and response to public health events where and when they occur.

[28] APSED aims to (i) reduce the risk of emerging and outbreak-prone diseases; (ii) strengthen early detection of outbreaks of emerging and outbreak-prone diseases; (iii) strengthen information management for early detection of outbreaks of emerging and outbreak-prone diseases; (iv) strengthen the preparedness for emerging diseases; and (v) develop sustainable technical collaboration within the region. Eight focus areas of APSED 2010 are (i) surveillance, risk assessment, and response; (ii) laboratory; (iii) zoonoses; (iv) infection prevention and control; (v) risk communications; (vi) public health emergency preparedness; (vii) regional preparedness, alert, and response; and (viii) monitoring and evaluation.

39. The analysis of project design was less positive. The sector assessment of CDC problems and systems at the country level did not prioritize endemic diseases based on burden of disease (among poor and ethnic populations). Similarly, the project did not provide any detailed analysis of specific areas needing strengthening by in-country institutions, or the level at which information, education, and communication (IEC), training, and institutional strengthening activities were required. This lack of detail may have been deliberate to provide flexibility in the use of project funds based on evolving country needs, but it meant there was a cost defining results and measuring performance. Further, the sector-wide management approach in Cambodia on early AOP planning and disbursement was not taken into account, leading to slow disbursements initially as the project was not synchronized with the budget planning cycle.

40. The project proposal provided a general statement of outcomes and outputs, with the focus of design being on components (inputs) to strengthen institutions. Quantitative measures were not specified in the DMF for the outputs, nor for the project milestones. However, selected project indicators and targets for the project components that would be monitored in each of the project communities, districts, and provinces were included in an appendix.[29] Ministry staff in Viet Nam noted that more attention could have been paid to develop the monitoring and evaluation indicators for the project. Given the preventive nature of many of the interventions, output and process indicators are useful to monitor progress.

41. The project formulation did not provide a discussion of any alternative designs for the regional component of GMS CDC1. This failure to examine alternative roles and activities for the RCU during formulation contributed to the RCU's weakness during implementation in its efforts to engage with other organizations working to improve regional collaboration related to control of emerging and epidemic diseases for (i) sharing program planning information (e.g., to increase the complementarity of regional efforts); (ii) engaging representatives of other organizations in GMS CDC1 events; or (iii) arranging for GMS CDC1 staff and consultants to attend events of these other organizations.[30]

42. Further, no mechanism(s) were put in place to ensure that GMS CDC1 outputs were complementary, rather than duplicating those of the government or other development partners during implementation.[31] A number of similar or complementary development partner efforts at a regional level were identified, but no mechanism was in place for coordination of efforts in this area. Closer examination of information about ADB and other development partner initiatives suggests that areas of overlap existed between these initiatives and the proposed GMS CDC1 project, which

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[29] ADB. 2005. *Report and Recommendation of the President to the Board of Directors on a Proposed Grant to the Kingdom of Cambodia, the Lao People's Democratic Republic, and the Socialist Republic of Viet Nam for the Greater Mekong Subregion Regional Communicable Diseases Control Project.* Manila. Appendix 12.

[30] The RCU project coordinator made many efforts to engage with other regional organizations and suggested that their lack of interest in GMS CDC1 activities (or outright lack of response for information or to invitations to events) resulted from a perception that the GMS CDC1 was a three-country-only project of short duration and with the RCU having a very small professional staff. Source: RCU May 2010. *Report of the Regional Coordination Unit*. It is unclear to what extent these organizations dismissed RCU efforts to engage more widely with regional events as a consequence of not wanting to legitimize an organization that might compete for their policy or program domain–especially as all regional efforts were development partner-, rather than member-, financed.

[31] Country AOPs outlined budget amounts by initiative or activity by project. These was no narrative included to facilitate understanding of how the proposed use of GMS-CDC1 funds would complement those financed by government or other development partners.

warranted further analysis. This would have enabled the project to fill unique gaps in country and regional needs to strengthen systems for better surveillance and control of epidemic and endemic disease (Appendix 5, Tables A5.2and A5.3).

C. Effectiveness

43. The project is rated *effective*. As noted previously, the intended outcomes were (i) timely and adequate control of epidemics that are likely to have a major impact on public health and the economy in the region; (ii) improved coverage of prevention and care of communicable diseases in vulnerable populations, in particular for poor women and children living in border areas; and (iii) improved know-how, policies, standards, and coordination among countries to improve CDC through effective intergovernmental cooperation.

44. The intended project outcomes of timely and adequate control of epidemics and improved prevention and care of communicable diseases in vulnerable populations was largely achieved, and targets for improved know-how, policies, standards, and coordination among countries to improve CDC were partially achieved.[32] Country plans and activities were ambitious and complex, involving development of surveillance and response capability (including upgrading of laboratory staff skills and equipment) and improved control of five to six endemic diseases per country. Implementation involved multiple institutes, with IEC, treatment, and training activities being provided to agencies at the provincial level and to some villages in target provinces.[33] Despite the ambitious objectives and plans, the executing and implementing agencies produced nearly all outputs as outlined in the DMF. The project outcomes and outputs varied by country, but there were common themes based on the three outputs and subcomponents discussed below. Achievements of milestone activities for components are mapped to country and RCU outcomes and outputs in the DMF, and listed in Appendix 1.

1. Output 1: Strengthening National Surveillance and Response Systems

45. Output 1 provided support to strengthen (i) institutional structures, partnerships, and policies; (ii) outbreak preparedness and surveillance and response systems; (iii) laboratory services; and (iv) HRD.

46. **Institutional structures, partnerships, and policies.** Crisis centers were established at the central level in the CLV countries, with practical collaboration for major outbreaks mainly occurring through cross-border cooperation at the provincial level. The project supported the preparation of CDC legislation, pandemic preparedness plans, decrees on border health quarantine, and regulation on the use of vaccines and immunological products in one or more countries.

[32] Each country may differ in a specific rating for an indicator because of differences among countries in (i) the status of disease control policies, institutions, and programs at the time of the GMS CDC1 project; (ii) the availability of government and development partner financing for systems strengthening and for disease control; (iii) countries' health information systems and each country's project management information systems, which resulted in variation in how countries reported their achievements against project targets or indicators; and (iv) priority given to gender and ethnic considerations.

[33] Of the 35 provinces covered by the project, 34 were targeted for strengthening surveillance and response capabilities, and 32 were targeted for a reduction in the disease burden of HIV/AIDS, or HIV/AIDS and NTDs.

47. **Strengthening surveillance and response systems and preparedness.** Provincial reporting systems were improved, and project emergency funds at provincial level aided in the control of disease outbreaks of avian and human influenza, dengue, cholera, typhoid, diarrheal diseases, and food poisoning. Provincial, hospital, and community preparedness plans were developed to facilitate a quick response to outbreaks.

48. **Strengthening laboratory services.** Essential laboratory equipment was procured for national and provincial laboratories, and complemented an improvement in standard operating procedures (SOPs), quality assurance, and biosafety measures. However, the standard of laboratory facilities was higher in Viet Nam than in Cambodia and the Lao PDR.

49. **Human resource development.** In-service training needs were identified and fellowships provided for hospital and laboratory services. A field epidemiology training program was developed in Viet Nam.

50. All countries put in place intra-MOH institutional structures, partnerships, and policies to record progress toward the achievement of the IHR 2005. Countries also prepared manuals, provided training, and conducted simulation exercises. Less success was achieved in developing capacity to use surveillance information, automating health management information systems (HMISs) and putting in place a geographic information system (GIS) with the locations of health facilities.

51. All three countries strengthened the capacity of their CDC systems to rapidly assess the emergence of epidemics and take timely action to control their spread, thereby reducing the potential impact on the public's health and economies of the countries and the region. Evidence exists that the capacity of the surveillance and response systems improved substantially in the 35 targeted provinces, leading to better reporting on outbreaks, and more timely investigation and control by rapid response teams (RRTs).

52. In Cambodia, the project was credited with improvements in zero reporting from health centers, improvements in disease outbreaks reported within 24 hours, and investigation of outbreaks within 24 hours of reporting. Some issues that were reported included difficulty in accessing ADB project funds for timely response to outbreaks, and lack of funds at the peripheral level to pay per diems for health personnel to go to the field. Other challenges identified at the provincial level were inadequate outbreak reporting that was limited by a lack of cell phone coverage in some areas, and lack of funds to top up cell phones in areas with good coverage. Ministry staff reported that health information systems for communicable diseases were still fragmented at the national and provincial levels, but work was ongoing to synchronize and harmonize the systems.

53. In the Lao PDR, the number of outbreaks detected and reported at project closing increased nearly fivefold compared with 14 reported in 2005. About half of these outbreaks received an appropriate response from a provincial team, and the other half from a central team. When access to ADB funds was delayed, ministry staff in the Lao PDR had access to funds from the United States CDC and WHO for outbreak investigation and transport of samples. In Viet Nam, 60% of targeted districts provided timely reports on outbreaks, and 40% of RRTs provided an appropriate response. A significant challenge that remained in all three countries was the lack of reports from

private sector clinics and hospitals. Viet Nam has a law to remedy this issue, but the MOH acknowledged that gaps remained in its implementation.

54. Staff in multilateral and bilateral institutions acknowledged that reporting of routine disease surveillance data had improved substantially in the CLV countries, but noted that gaps remained in event-based surveillance and laboratory capacity, particularly at the provincial level. It was also noted that surveillance was mainly "passive," with limited capacity and funds available for "active" surveillance.[34] The need to build more depth of capacity at the provincial level was noted. This weakness was confirmed during site visits to provinces in Cambodia and the Lao PDR, but it appeared to be less of an issue in Viet Nam.

55. Cambodia and Viet Nam achieved milestone indicators to upgrade laboratories, while the upgrading of the Lao PDR's laboratory capacity was a longer term prospect. Staff in national institutions in all three countries reported receiving new laboratory equipment and vehicles, which were still in use, although procurement of replacement parts and reagents was listed as a challenge. This difficulty was attributed to ADB's procurement guidelines, which resulted in procurement of "closed systems," i.e., systems that cannot be operated with generic reagents and replacement parts.

56. All countries showed weakness in planning for HRD—especially for women and ethnic minorities. At the time of the project, educational levels for many women, including members from ethnic groups, were relatively low and therefore eligibility for higher education was limited. During the project, the countries did not develop or complete undergraduate or graduate training that included subjects in field epidemiology.

2. Output 2: Improving Communicable Disease Control for Vulnerable Groups

57. Output 2 included the following components: (i) strengthening the capacity for providing integrated CDC in the targeted 35 provinces with the major burden of communicable diseases and large vulnerable groups; (ii) controlling endemic diseases in priority locations; and (iii) improving the continuum of care for HIV/AIDS control in particular hotspots, and regional coordination of HIV/AIDS control in mobile high-risk populations.

58. **Mainstream integrated management of childhood illnesses and communicable disease control.** Cambodia and the Lao PDR succeeded in mainstreaming CDC in the provincial AOPs. While Viet Nam also adopted provincial AOPs, CDC continued to be managed through the preventive medicine program since legislation in Viet Nam includes communicable diseases control as part of the preventive medicine system.

59. **Interventions for priority diseases for poor communities in border areas.** Neglected tropical diseases (NTDs) were controlled in the targeted provinces through

[34] Passive surveillance occurs when local and provincial health departments rely on health care providers or laboratories to report cases of disease. It is simple and requires relatively few resources, but the disadvantage is the possibility of incomplete data as a result of underreporting. The majority of public health surveillance systems are passive, but in some situations it is preferable to conduct active surveillance. Active surveillance occurs when the health department contacts health care providers or laboratories requesting information about conditions or diseases to identify possible cases. This method requires more resources than passive surveillance, but is especially useful when it is important to identify all cases e.g., during an outbreak.

vaccines and medicines administered to the population, and links were established with global NTD control initiatives.[35]

60. **HIV/AIDS control for high-risk populations along transport corridors.** HIV/AIDS patients were treated, and the project supported studies on HIV/AIDS related behavior in border areas.

61. Viet Nam focused on pilot testing an IMCI approach and provided vaccination against Japanese B Encephalitis.[36] Viet Nam's approach to the IMCI pilot provided evidence for its government to expand successful elements of their model, and encouraged Cambodia and the Lao PDR to include village-based efforts in the follow-on second phase of the GMS CDC project (GMS CDC2).[37] All three countries improved coverage of the prevention and treatment of endemic diseases in the project provinces, reduced the incidence and prevalence of dengue and HIV/AIDS, and controlled soil-transmitted helminthes.[38] The Cambodian and Lao PDR initiatives included successful mass drug administration efforts to reduce lymphatic filariasis and schistosomiasis in highly endemic areas.

62. While the GMS CDC1 project design clearly intended for the provision of services to vulnerable population (e.g., women and children living in border or ethnic areas who tend to be poorer and have less access to health services) areas, none of the MOHs systematically collected data on the intended beneficiaries before or during the project. Therefore, it was not possible to evaluate the level of success targeting populations by gender or ethnicity (as compared with targeting by disease).[39] Further, the executing agencies did not give equal emphasis to achievement of the GAP and EMP targets compared with the DMF indicators and milestones. ADB's efforts during supervision missions to focus countries on the GAP and EMP were less effective because of (i) lack of gender specialists to fill domestic positions; (ii) lack of information in CLV statistical or MOH HMISs to provide details on the gender or ethnicity of persons within project provinces; and (iii) sensitivity in some countries about using ethnicity as a social indicator since it might be perceived as a source of social division.

3. Output 3: Strengthening Regional Cooperation in CDC

63. Under this output, the three original subcomponents were regrouped and defined as follows: (i) improve institutional arrangements, strategies, and plans for regional cooperation; (ii) regional knowledge management and HRD; and (iii)

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[35] NTDs are a group of infectious diseases that include dengue, soil-transmitted helminths, lymphatic filariasis, and schistosomiasis. Of these, STH, lymphatic filariasis, and schistosomiasis can be controlled or even eliminated through mass administration of safe and effective medicines (mass drug administration [MDA]). Vector control is the main means to reduce the burden of dengue, and the use of mosquito nets the main means to prevent it.

[36] Viet Nam's IMCI pilot project was an integrated effort to improve communities' knowledge, attitudes, and practices (KAP) concerning actions that could be taken at the household and community level to prevent disease, and know how to respond quickly to reduce its spread.

[37] ADB. 2010. *Report and Recommendation of the President to the Board of Directors: Proposed Loan and Grants to the Kingdom of Cambodia, the Lao People's Democratic Republic, and the Socialist Republic of Viet Nam for the Second Greater Mekong Subregion Regional Communicable Diseases Control Project*. Manila.

[38] Diseases targeted for control in all three countries were dengue and STH. Cambodia and the Lao PDR also targeted lymphatic filariasis and schistosomiasis, while Viet Nam targeted Japanese B Encephalitis and intestinal diseases like cholera and typhoid. Only the Lao PDR targeted control of opisthorchis viverrrini.

[39] The PPER rates the project overall as less effective when GAP and EMP targets are included in addition to the DMF and milestones. The countries were more effective at achieving targets related to disease control or improvement of disease control systems. The PPER rated targets associated with RCU activities as effective whether the GAP and EMP targets were considered or not.

information sharing and cross-border cooperation in CDC (para. 10). The new grouping preserved the content of the component, but it was a more accurate reflection of organizational functions, with project management being subsumed under the first subcomponent.

64. **Institutional arrangements, strategies, and plans for regional cooperation**. CDC coordination occurred through focal points, and annual workshops were held to review progress. Both the People's Republic of China and Thailand were already supporting cross-border cooperation and willing to make a bigger contribution, but a larger GMS plan for regional cooperation in CDC has not yet materialized because ministries decided to adopt a cautious and phased approach.

65. **Regional knowledge management and human resource development**. A wide range of knowledge management activities was completed including forums, workshops, studies, CDC information products, websites, and the establishment of a community of practice. The knowledge products are posted on the CDC website, which also provided weekly information on disease outbreaks and innovations on CDC, as well as policy documents and standards.[40]

66. **Cross-border information sharing and cooperation.** As reported in the PCR, half of the provinces surveyed engaged in cross-border activities supported by provincial governments or through external assistance. Workshops were held to plan cross-border cooperation, and guidelines were issued to staff. Information sharing and joint actions with neighboring countries were improving slowly based on local initiatives, and this bottom-up approach is now the norm. Outbreaks now trigger stronger cross-border cooperation.

67. The project was partly effective in improving know-how, policies, standards, and coordination among countries to improve CDC through effective intergovernmental cooperation. The RCU, with direction from the RSC, organized numerous meetings and workshops on a variety of technical subjects, and established a website to provide relevant scientific and project information and encourage interactions between experts within the CLV countries through virtual communities of practice (Appendix 5, Table A5.3). The RCU was effective at organizing and supporting the international TA financed by ADB, but it had more difficulty with WHO-financed TA that was obliged to follow the procedures of ADB rather than WHO.[41]

68. Government officials who attended regional workshops or meetings supported by the project indicated that the focus of discussions was mostly on technical and administrative concerns, and there was limited follow-up or agreement on actions to be taken. However, they acknowledged that the regional component of the project built trust and familiarity among counterpart colleagues in the CLV countries, and laid the foundation for future collaboration and coordination of regional and cross-border CDC, e.g., through the follow-on second phase of the project supported by ADB.

69. The RCU was partly effective at generating regional cooperation on policy development, partly because each country was developing its own capacity for

[40] Greater Mekong Subregion Regional Communicable Diseases Control Project. http://www.gms-cdc.org

[41] For projects supported by ADB, all United Nations (UN) agencies including the WHO are obliged to follow ADB's procurement and consultant guidelines through contractual agreements. There is a conflict between ADB and UN country eligibility criteria since UN organizations stipulate that all UN member countries are eligible, which does not meet ADB's eligibility criteria.

epidemic disease control, and each government was reluctant to share information that might affect its exports (including tourism). In addition, other organizations, e.g., the Association of Southeast Asian Nations (ASEAN)+3 Emerging Infectious Disease (EID) program, the Mekong Basin Disease Surveillance (MBDS) initiative, and WHO WPRO—had already established themselves as having long-term commitments to the CDC policy space.[42] Finally, the RCU did not achieve the GAP and EMP indicators, showing that it gave higher priority to the disease control orientation of the project, similar to the executing agencies.

D. Efficiency

70. The project is rated *efficient*. This analysis was based on a review of process efficiency, as technical difficulties made it difficult to calculate the economic rate of return (EIRR) on investment in the program. [43] Although the project document included an EIRR, the PCR only included a discussion on this estimate without showing the detailed calculation.[44] The study team planned to estimate the EIRR prior to and after implementation of the project, but it could not obtain the necessary data. Although it is difficult to identify, measure, and value project benefits, the estimated economic impact of the SARS outbreak suggests a high return on investment from the control of epidemics.[45]

71. In Viet Nam, the project was completed on time and to a lesser extent as outlined in the GAP and EMP within budget. Initial project delays occurred because of the time it took to establish PMUs, engage consultants, and prepare and obtain approval for specifications for equipment and bidding documents. Counterpart funds were not immediately released after AOP approval, and liquidations were sometimes delayed, primarily because of staff constraints, including at ADB. However, the PMUs managed to overcome these delays. In the Lao PDR, the project was completed ahead of time. In Cambodia, the program was extended for 1 year to finance dengue prevention, outbreak response, and the final audit and survey.

72. Organizational efficiency was achieved, specifically in the planning and implementation of project activities, as they were carried out by existing government personnel and institutions.[46] The project was mainstreamed through the regular health services; central planning was done in consultation with provinces and implemented through the existing systems of national programs and provincial health services,

[42] The GMS CDC1's RCU experience concerning policy development informed the design of the second phase of the project (GMS CDC2) that has refocused toward building cross-border relations between provinces for information sharing and conduct of joint epidemic simulations.

[43] Reliable ex post estimates of the project's cost-efficiency are not possible for several reasons: (i) project formulation did not provide information on alternative designs to achieve project objectives (e.g., selection of fewer diseases with perhaps a wider geographic scope) or any estimate of the cost-effectiveness of the proposed design; (ii) estimation of cost-effectiveness is difficult when some benefits represent intermediate outputs (training of health staff in surveillance) vs. final outputs of cases or deaths averted from treatment provided to those already ill; and (iii) lack of complete data on intermediate outputs and final outputs for all activities in the PCRs, and especially against a counterfactual of what would have been achieved in the absence of the project.

[44] ADB. 2013. *Completion Report: Greater Mekong Subregion Regional Communicable Diseases Control Project*. Manila. Appendix 10.

[45] J.W. Lee and W.J. McKibbin. Estimating the Global Economic Costs of SARS. 2004. In S. Knobler et al., eds. *Learning from SARS: Preparing for the Next Disease Outbreak – Workshop Summary*. Washington, DC: National Academies Press (US); Institute of Medicine (US) Forum on Microbial Threats. http://www.ncbi.nlm.nih.gov/books/NBK92473/

[46] It is unknown to what extent GMS CDC1 funded activities overlapped with those funded by other development partners, but it would seem reasonable to assume that any overlap would have been minimized given the insufficient levels of government and development partner funding for CDC.

involving minimal additional organizational structures. Greater efficiency was achieved by holding monthly meetings of country-level steering committees attended by representatives of all implementing agencies, which included the project's international technical specialists. In addition, the project directors' weekly project meetings during implementation helped resolve issues impeding project progress.

E. Sustainability

73. The project is rated *likely sustainable.* This rating is based equally on criteria related to the institutional and financial sustainability of project components. The institutional sustainability for strengthening national surveillance and response systems was proxied by political will and commitment, public policies, and institutional capacity. CLV countries' progress toward full compliance with IHR 2005 provides evidence of the institutional sustainability of the first project component. The institutional sustainability of improved CDC in vulnerable groups was proxied by consideration of the degree to which CDC was integrated into provincial health systems. At the time of preparation of the PPER, all countries were still relying to a large extent on vertical disease control efforts where development partner funding is targeted and time-limited. Since these efforts do not currently include NTDs, the sustainability of improved CDC for vulnerable groups is less likely.

74. The financial sustainability of strengthening national surveillance and response systems was determined by examining trends in government expenditures for health, trends in development partner financial assistance for CDC, and the policies and their implementation regarding the provision of sufficient salaries and incentives to retain staff trained by the project at national and provincial level.[47] Financial sustainability varied by criteria and by country, with Viet Nam highly likely to sustain financing for project activities in the future. Viet Nam has a low dependence on development partners for health financing (2%), and project recurrent costs were estimated to be only 0.1% of the total recurrent budget of the MOH. Cambodia and the Lao PDR are less likely to be able to sustain project-related activities in view of their greater reliance on development partner financing (20% of total health spending in Cambodia and 22% in the Lao PDR); further, project recurrent costs were a higher percentage of total recurrent financing (0.7% in Cambodia and 1.1% in the Lao PDR) in both countries. All CLV countries were challenged to provide salaries for human resources for health that were sufficiently attractive to retain trained personnel in view of the much higher salaries in the private health sector.

75. Similarly, the institutional and financial sustainability of strengthened regional coordination for CDC was rated likely. Knowledge products generated from the project were still publicly available on the website, but stakeholders would not have continued the RCU in the absence of the follow-on second phase of the project. Although several development partners are likely to finance the RCU, or a similar institution engaged in strengthening regional capacity for communication and cooperation on CDC, the CLV countries are unlikely to finance the RCU directly from their own budgets.

76. The project built trust and confidence among CLV country counterparts through frequent and focused dialogue and exchange, and developed networks across MOHs. However, it is unclear if the dialogue and exchange would have continued in the absence of the follow-on CDC2 project. Information exchange and

[47] Information on trends in CLV government budgets for CDC programs was not available.

joint research on critical regional health issues furthered trust among the countries. Of these activities, cross-border exchange of information has the most potential for sustainability, while lack of funding will constrain the continuation of joint training, cross-border meetings, and joint outbreak investigations. The project-initiated GMS community of practice attracted readers during the project, but interest was not sustained after project closing because of a lack of champions and writers to maintain the websites.[48] Competition with international websites may also have been a factor.

77. Some evidence exists that the activities supported by the RCU gained traction among other organizations, which have picked up where the RCU left off. For example, the United Nations Development Programme in Viet Nam built on the findings of the legal preparedness studies commissioned by the RCU, and the International Vaccine Institute in the Republic of Korea has taken the lead in developing a network of professionals and agencies involved in Japanese encephalitis after the RCU/Institut Pasteur sponsored a regional technical forum on the topic.

78. A summary assessment of the sustainability of impacts, outcomes, and outputs appears in the last column of the DMF (Appendix 1).

F. Impact

79. The PPER rated the health impacts of the project as *significant*. The intended impacts of the project were to (i) improve the containment of epidemic diseases at the local, national, and regional levels; and (ii) reduce the burden of common endemic diseases by about 15% in provinces targeted by the project.[49] All CLV countries met or exceeded project targets for reductions in infant and under-five year old mortality (IMR and U5MR), and prevalence of HIV/AIDS, which were important health Millennium Development Goals (MDGs). The burden of endemic disease declined in the provinces targeted by the project. Except for a dengue outbreak in 2007, all CLV countries reduced dengue incidence rates in project provinces, and cut case fatality rates in Cambodia. This result occurred, despite increases in national dengue incidence rates in the Lao PDR and Viet Nam during the project period.[50] While project contribution to these achievements is plausible, the entire reduction in IMR, U5MR, and HIV/AIDS prevalence cannot be attributed to the program. Further contributing factors toward these achievements are overall improvements in socioeconomic conditions, including maternal and child health services, and funding for health MDGs available from other sources.[51]

[48] For dengue, Japanese encephalitis, and laboratory services.

[49] Although disability adjusted life years were not reported in the PCR for the reductions in disease burden, the large declines in the disease burden of targeted NTDs and HIV/AIDS suggests that the burden of communicable diseases decreased by at least 15% of current disability adjusted life years in the targeted population.

[50] It is unknown to what extent the increase in incidence reflected more complete data from project provinces as a result of project component 1, which strengthened disease surveillance. This is further complicated by the periodic dengue epidemic cycles e.g., at 3- to 5-year intervals.

[51] For example, UNAIDS (the joint United Nations program on HIV/AIDS), the United Nations Children's Fund (UNICEF), The Global Fund to Fight AIDS, Tuberculosis and Malaria, the Measles and Rubella Initiative, and Gavi, the vaccine alliance.

CHAPTER 4

Other Assessments

A. Asian Development Bank Performance

80. ADB performance is rated *satisfactory.* This is a notable achievement as the project had a complex design given the number of (i) recipient countries; (ii) institutions per country; (iii) administrative levels at which activities were organized; (iv) range and severity of epidemic and endemic diseases; and (v) procurement of a variety of equipment, domestic TA, supplies, and vehicles (Appendix 2, Tables A2.1 and A2.2).

81. To a large extent, ADB's performance rating was a result of continuity in the senior staff guiding the GMS CDC1 project though all stages from the concept paper, formulation, implementation, and writing of the PCR. One area that had a shortfall was the GAP and EMP, which were not prioritized by executing agencies. Although ADB recognized this as an issue during supervision visits and the midterm review (MTR), no evidence exists that changes were made to the GAP and EMP to make it more feasible to measure what gender and ethnic-related measures were achieved by the project.

82. All three countries' executing agencies reported difficulty in keeping up with the frequent changes (several per year) in ADB's procurement and audit requirements. The situation was made even more difficult as the executing agencies experienced difficulty in retaining qualified national staff for financial management. It was also noted that the MOH in Viet Nam changed decrees on procurement several times, which resulted in additional layers of approval procedures. In-service training from ADB was lacking, and support from ADB resident missions was very limited since the project was managed out of ADB headquarters in Manila. ADB had decided to not make changes to the project design or scope until the MTR, which occurred at the end of the third year of the project. This meant there was little time for the CLV countries to benefit from the changes adopted after the MTR.

83. Each executing agency and the RCU completed a PCR using the template provided by ADB, although the content varied depending on the information available for evaluation. The RCU PCR was very well organized and defined alternative ways in which the CDC1 RCU could perform its functions (e.g., provide funding to the ASEAN+3 EID program or the MBDS initiative), and tasks to establish a follow-on RCU. To some extent, the improvement in performance resulted from hiring competent technical specialists and support staff for the RCU, and placing reliance on the RSC to guide the work of the RCU. The overall project PCR organized the contents of the individual PCRs quite well, and project-related recommendations were largely incorporated into the follow-on second phase of the project.

B. Grantees' Performance

84. The recipient executing agencies' performance overall is rated *satisfactory*. Executing agencies in all three countries demonstrated high-level support for the project, had effective project steering committees, participated at the design stage and supported ADB review and performance evaluation processes. This level of support demonstrated the commitment of executing and implementing agencies to implement the GMS CDC1 project.

85. The executing agencies satisfactorily complied with grant covenants, with the exception of the GAP and EMP and failure to submit audits within 9 months after the close of the financial year. Only the executing agency in Cambodia provided adequate counterpart funding on time, while executing agencies in the Lao PDR and Viet Nam provided less than 50% of estimated counterpart funds, substituting in-kind resources. Finally, none of the three executing agencies met the criteria of timeliness of the submission of financial statements and the quality and timeliness of the audit process. This performance reflected a variety of factors: (i) ADB's frequent change in financial reporting requirements and formats, (ii) difficulty in identifying and retaining qualified domestic accountants for the PMU, and (iii) delays in obtaining receipts for expenditures from implementing agencies in provinces involved in implementation.

CHAPTER 5

Issues, Lessons, and Follow-up Actions

A. Issues

86. Reporting on outbreaks and collection of routine disease surveillance data has improved in all three countries, but gaps remain in event-based surveillance and laboratory capacity at the provincial level.[52] Lack of reporting from private sector clinics and hospitals remains to be addressed. Further, sustaining improvements in outbreak investigation and response is at risk because of high costs, difficulties in rapidly mobilizing government funds, and reliance on external development partner financing.

87. The CLV countries encountered difficulties in developing capacity to use surveillance information, automating their HMISs, and putting in place a GIS with the locations of health facilities. HMISs to gather and transmit data electronically are still at an early stage of development. Further, the countries did not develop undergraduate or graduate-level training programs that include subjects in field epidemiology.

88. The RCU was perceived as a project-based, time-limited, three-country effort, so it faced difficulties engaging with other organizations involved in regional cooperation for CDC. Further, knowledge products generated through the support of the RCU and posted to the GMS CDC1 website are now available on the CDC2 website, but their longer-term sustainability is at risk.

B. Lessons

89. **Consistent support**. Continuity of ADB project staff was an important element of the successful implementation of this complex three-country project. The same team of senior staff continued to guide the GMS CDC1 project though all stages from the concept paper, formulation, implementation, and writing of the PCR.

90. **ADB procurement**. All three countries reported difficulty keeping up with the frequent changes in ADB's procurement and audit requirements. This was compounded by the executing agencies' difficulty in retaining qualified national staff for financial management, lack of in-service training from ADB, and limited support from ADB resident missions since the project was managed out of Manila.

91. **Long-term prospect**. Regional cooperation for CDC is a long-term prospect. As a first generation GMS project supported by ADB, the CDC1 project left behind a legacy of regional political commitment, trust, and familiarity among counterpart colleagues in CLV countries, and knowledge products generated from RCU-supported studies.

[52] The ADB-supported follow-on CDC2 project continues the work of the CDC1 project to strengthen laboratory capacity.

92. **Alternative Regional Coordination Unit designs**. The RCU could have been embedded within an established organization (e.g., an intergovernmental agency or nongovernment organization) or existing program with similar objectives to the CDC1. By hiring a consultant and housing the RCU independently, institutional capacity for coordinating CDC was not developed within these agencies, risking loss of momentum after project closure.

C. Follow-up Actions

93. The PCR for CDC1 made recommendations to (i) strengthen monitoring and evaluation, (ii) prioritize the GAP and EMP, (iii) continue strengthening outbreak response, (iv) reach border villages with CDC, (v) strengthen cross-border cooperation, and (vi) develop provincial training systems. General recommendations on regional project design and implementation, and procurement and financial management, capacity were also considered in the design of CDC2. A number of recommendations made in the PCR have largely been incorporated into the follow-on CDC2 project.

94. From IED's perspective, knowledge products generated and accumulated through ADB support for the GMS CDC1 and CDC2 projects could be consolidated. The website and contents could then be handed over to an established regional organization that has a longer-term presence for regional coordination of CDC, and the capacity and resources to host an information clearinghouse. Knowledge products can then be updated continuously to reflect the most current information available, and ensure the sustainability of ADB's investments.

95. Future ADB efforts to improve country capacity and regional coordination for CDC could consider developing partnerships with established organizations that have a longer-term presence for regional coordination in CDC.[53] ADB support for complementary investments in technological infrastructure for HMISs, GISs, and curriculum development for field epidemiology would be essential. New ADB support in this area could build on the trust and networks already established by CDC1, to support further strengthening of policy and framework agreements, harmonization of practices and approaches, and set regional standards for goods and services. For any new regional initiative on CDC, addressing the emerging issue of food safety, and strengthening links between animal and human health, would be crucial. Pandemic preparedness is best supported in the context of disaster preparedness, with a multisector and multi-hazard approach, and business continuity plans.

[53] For example, the ASEAN+3 Field Epidemiology Training Network under the umbrella of the ASEAN Secretariat.

Appendixes

APPENDIX 1: DESIGN AND MONITORING FRAMEWORK

Design Summary	Performance Targets/Indicators	Results	Sustainability
Impact Contain the spread of epidemic diseases at local level, and reduce the burden of common endemic diseases by about 15% in the targeted provinces, and more for certain specific infections, in the CLV countries. This will help these countries progress toward their health-related MDGs for 2015 of reducing the child mortality rate and containing the spread of HIV/AIDS and other infections.	**Cambodia targets by 2010:** IMR: reduced from 75/1,000 to 60/1,000 live births U5MR: reduced from 105/1,000 to 85/1,000 live births HIV prevalence rate among 15- to 49-year-olds reduced from 2.3% to 2.0% **Lao PDR targets by 2010:** IMR: reduced from 75/1,000 to 50/1,000 live births U5MR reduced from 100/1,000 to 60/1,000 live births HIV prevalence rate among 15- to 24-year-old commercial service women remains below 1% **Viet Nam targets by 2010:** IMR: reduced from 64/1,000 to 40/1,000 live births U5MR reduced from 40/1,000 to 32/1,000 live births HIV prevalence rate in the general population kept below 0.32% (estimate for 2005 is 0.27%) **All countries:** Burden of communicable diseases decreased by 15% of current disability adjusted life years in targeted population	**Cambodia:** IMR: reduced from 56.8/1,000 in 2004 to 32.5/1,000 in 2013 U5MR: reduced from 70.5/1,000 in 2004 to 37.9/1,000 in 2013 HIV prevalence among 15–49 years old adults reduced from 0.9% in 2006 to 0.2% in 2013 **Lao PDR:** IMR: reduced from 72.5/1,000 in 2004 to 53.8/1,000 in 2013 U5MR: reduced from 100.8/1,000 in 2004 to 71.4/1,000 in 2013 HIV prevalence rate among 15–24 year old service women reduced from 2.02% in 2004 to 0.1% in 2013. **Viet Nam:** IMR: reduced from 24.3/1,000 in 2004 to 19/1,000 in 2013 U5MR: reduced from 31/1,000 in 2004 to 23.8/1,000 in 2013 HIV prevalence rate among 15–49 year olds is 0.2% in 2013.	IMR and U5MR reductions reflect overall improvements in socioeconomic conditions, including of maternal and child health services. Reductions likely to be sustained in the absence of conflict or an emerging infectious disease with high mortality rates for children. Sustainability of reductions in HIV/AIDS prevalence will require continued funding. Uncertainties regarding continuation of UNAIDS (the joint United Nations program) on HIV/AIDS funding for middle-income countries places HIV/AIDS prevalence reduction achievements at greater risk in Cambodia and the Lao PDR, which rely to a greater extent on development partner financing for health.

Design Summary	Performance Targets/Indicators	Results	Sustainability
Outcome (1): Timely and adequate control of epidemics that are likely to have a major impact on the region's public health and economy.	Proportion of targeted districts that provided timely reporting and appropriate response to disease outbreaks	**Cambodia:** Submission of zero reporting from health centers increased from 85% to 95% between 2006 and 2009. 90% of disease outbreaks are reported within the first 24 hours (target = 100%). 98% of disease outbreaks reported are investigated within 24 hours. **Lao PDR:** 66 outbreaks were reported in 2009, of which 46% were responded to appropriately by provincial teams and 55% were responded to appropriately by a central team (achieving target of 100%). **Viet Nam:** 60% of targeted districts provided timely reporting. 40% of rapid response teams provided an appropriate response.	Improvements in zero and outbreak reporting are likely to be sustained because of the low cost of technologies used for reporting. Improvements in outbreak investigation are at greater risk of not being sustained, especially in Cambodia and the Lao PDR, because of the higher cost of outbreak investigation, difficulty in mobilizing government budgetary funds quickly, and reliance on the availability of funding from development partners for outbreak investigation.
Outcome (2): Improved coverage of prevention and care of communicable diseases in vulnerable populations, in particular poor women and children living in border areas.	Proportion of targeted men, women, children, and ethnic minorities that received proper prevention and care for common infections, including HIV/AIDS	**Cambodia** Dengue vector control was 93.2% in 2009 in high-risk areas of 5 targeted provinces. Treatment for STH was provided to 83% of pregnant women, 64% of preschool children, and 53% of women with a child less than 2 years of age. Nationally, the number of patients receiving HAART increased from 12,355 in 2005 to 34,384 in 2009. **Lao PDR** Dengue vector control coverage in villages was 31% in 2007, 59% in 2008, and 30% in 2009.	Sustainability of improvements in endemic disease control is at risk in Cambodia and (especially) Lao PDR because of dependence on development partner financing for drugs and insecticide. While financial sustainability in Viet Nam is very promising, post CDC1 the Government of Viet Nam has not provided government financing to purchase drugs to provide MDA for STHs. Other threats to longer-term sustainability come from increased numbers of migrants from areas or countries with poorer endemic disease control,

Design Summary	Performance Targets/Indicators	Results	Sustainability
		Viet Nam Use of mosquito nets increased from 85% to 98%. Use of insecticide-treated mosquito nets increased from 1.5% to 5.4%. 46,191 children fully vaccinated for Japanese encephalitis	and emergence of disease viruses, parasites, or vectors resistant to lower-cost drugs or insecticides used in disease control efforts.
Outcome (3): Improved know-how, policies, standards, and coordination among countries to improve CDC, including HIV/AIDS control.	Policy reforms carried out to improve CDC, including integration of CDC in provincial health systems, improved delivery systems, cross-border and bilateral coordination, and other health system improvements Access of migrants and mobile people to health services	**Regional** Early warning system for intercountry reporting of disease outbreaks, including establishment of response systems, focal points, and coordination arrangements. Development of various knowledge management products. Access of migrants and mobile people to health services was not measured.	Functioning of formal early warning systems at end of CDC1 was reported to be problematic because of national concerns over the release of information concerning suspected epidemic disease outbreaks. Availability of CDC1 knowledge management products limited after project closure because of lack of support for project website. Products became available later under CDC2 website.
Output (1): Comprehensive national surveillance and response systems, including institutional structures, preparedness, surveillance and response, laboratory services, and HRD—in all three countries nationwide	Degree of compliance with requirements of revised IHR. Target: full compliance by WHO deadline Preparedness plans formulated and implemented in all target areas Goals and standards of plans attained Improved capability of hospital and preventive staff in organizing outbreak response Greater coordination of sectors	**Regional** Insufficient global support for the rollout of the WHO framework for IHR and APSED; thus linkages between WHO strategic frameworks and national implementation remain weak. All 24 provinces, districts, and hospitals have an outbreak plan. Rapid response teams are equipped, trained, and functioning well. Coordination mechanisms among sectors are in place but only activated when outbreaks occur. International checkpoints have contingency plans for public health emergencies and in Cambodia and Viet Nam, all ships receive sanitation control by quarantine service.	Performance indicators for output 1 not (fully) met by project closure are not sustainable (e.g., laboratory services, hospitals surge capacity). Sustainability of achievements varies by indicator and country: –Transport-related checkpoints likely sustainable but unclear if adequate capacity for quarantine has been developed. –Outbreak plans, while developed, will become less effective over time if countries do not provide new and

Design Summary	Performance Targets/Indicators	Results	Sustainability
		Most laboratories do not meet MOH standards. Hospitals do not have surge capacity. **Cambodia:** Regional trends on IHR 2005 compliance steadily improved 2010–2013. Inter- and intra-ministerial coordination mechanisms for outbreak response and rollout of IHR and APSED supported. While a National Pandemic Influenza Program was developed in close collaboration between the MOH, Ministry of Agriculture, Forestry and Fisheries, and NCDM in July 2007, the primary development partners were from the UN system. Developed and implemented: (i) Policy for Disease Outbreak Investigation and Response in June 2007, (ii) national legislation and policies to support EWAR in 2008, and (iii) Policy for Dengue Outbreak Investigation and Response in 2009. National surveillance and response system rolled out for 5 provinces. Manuals prepared and equipment provided, including for international border checkpoints. Prepared plans developed and orientation provided but need more. CDCD has improved data analysis for IHR and APSED with support of WHO. **Lao PDR** Regional trends on IHR 2005 compliance steadily improved 2010–2013. Inter- and intra-ministerial coordination mechanisms for outbreak response and rollout of IHR/APSED were developed and a National Surveillance Working Group was established, including development partners.	refresher training. –Development partner financing is required for effective functioning of rapid response teams in Cambodia and Lao PDR.

Design Summary	Performance Targets/Indicators	Results	Sustainability
		Strategic plans for CDC were developed including (i) SOP for dengue surveillance, outbreak detection, outbreak response, and investigation (2007); (ii) National Dengue Control Policy (2007); (iii) Helminthiasis Policy; and (iv) National Avian Influenza Control and Pandemic Preparedness Plan, 2006–2010); No new CDC legislation reported. Revised national surveillance and response system put into place; and RRTs established. Policies and regulations reviewed and aligned with the IHRs; commitment to the development of long-term strategic plans for CDC; revised national surveillance and response system in place; RRTs established. National surveillance system (EWARN –Early Warning, Alert and Response Network) installed by NCLE; 17 disease conditions reported from all hospitals, health centers, and VHW, using telephone and internet Completion of outbreak investigation and response manuals, standard operating procedures, and RRT guidelines to respond to outbreaks; equipment and transport provided for provincial and district RRTs Training of health officers, RRTs, VHVs; quarantine officers, customs, and disinfection staff at border checkpoints; provincial and district hospitals (case management); and community leaders and others, in surveillance and outbreak response (total 9,500 persons) National Avian Influenza Control and Pandemic Preparedness Plan 2006-2010 developed. All provinces completed pandemic preparedness plans by 2009. Hospital preparedness plans prepared. Outbreak simulation exercises conducted for	

Design Summary	Performance Targets/Indicators	Results	Sustainability
		central and provincial staff along borders. Curriculum for surveillance and response refresher training developed; Laboratory assessment done, but the system of quality assurance and biosafety has not yet been developed Development of and training in GIS Basic equipment provided to the reference laboratory and a few provincial laboratories **Viet Nam** Regional trends on IHR 2005 compliance steadily improved 2010–2013. Inter- and intra-ministerial coordination mechanisms for outbreak response and rollout of IHR/APSED supported by UN. National surveillance and response system (EWARS) rolled out for 15 provinces. Manuals prepared, equipment provided to all provincial and district RRTs. Preventive medicine staff, hospital staff, and over 80% of VHWs in targeted provinces were trained in community-based surveillance and response. A community-based HIV prevention program implemented in high risk districts and communities along major economic corridors in southern Viet Nam, including through Viet Nam Administration of HIV and AIDS Control (VAAC) Participatory program planning Developed community-based control models for dengue, Japanese B Encephalitis, cholera, typhoid, and STH. For dengue, conducted case detection and treatment, and vector control; and established a collaborator network for mobilizing households	

Design Summary	Performance Targets/Indicators	Results	Sustainability
		in high risk locations	
Output (2): Expanded and integrated CDC for vulnerable groups in 35 provinces (5 in Cambodia, 6 in Lao PDR, and 15 in Viet Nam; an additional 9 provinces were added in Lao PDR after the start of the project).	Strengthened provincial capacity for CDC Supporting comprehensive CDC for vulnerable groups, including control of neglected communicable diseases like dengue and parasitic infections Improving prevention of HIV/ AIDS and care for high-risk populations.	**Regional** All provinces have increased capacity for CDC Scaled-up support for control of dengue and NTDs in all provinces No specific targeted support for ethnic groups HIV /AIDS prevention coverage scaled up in Lao PDR **Cambodia:** At least 5 provincial staff from each targeted province received training in planning and budgeting (AOP). Annual workshops and ongoing central support for preparation of provincial AOPs. Provincial training, procurement, and financial management activities supported. Training of at least 1 health staff from all facilities on surveillance, response and preparedness, and training of quarantine staff at border checkpoints in 2009. Training of 80% of health facilities' staff in GMS-CDC1 project provinces and 10% of health facility staff in other provinces. CDCD-MOH, in collaboration with WHO, reviewed the national system of surveillance and response and developed a plan and established new surveillance sites for avian influenza, dengue, and schistosomiasis. Comprehensive Avian and Human Influenza Plan for outbreak preparedness and response was developed and used as basis for training. 90% of target Village Health Support Group members in target provinces trained in community IMCI, and community health education. 12 diseases surveillance manual were used as	Dengue control is difficult to sustain because of the relatively high cost NTD control unlikely to be sustained in Cambodia and Lao PDR without development partner funds

Design Summary	Performance Targets/Indicators	Results	Sustainability
		basic training tool for all levels of surveillance and response system. Latest edition of dengue treatment guidelines used for clinical diagnosis, management, and care. GMS-CDC1 funds used for training in project provinces and select quarantine stations (e.g., in-service training, outbreak simulation exercises, and regional fellowships). Health quarantine staff trained in control and prevention procedures increased from 30% in 2006 to 100% in 2009. Designed and implemented national systems of quality assurance and biosafety. Quality assurance and biosafety guideline was translated from English to Khmer by NIPH. Laboratory equipment procurement plan was developed and integrated into MOH sector AOP in 2007 with technical guidance from PMU and HSSP procurement unit; assessment of laboratory capacity and performance in project provinces in May 2007 by NIPH Laboratory equipment was procured and delivered to NIPH in 2009. All targeted lab technicians were trained in quality assurance; all laboratories received some essential equipment and supplies but laboratories do not meet standards. Training for selected provincial staff on gender issues and integrated management of childhood illness for 104 local trainers, including 33 female trainers (31.7%); 293 health staff, including 99 female staff (33.8%); 1,384 health center staff and 1,055 village health support groups, including 322 females (13.2%). 80% of health facilities in project provinces and 10% in other provinces have at least one staff training in dengue case management. All	

Design Summary	Performance Targets/Indicators	Results	Sustainability
		primary school directors and teachers in target areas are trained in school-based dengue interventions. While GMS-CDC1 supported procurement of HIV/AIDS testing equipment, there is no mention that GMS-CDC1 financed IEC equipment for HIV/AIDS. GMS-CDC1 support was limited to provision of medicines for HAART for AIDS patients. Gender and ethnic concerns were included in training, but there was no specific training on gender and ethnic sensitization. GIS development and training was conducted by MPH-CDCD. However, only manual tools are available in CDCD. **Lao PDR** 17 disease conditions reported from all hospitals, health centers, and village health workers (VHW), using telephone and internet. Guidelines were developed for border crossings. Curriculum for surveillance and response refresher training developed. Training of health officers, RRTs, village health volunteers (VHVs); quarantine officers, customs, and disinfection staff at border checkpoints; provincial and district hospitals (case management); and community leaders and others, in surveillance and outbreak response (total 9,500 persons) Outbreak simulation exercises conducted for central and provincial staff along borders. GIS development and training but unclear if output included inventory of health facilities. All provinces completed pandemic preparedness plans by 2009. Hospital preparedness plans	

Design Summary	Performance Targets/Indicators	Results	Sustainability
		prepared. Gender and ethnic concerns included in technical training. Females constituted 39.4% and ethnic minorities constituted 20.3% of total participants in all training and workshops combined. Project trained some VHVs on integrated CDC prevention and control; 30% of those trained in IMCI were female. Some efforts to increase women (e.g., Lao Women's Union) and ethnic groups' participation in training. No pre or post testing of materials, nor of response of these groups as compared with males and majority populations. Laboratory assessment done, but the system of quality assurance and biosafety was not developed. Basic equipment provided to the reference laboratory and a few provincial laboratories. While the project supported case management training of doctors and nurses for dengue and avian influenza, no pre-service training models or materials were developed. Training needs assessments did look at training needs of women. Provincial health sector planning dataset developed from national database. Tools for planning, budgeting, supervision, and audits developed. Integrated training, combining preventive methods, curative methods, and control measures for CDC provincial teams. Females constituted 39.4% and ethnic minorities constituted 20.3% of total participants in all training and workshops combined on gender issues in CDC.	

Design Summary	Performance Targets/Indicators	Results	Sustainability
		Trained 636 participants in MDA in 2007; conducted schistosomiasis survey; conducted schistosomiasis prevention and MDA for 194 villages (111,484 people). Conducted filariasis survey (showed 60.26% of adults infected in Champasack province). Lymphatic filariasis MDA was administered in 24 remote villages in 2008, and for 204 villages (104,097 people). Trained 1,110 participants in opisthorchis viverrini MDA. Conducted opisthorchis viverrini MDA in 518 villages with 378,958 persons at risk in 2008. Percentage treated who were pregnant women not recorded; treatment success rates and reinfection rates also not reported. Training in opisthorchis viverrini MDA included teachers. Conducted opisthorchis viverrini MDA, but no report of percentage treated who were children; also no information on treatment success rates or reinfection rates. CDC1 supported prevention campaign in hotspots, including a 100% condom campaign, VCT, and curriculum development for HIV/AIDS. No information on changes in pre/post KAP regarding high-risk behavior. Trained 81 female and 37 male health staff on HIV and STI diagnosis and management. Trained 38% of VHVs in HIV and STI. Trained 95 laboratory staff regarding HIV/AIDS. Conducted advocacy campaigns. Conducted workshops on BCC and VCT in 11 targeted provinces. Conducted a workshop with teachers on integrating HIV/AIDS and dengue prevention into life skills primary school curriculum. Provincial health sector planning dataset developed from national database Tools for planning, budgeting, supervision, and	

Design Summary	Performance Targets/Indicators	Results	Sustainability
		audits developed Integrated training—combining preventive methods, curative methods, and control measures—for CDC provincial teams Integrated training for district health staff, health center staff, and VHVs on surveillance and reporting, in 6 provinces IEC materials for various diseases developed, and training in correct use given Case management training of doctors and nurses for dengue and avian influenza. NCLE developed SOP for dengue surveillance, outbreak detection, outbreak response, and investigation (2007) Prepared National Dengue Control Policy (2007) and Helminthiasis Policy (2008) Conducted vector control campaigns Trained 1,166 staff in NTD control Conducted filariasis survey (showed 60.26% of adults infected in Champasack province). Trained 56 laboratory staff Trained 1,110 participants in opisthorchis viverrini MDA Conducted opisthorchis viverrini MDA in 518 villages with 378,958 persons at risk in 2008 For schistosomiasis, trained 636 participants in MDA in 2007; conducted schistosomiasis survey; conducted schistosomiasis prevention and MDA for 194 villages (111,484 people). Lymphatic filariasis MDA administered for 24 remote villages in 2008, and for 204 villages (104,097 people).	

Design Summary	Performance Targets/Indicators	Results	Sustainability
		Trained 38% of VHVs in HIV/STI Conducted advocacy campaigns Trained 81 female and 37 male health staff on HIV and STI diagnosis and management Conducted workshops on BCC and VCT in 11 targeted provinces Conducted a workshop with teachers on integrating HIV/AIDS and dengue prevention into life skills primary school curriculum Provided health check-ups for service women Trained 95 laboratory staff **Viet Nam** 18 simulation exercises conducted at the provincial level. No simulation exercises noted at national or regional level. Provincial level maintaining health facility inventory through manual records. Conducted 15 training courses for laboratory staff in 60 districts for 269 trainees. All (100%) of laboratories of district preventive medicine centers have at least the minimum equipment. No information on pre/post training KAP of laboratory. Total of 1,233 training courses and workshops conducted from 2006 to 2009. Quarantine training for 182 trainees. All project provinces trained in project planning and budgeting, and procurement and financial management. Delay in submission of audits suggests that training in at least financial management was not highly effective. Women and ethnic representation in workshops and meetings was adequate, keeping in mind Viet Nam has relatively low numbers of ethnic	

Design Summary	Performance Targets/Indicators	Results	Sustainability
		groups. Developed community-based control models for dengue, Japanese B Encephalitis, cholera, typhoid, and STH. Trained curative staff at provincial, district, and commune levels on CDC methodology in case of emergencies, based on WHO guidelines. For dengue, conducted case detection and treatment, and vector control; and established a collaborator network for mobilizing households in high-risk locations. Purchased kits and drugs for diagnosis and treatment of common infections. IEC equipment provided to 14 provinces. No information as to whether IEC equipment was used for HIV/AIDS. All project provinces trained in project planning and budgeting, and procurement and financial management. National Institute of Hygiene and Epidemiology (NIHE) prepared manuals for IMCI, trained 401 health staff, 273 commune health staff, and 7,860 health collaborators in IMCI; supervised IMCI in targeted health facilities and villages. Equipment and supplies were procured for IMCI. Trained curative staff at provincial, district, and commune levels on CDC methodology in case of emergencies, based on WHO guidelines Conducted IEC campaigns for Japanese B Encephalitis, NTDs, diarrheal diseases Purchased kits and drugs for diagnosis and treatment of common infections	
Output (3): Productive regional	MOH's performance in regional coordination	**Regional** Effective regional coordination of project	Legislation passed with CDC1 support has high probability of

Design Summary	Performance Targets/Indicators	Results	Sustainability
coordination for CDC through capacity building of MOHs, regional policy dialogue, support for regional institutions in operations research for HIV/AIDS control and other fields in support of this dialogue, and project management	Outreach to counterparts in other countries at all levels to coordinate CDC Policy lessons identified Adjustments in policy formulation process Legislative activities Recognized gaps and weaknesses closed Strategies to increase and strengthen women's participation and access Transfer and translation of research, CDC information, case studies, lessons learned, and curricula Active interactive website	activities through annual regional steering committee and project workshops Only partly effective regional and cross-border coordination of disease control. Cross-border cooperation with the People's Republic of China and Thailand did not materialize because of time constraints. Policy lessons identified mainly concern dengue control and laboratory services. Passage of several relevant laws and regulations, e.g., Viet Nam. Strategies to increase women's participation and access were developed only in Viet Nam. RCU aimed to improve knowledge products and management through support for project website, public health and technical fora, and research and publications. Communities of practice established for dengue and Japanese encephalitis. Conducted competitive funding for regional CDC consortia initiatives. Regional Project Workshops and Regional Steering Committee Meeting: Phnom Penh, 2006; Vientiane, 2007; Danang, 2008; Phnom Penh, 2009, conducted each year with participation of the 6 GMS countries. CLV countries provided peer review and mutual advice on IHR 2005 but did not develop joint implementation criteria (nor were such prepared through Mekong Basic Disease Surveillance Program or Association of Southeast Asian Nations+3 Emerging Infectious Diseases Program). RCU clearly focused on policy lessons but extent of focus in regional meeting and /workshops on	being sustained. Less clear is effectiveness of legislation if financing insufficient for regulatory and/or implementation units. ADB, WHO, and other regional and international bodies continue to provide technical and financing support to complete building of effective regional coordination for disease control. Sustainability of ADB's knowledge management and community of practice initiatives under CDC1 unlikely without ADB's long-term commitment to support these initiatives after the end of the project.

Design Summary	Performance Targets/Indicators	Results	Sustainability
		website cannot be determined. RCU contracted International Federation of Red Cross and Red Crescent Societies (IFRC) to analyze each CLV country's legal preparedness for responding to disasters and communicable disease emergencies in 2009 (reports available on project website). RCU supported a Regional Workshop on Legal Preparedness for Communicable Diseases Emergencies, Phnom Penh, 2009. RCU's entire portfolio of activities and support of international TA supported bilateral (CLV countries with ADB) and regional (among GMS and CLV countries) communications toward greater cooperation regarding CDC. Supported 2 regional studies: (i) Hanoi University of Medical Sciences et al: 2010. International Epidemiological Collaboration on Surveillance, Epidemiology and Prevention of HBV, HCV, HIV and Rabies in the GMS; and (ii) Hanoi School of Public Health et al: 2010. HIV/AIDS Transmission at the Viet Nam-Lao Border Areas. RCU set up interactive website that provided a place for posting of project and non-project technical information on CDC; information on regional events (training and workshops). **Cambodia:** Documented current and expected staff roles and responsibilities regarding CDC surveillance and response at various levels of the health system; designed and conducted continuing education and training programs to address identified knowledge gaps by geographic areas. Designed and implemented Field Epidemiology Training Program by CDCD. Field Epidemiology in Action training course conducted in Cambodia in June 2007 with participants from Cambodia,	

Design Summary	Performance Targets/Indicators	Results	Sustainability
		Lao PDR, and Viet Nam. Selection of Field Epidemiology Training Program trainees was based on merit, not on gender or ethnicity. Conducted BCC and IEC to improve community level control of endemic diseases. **Lao PDR** IEC messages were intensively campaigned on local radio, TV, and in the print media. Widespread community health education campaign on dengue vector control was introduced through VHV. Before starting these Communication for Behavioral Impact activities, the project supported training for provincial staff in 4 selected provinces on BCC campaigns. No information on the impact of IEC on pre and post KAP, or on women's participation. Government promulgated 16 laws, regulations, or circulars related to CDC; decrees on border health quarantine, biosafety, and health isolation; and a regulation on the use of vaccines and immunological products. **Viet Nam** Legislation for laboratory quality assurance and biosafety was developed; manuals and SOPs were prepared; safety features of facilities were improved; quality control measures were improved, including regular calibration; and laboratory staff was trained through apprenticeships and classroom teaching. Conducted IEC campaigns for Japanese B Encephalitis, NTDs, and diarrheal diseases as part of community-based control models. Evidence of change in population behavior on mosquito nets or clothing or repellant, etc. and improvement of sanitation around houses and in communities. Viet Nam pilot tested a community IMCI model. However, no information on the participation	

Design Summary	Performance Targets/Indicators	Results	Sustainability
		rates of women was reported. Community-based HIV prevention program implemented in high-risk districts and communities along major economic corridors in southern Viet Nam, including through VAAC. Procured HIV test kits and supplies and provided VCT. CDC1 supported a 100% condom campaign in hotspots and VCT in 5 provinces. In addition, two national studies focused on migrants from the People's Republic of China in Luang Namtha and men having sex with men. No information on changes in pre and post KAP regarding high-risk behavior. GMS-CDC1 supported conduct of surveys, development of IEC materials, and peer education programs for at-risk populations (e.g., mobile communities, injection drug users, and female sex workers).	

ADB = Asian Development Bank; AOP = annual operation plan; APSED = Asia Pacific Strategy for Emerging Diseases; BCC = behavior change communication; CDC = communicable disease control; CDCD = Communicable Disease Control Department ; EWAR = Early Warning Alert and Response; EWARN = Early Warning, Alert and Response Network; EWARS = Early Warning and Response System; GIS = geographic information system; GMS-CDC1 = Greater Mekong Subregion Regional Communicable Diseases Control Project, 2006-2009; HAART = highly active antiretroviral therapy; HMIS = health management information system; HRD = human resource development; HSSP = Health Sector Support Programme; IEC = information, education, and communication; IHR = International Health Regulations; IMCI = Integrated Management of Childhood Illnesses; IMR = infant mortality rate; KAP = knowledge, attitudes, and practices; Lao PDR = Lao People's Democratic Republic; MDA = mass drug administration; MDG = Millennium Development Goal; MOH = Ministry of Health; NCDM = National Committee for Disaster Management; NCLE = National Center for Laboratory and Epidemiology; NIPH = National Institute of Public Health (Cambodia); NTD = neglected tropical disease; PCR = project completion report; PMU = project management unit; RCU = regional coordination unit; RRT = rapid response team; SOP = standard operating procedure; STH = soil-transmitted helminth; STI = sexually transmitted infection; U5MR = under-5 mortality rate; UN = United Nations; VCT = voluntary counseling and testing; VHV = village health volunteer; VHW = village health worker; WHO = World Health Organization.

Sources: Independent Evaluation Department Mission and assessment; project completion reports of Cambodia, the Lao PDR, Viet Nam, and the RCU; ADB. 2013. *Completion Report: Greater Mekong Subregion Regional Communicable Diseases Control Project*. Manila; and Millennium Development Goals Indicators. The official United Nations site for the MDG Indicators. http://mdgs.un.org/unsd/mdg/Data.aspx

APPENDIX 2: DESIGN AND IMPLEMENTATION

Table A2.1: Cost Estimates at Appraisal and Actual Expenditures at Closure
Greater Mekong Subregion Regional Communicable Diseases Control Project, 2006–2009
($ million)

Recipient	Estimates at Appraisal					Actual Expenditures at Closure					Actual Expenditures at-Appraisal		
	ADB	Govern-ment	WHO	Total	%	ADB	Govern-ment	WHO	Total	%	ADB	Govern-ment	Total
Cambodia	9.00	1.98	0.27	11.25	29.0%	8.77	1.72	0.27	10.76	31.3%	97.4%	86.9%	95.6%
Lao PDR	6.00	1.32	0.18	7.50	19.4%	5.92	0.41	0.18	6.51	18.9%	98.7%	31.1%	86.8%
Viet Nam	15.00	4.55	0.45	20.00	51.6%	14.78	1.90	0.45	17.13	49.8%	98.5%	41.8%	85.7%
Total	**30.00**	**7.85**	**0.90**	**38.75**	**100.0%**	**29.47**	**4.03**	**0.90**	**34.40**	**100.0%**	**98.2%**	**51.3%**	**88.8%**
% of Total	75.0%	22.8%	2.3%	100.0%		86.3%	11.1%	2.6%	100.00%				

ADB = Asian Development Bank, Lao PDR = Lao People's Democratic Republic, WHO = World Health Organization.
Sources: ADB. 2013. *Completion Report: Greater Mekong Subregion Regional Communicable Diseases Control Project.* Manila; and IED study team.

Table A2.2: Executing and Implementing Agencies
Greater Mekong Subregion Regional Communicable Diseases Control Project, 2006–2009

Responsible Institution	Cambodia	Lao PDR	Viet Nam
Executing Agency	Ministry of Health	Ministry of Health	Ministry of Health
National Steering Committee	Health Sector Steering Committee	MOH Steering Committee	MOH Steering Committee for ADB Projects
National Implementing Agency	Communicable Disease Control Department	Department of Hygiene and Prevention	General Department Preventive Medicine
PMU located in	Health Sector Support Program	Department of Planning and Finance, MOH	General Department Preventive Medicine
National Institutes	3	3	4
Provinces	Original (5): Kampot, Mondol Kiri, Ratanak Krir, Stung Treng, Takeo	Original (6): Attapeo, Bolikhamsay, Champasak, Luang Prabang, Oudamxay, Savannakhet Additional (9): Bokeo, Khammouane, Luang Namtha, Phongsaly, Saravana, Sayaboury, Sekong, Vientiane Capital, Vientiane Province	Original (15): An Giang, Ben Tre, Can Tho, Dak Lak, Da Nang, Dong Thap, Hanoi, Ha Tay, Ha Tinh, Kieng Giang, Nghe An, Quang Tri, Tay Ninh, Thanh Hoa, Tra Vinh

ADB = Asian Development Bank, Lao PDR = Lao People's Democratic Republic, MOH = Ministry of Health, PMU = project management unit.
Notes: All of the original project provinces received surveillance and response capacity strengthening, dengue control, and NTD treatment inputs. In addition, all of the original Lao PDR and 13 of 15 of the Viet Nam provinces also received HIV/AIDS-related inputs or support. In the nine additional provinces in the Lao PDR, four received inputs for surveillance and response capacity strengthening, and five received HIV/AIDS-related inputs or support.
Sources: ADB. 2013. *Completion Report: Greater Mekong Subregion Regional Communicable Diseases Control Project.* Manila; and IED study team.

Table A2.3: Financial Management Arrangements, Issues, and Innovations
Greater Mekong Subregion Regional Communicable Diseases Control Project, 2006–2009

	Cambodia	Lao PDR	Viet Nam	RCU
National Imprest Account	MOH	Ministry of Finance	MOH	Not applicable
Second Generation Imprest Accounts	Provinces	PMU in MOH	Institutional (7) Provincial (15)	Not applicable
Other Financial Management Arrangements	MOH for national institutes and non-CDC1 provinces	PMU provided advance funds to national institutes, project and non-project provinces as needed	PMU provided advances for non-project provinces on as needed basis	RSC agreed upon a program of activities for the RCU. This program as well as estimates of the operating expenses of the RCU constituted the funding needed from each of the country grants to be part of a "pooled fund". The ADB retained and managed the RCU's funds from each country's grant according to each country's relative share of the total CDC1 grant.
Issues	-Slow disbursement in 2006 for activities not already identified in HSSP AOP. -Low imprest ceiling. -Multiple advances to provinces. -Slow liquidation of advances by provinces.	-Rapid disbursement of grant funds (due to expansion of disease control activities) led to Lao PDR running out of grant funds before the project closing date. -	-Delayed liquidation of advances and ability to release new funds due to provinces limited financial management capacity and complex requirements for documentation as well as multiple checks of accounts.	-The low level and project-specific funding of the RCU did not build confidence that the ADB would play a long-term role in leading nor supporting regional communication/coordination of efforts to address emerging infectious diseases.
Innovations	MOU between MOH and non-MOH implementing agencies	MOU between PMU and each implementing agency	MOU between PMU and each implementing agency	

ADB = Asian Development Bank; CDC1 = Greater Mekong Subregion Regional Communicable Diseases Control Project, 2006–2009; MOH = Ministry of Health; MOU = memorandum of understanding; PMU = project management unit; RCU = Regional Coordination Unit; RSC = regional steering committee.
Sources: ADB. 2013. *Completion Report: Greater Mekong Subregion Regional Communicable Diseases Control Project.* Manila; and IED study team assessment.

Table A2.4: Appraisal and Revised Estimates and Amounts Disbursed by Line Item and Country
Greater Mekong Subregion Regional Communicable Diseases Control Project, 2006–2009
($ million)

	CAM				LAO					VIE				ADB SUBTOTAL				
			Disbursed As % of					Disbursed As % of				Disbursed As % of					Disbursed As % of	
Line Items	Appraisal Estimate	Disbursed	Appraisal Estimate	Total Disbursed	Appraisal Estimate	Revised Estimate	Disbursed	Revised Estimate	Total Disbursed	Appraisal Estimate	Disbursed	Appraisal Estimate	Total Disbursed	Appraisal Estimate	Revised Estimate	Disbursed	Revised Estimate	Total Disbursed
A. Base Costs																		
1. Investment Costs																		
a. Civil Works	0.16	0.03	18.8%	0.3%	0.04	0.04	0.04	100.0%	0.7%	0.07	0.04	57.1%	0.3%	0.27	0.27	0.11	40.7%	0.4%
b. Laboratory and Other Equipment	0.56	0.54	96.4%	6.2%	0.26	0.62	0.65	104.8%	11.0%	2.86	3.53	123.4%	23.9%	3.68	4.04	4.72	116.8%	16.0%
c. Vehicles	0.39	0.37	94.9%	4.2%	0.21	0.38	0.44	115.8%	7.4%	0.63	0.53	84.1%	3.6%	1.23	1.40	1.34	95.7%	4.5%
d. System Development	1.00	0.70	70.0%	8.0%	0.41	0.35	0.29	82.9%	4.9%	0.23	0.41	178.3%	2.8%	1.64	1.58	1.40	88.6%	4.8%
e. Training, Workshops, and Fellowships	2.05	2.32	113.2%	26.5%	1.25	1.10	1.25	113.6%	21.1%	3.72	3.79	101.9%	25.6%	7.02	6.87	7.36	107.1%	25.0%
f. Community Mobilization	1.12	1.87	167.0%	21.3%	0.30	0.48	0.64	133.3%	10.8%	1.22	1.18	96.7%	8.0%	2.64	2.82	3.69	130.9%	12.5%
g. Consulting Services	0.23	0.29	126.1%	3.3%	0.28	0.39	0.14	35.9%	2.4%	0.50	0.25	50.0%	1.7%	1.01	1.12	0.68	60.7%	2.3%
h. Project Management	0.50	0.43	86.0%	4.9%	0.45	0.41	0.70	170.7%	11.8%	0.64	0.79	123.4%	5.3%	1.59	1.55	1.92	123.9%	6.5%
2. Recurrent Costs																		
a. Salaries	0.09	0.08	88.9%	0.9%	0.00	0.00	0.00	n.a	0.0%	0.00	0.00	n.a.	0.0%	0.09	0.09	0.08	88.9%	0.3%
b. Supplies	0.82	0.92	112.2%	10.5%	1.46	1.13	0.83	73.5%	14.0%	1.49	2.15	144.3%	14.5%	3.77	3.44	3.90	113.4%	13.2%
c. Communications	0.18	0.06	33.3%	0.7%	0.03	0.09	0.06	66.7%	1.0%	0.06	0.04	66.7%	0.3%	0.27	0.33	0.16	48.5%	0.5%
d. Vehicle Operations and Maintenance	0.08	0.07	87.5%	0.8%	0.05	0.09	0.10	111.1%	1.7%	0.21	0.08	38.1%	0.5%	0.34	0.38	0.25	65.8%	0.8%
Components 1 and 2	7.18	7.68	107.0%		4.74	5.08	5.14			11.63	12.79			23.55	23.89	25.61		
3. Regional Pool	1.29	1.09	84.5%	12.4%	0.86	0.86	0.78	90.7%	13.2%	2.15	1.99	92.6%	13.5%	4.30	4.30	3.86	89.8%	13.1%
Total Base Costs	**8.48**	**8.77**	**103.4%**	**100.0%**	**5.59**	**5.94**	**5.92**	**99.7%**	**100.0%**	**13.78**	**14.78**	**107.3%**	**100.0%**	**27.85**	**28.20**	**29.47**	**104.5%**	**100.0%**
B. Contingencies	**0.52**	**0.00**	**0.0%**	**0.0%**	**0.41**	**0.06**	**0.00**	**0.0%**	**0.0%**	**1.22**	**0.00**	**0.0%**	**0.0%**	**2.15**	**1.80**	**0.00**	**0.0%**	**0.0%**
Total	**9.00**	**8.77**	**97.4%**	**100.0%**	**6.00**	**6.00**	**5.92**	**98.7%**	**100.0%**	**15.00**	**14.78**	**98.5%**	**100.0%**	**30.00**	**30.00**	**29.47**	**98.2%**	**100.0%**

n.a. = not available, ADB = Asian Development Bank, CAM = Cambodia, LAO = Lao People's Democratic Republic, VIE = Viet Nam.
Sources: ADB. 2013. *Completion Report: Greater Mekong Subregion Regional Communicable Diseases Control Project.* Manila; and IED study team.

Table A2.5: Expertise of Domestic Consultants Engaged by Cambodia, the Lao PDR, and Viet Nam Greater Mekong Subregion Regional Communicable Diseases Control Project, 2006–2009
(person-months)

Expertise	Cambodia	Lao PDR	Viet Nam
Community Development	No information	No information	Not contracted
Community-based Vector Control	30.0	No information	No information
Dengue	No information	30.0	No suitable candidate identified
Endemic Diseases	No information	22.0	26.0
Health Information System	12.0	No suitable candidate	10.0
Health Legislation	No information	No suitable candidate	3.0
Health Planning	No information	No information	10.0
Health Systems	No information	15.0	
HIV/AIDS Control	No information	30.0	Not contracted
International Procurement	8.0	No information	No information
Monitoring and Evaluation	37.5	36.0	26.0
Outbreak and Hospital Preparedness	44.5	30.0	26.0
Public Health	No information	No information	Not contracted
Social Development (gender)	No information	3.0	No information
Surveillance and Response	No information	No suitable candidate	No suitable candidate
Accounting and Auditing (firm)	No information	15.0	No information
Impact Evaluation (firm)	Contract	No information	No information
Total	**132.0**	**181.0**	**101.0**

Source: ADB. 2013. *Completion Report: Greater Mekong Subregion Regional Communicable Diseases Control Project.* Manila.

APPENDIX 3: SUMMARY OF COMPLIANCE WITH GRANT COVENANTS

Cambodia		Lao PDR				Viet Nam		
Covenant	**Ref in GA**	**Status**	**Covenant**	**Ref in GA**	**Status**	**Covenant**	**Ref in GA**	**Status**
Project Management and Implementation			**Project Management and Implementation**			**Project Management and Implementation**		
MOH shall be the Project Executing Agency. CDCD shall be the implementing agency. The Project shall be implemented through HSSP for national health development.	GA, Sch 5 Para. 1	**Complied with**	MOH shall be the Project Executing Agency. DHP shall be the implementing agency. The National Center for Laboratory and Epidemiology, the National Center of Malariology, Parasitology, and Entomology, the Center for HIV/AIDS/STI and the Project provinces shall cooperate with the implementing agency.	GA, Sch 5 Para. 1	**Complied with**	MOH shall be the Project Executing Agency. APM shall be the implementing agency.	GA, Sch 5 Para. 1	**Complied with**
The Health Sector Steering Committee for HSSP shall be responsible for reviewing the Project's progress and guiding its implementation. The Health Sector Steering Committee shall be headed by MOH and comprise the Secretary General for Finance of the Ministry of Economy and Finance, two Secretaries of State in MOH, two Directors General and the Project Coordinator of HSSP. The steering committee meetings shall be held on a semi-annual basis.	GA, Sch 5 Para. 2	**Substantially complied with**	The MSC shall be responsible for reviewing the Project's progress and guiding its implementation. The PSC shall be headed by the minister of health and comprise the directors of MOH's departments, the Ministry of Finance, the Ministry of Foreign Affairs and the Committee for Planning and Investment. The MSC meetings shall be held at least on a quarterly basis, or as required.	GA, Sch 5 Para. 2	**Complied with**	The PSC shall be responsible for reviewing the Project's progress and guiding its implementation. The PSC shall be headed by the vice-minister of health for preventive services and comprise the MOH's Departments of Planning and Finance, Equipment and Construction, and Science and Training, the Ministry of Planning and Investment, the Ministry of Finance and the State Bank of Viet Nam. PSC meetings shall be held on a semi-annual basis.	GA, Sch 5 Para. 2	**Complied with**
The PMU, established under HSSP, shall include a project	GA, Sch 5 Para. 3	**Complied with**	The PMU shall be established in DPB. The Deputy Director	GA, Sch 5 Para. 3	**Complied with**	The PMU shall be established in APM. The	GA, Sch 5 Para. 3	**Complied with**

Cambodia		Lao PDR				Viet Nam		
Covenant	**Ref in GA**	**Status**	**Covenant**	**Ref in GA**	**Status**	**Covenant**	**Ref in GA**	**Status**
manager, project accountant and project procurement specialist. The Director of CDCD shall serve as the project manager, and be assisted by three counterparts in CDCD, the Director of the National Center for Parasitology, Entomology and Malaria Control, the Director of the National Institute of Public Health and the Director of the National Center for HIV/AIDS, Dermatology and Sexually Transmitted Diseases Control. The project manager shall hold monthly project meetings to review implementation and reports and agree on the work plan for the next month. At provincial level, selected activities shall be implemented by a focal group in the provincial health departments. The Recipient shall cause its interministerial task force for avian influenza, chaired by the Ministry of Agriculture and Forestry and Fisheries, and a government-development partner technical coordination committee to guide Project activities.			General of DHP shall be the project director, and be assisted by a deputy project director. The directors of the National Center for Laboratory and Epidemiology, the National Center of Malariology, Parasitology, and Entomology, and Center for HIV/AIDS/STI, and the Project provinces shall be responsible for implementing relevant project activities. At provincial level, selected activities shall be implemented by the provincial health offices.			PMU shall comprise a project director, a deputy director, a chief accountant, an accountant, 2 procurement and planning officers and 2 monitoring, evaluation and reporting officers, and shall work under the overall guidance of the PSC and in collaboration with other project management units under ADB projects being implemented in MOH. The PMU shall hold monthly meetings to review the project's implementation and reports, and agree on work plans for the next month.		
						At national level, NIA shall implement the Project staffed with at least one qualified project staff. At provincial level, the	GA, Sch 5 Para. 4	**Complied with**

Cambodia		Lao PDR				Viet Nam		
Covenant	Ref in GA	Status	Covenant	Ref in GA	Status	Covenant	Ref in GA	Status
						Provincial Preventive Medicine Centers shall implement the Project with strengthened staff including at least one accounts officer for each center.		
The Recipient shall ensure that the Project is implemented based on the Project's national AOPs. CDCD shall prepare the national AOPs to be submitted to the Health Sector Steering Committee for approval, and further submit, no later than 31 January of each year, the approved national AOPs to ADB for concurrence. The national AOPs shall be based on AOPs submitted by the Project provinces and national programs for CDC including Dengue, HIV/AIDS and endemic diseases, covering all Project activities with correspondent budget.	GA, Sch 5 Para. 4	**Complied with**	The Recipient shall ensure that the Project is implemented based on the Project's national AOPs. DHP shall prepare the national AOPs to be submitted to the MSC for approval, and further submit, no later than 31 January of each year, the approved national AOPs to ADB for concurrence. The national AOPs shall be based on AOPs submitted by the Project provinces and national programs for CDC including Dengue, HIV/AIDS and endemic diseases, covering all Project activities with corresponding budget.	GA, Sch 5 Para. 4	**Complied with**	MOH shall ensure that the Project is implemented based on the Project's national AOPs. APM shall prepare the national AOPs in consultation with ADB and submit them to the PSC for approval, and further submit, no later than 31 January of each year, the approved national AOPs to ADB. The national AOPs shall be based on AOPs submitted by the Project provinces and national programs for CDC including Dengue, HIV/AIDS and endemic diseases, covering all Project activities with corresponding budget.	GA, Sch 5 Para. 5	**Complied with**
						Viet Nam shall cause its task forces on communicable disease control, among others, task force for avian influenza control and the national and provincial committees for HIV/AIDS control, to provide technical guidance to the	GA, Sch 5 Para. 6	**Complied with**

Cambodia		Lao PDR				Viet Nam		
Covenant	**Ref in GA**	**Status**	**Covenant**	**Ref in GA**	**Status**	**Covenant**	**Ref in GA**	**Status**
						Project, if necessary		
The regional steering committee, which is advisory in nature, shall meet annually, which meetings will be hosted by one of the Participating Countries. The regional steering committee shall be chaired by the Minister or Vice Minister of the host country's Ministry of Health, and comprise leading representatives from the Project steering committees of the Participating Countries, project staff, and ADB and WHO representatives. An RCU shall be established in Hanoi and managed by ADB, and funded by the Pooled Fund. The RCU shall be responsible for regional coordination including liaison with stakeholders, data and document collection, support of international consultants, provision of logistic support, and organization of Project regional workshops/meetings.	GA, Sch 5 Para. 5	**Complied with**	The regional steering committee, which is advisory in nature, shall meet annually, which meetings will be hosted by one of the Participating Countries. The regional steering committee shall be chaired by the Minister or Vice Minister of the host country's Ministry of Health, and comprise leading representatives from the Project's steering committees of the Participating Countries, project staff, and ADB and WHO representatives. An RCU shall be established in Hanoi and managed by ADB, and funded by the Pooled Fund. The RCU shall be responsible for regional coordination including liaison with stakeholders, data and document collection, support of international consultants, provision of logistic support, and organization of Project regional workshops/meetings.	GA, Sch 5 Para. 5	**Complied with**	The regional steering committee, which is advisory in nature, shall meet annually, which meetings will be hosted by one of the Participating Countries. The regional steering committee shall be chaired by the Minister or Vice Minister of the host country's Ministry of Health, and comprise leading representatives from the project's steering committees of the participating countries, project staff, and ADB and WHO representatives. An RCU shall be established in Hanoi and managed by ADB, and funded by the Pooled Fund. The RCU shall be responsible for regional coordination including liaison with stakeholders, data and document collection, support of international consultants, provision of logistic support, and organization of project regional workshops/meetings.	GA, Sch 5 Para. 7	**Complied with**
Financing by the Pooled Fund			**Financing by the Pooled Fund**			**Financing by the Pooled Fund**		
The Pooled Fund shall be used for financing (i) the regional steering committee including	GA, Sch 5 Para. 6	**Complied with**	The Pooled Fund shall be used for financing (i) the regional steering committee	GA, Sch 5 Para. 6	**Complied with**	The Pooled Fund shall be used for financing (i) the regional steering	GA, Sch 5 Para. 8	**Complied with**

Cambodia		Lao PDR				Viet Nam		
Covenant	Ref in GA	Status	Covenant	Ref in GA	Status	Covenant	Ref in GA	Status
technical forums, regional workshop; (ii) the RCU including engaging regional coordination consultants; (iii) international technical consultants; and (iv) regional studies and Project cross-border activities. The regional steering committee and RCU shall be financed on the basis of the ratio 30:20:50 for Cambodia, Lao PDR and Viet Nam, respectively.			including technical forums, regional workshop; (ii) the RCU including engaging regional coordination consultants; (iii) international technical consultants; and (iv) regional studies and Project cross-border activities. The regional steering committee and RCU shall be financed on the basis of the ratio 30:20:50 for Cambodia, Lao PDR and Viet Nam respectively.			committee including technical forums, regional workshops; (ii) the RCU including engaging regional coordination consultants; (iii) international technical consultants; and (iv) regional studies and Project cross-border activities. The regional steering committee and RCU shall be financed on the basis of the ratio 30:20:50 for Cambodia, Lao PDR and Viet Nam respectively.		
The International technical consultants whose areas of expertise are referred to in Paragraphs 1(a), (f) and (g) of Schedule 4 of the Grant Agreement (Surveillance and response, Dengue fever, Endemic disease) shall be engaged through, and managed by, WHO. Such consultants shall be financed out of the Pooled Fund, representing $480,000 from the Recipient's grant proceeds, $320,000 from Lao Grant proceeds, and $800,000 from Viet Nam Grant proceeds pursuant to a project implementation agreement to be entered into between ADB and WHO.	GA, Sch 5 Para. 7	**Complied with**	The International technical consultants whose areas of expertise are referred to in Paragraphs 1(a), (f) and (g) of Schedule 4 to the Grant Agreement shall be engaged through, and managed by, WHO with concurrence of MOH and ADB. Such consultants shall be engaged through, and managed by, WHO. Such consultants shall be financed out of the Pooled Fund, representing $320,000 from the Recipient's grant proceeds, $480,000 from Cambodia Grant proceeds, and $800,000 from Viet Nam Grant proceeds pursuant to a project implementation agreement to be entered	GA, Sch 5 Para. 7	**Complied with**	The International technical consultants referred to in Paragraph 4 of Schedule 4 to the Grant Agreement shall be financed out of the Pooled Fund, representing $800,000 from Viet Nam's grant proceeds, $480,000 from Cambodia Grant proceeds, and $320,000 from Lao Grant proceeds pursuant to a project implementation agreement to be entered into between ADB and WHO.	GA, Sch 5 Para. 9	**Complied with**

Cambodia		Lao PDR				Viet Nam		
Covenant	**Ref in GA**	**Status**	**Covenant**	**Ref in GA**	**Status**	**Covenant**	**Ref in GA**	**Status**
			into between ADB and WHO.					
Regional studies and Project cross-border activities shall be decided and financed on a case-by-case basis by the Participating Countries through the regional steering committee	GA, Sch 5 Para. 8	**Complied with**	Regional studies and Project cross-border activities shall be decided and financed on a case-by-case basis by the Participating Countries through the regional steering committee.	GA, Sch 5 Para. 8	**Complied with**	Regional studies and Project cross-border activities shall be decided on a case-by-case basis by the Participating Countries through the regional steering committee.	GA, Sch 5 Para. 10	**Complied with**
Surveillance and Response	GA, Sch 5		**Surveillance and Response**			**Surveillance and Response**		
The Recipient shall ensure that the Project surveillance and response activities are technically sound, sustainable, participatory and in accordance with the IHR 2005.	GA, Sch 5 Para. 9	**Complied with**	The Recipient shall ensure that the Project surveillance and response activities are technically sound, sustainable, participatory and in accordance with the IHR 2005.	GA, Sch 5 Para. 9	**Complied with**	Viet Nam shall ensure that the Project surveillance and response activities are technically sound, sustainable, participatory and in line with the IHR 2005.	GA, Sch 5 Para. 11	**Complied with**
Integrated CDC			**Integrated CDC**			**Integrated CDC**		
The Recipient shall ensure that the Project activities at provincial level are implemented in a manner that supports mainstreaming CDC in the general provincial health services. By 30 June 2006, MOH and the Project provinces shall prepare, and submit to ADB for approval, implementation plans for integrated CDC in the Project provinces. By 31 January of each year of the Project period, MOH shall submit to ADB annual updates on changes to the integrated CDC plans, if there are any changes to the plans. Within one year of the Effective Date, all	GA, Sch 5 Para. 10	**Complied with**	The Recipient shall ensure that the Project activities at provincial level are implemented in a manner that supports mainstreaming CDC in the general provincial health services. By 30 June 2006, MOH and the Project provinces shall prepare, and submit to ADB for approval, implementation plans for integrated CDC in the Project provinces. By 31 January of each year of the Project period, MOH shall submit to ADB annual updates on changes to the integrated CDC plans, if there are any changes to the plans. Within one year of the Effective	GA, Sch 5 Para. 10	**Complied with**	Viet Nam shall ensure that the Project activities at provincial level are implemented in a manner that supports mainstreaming CDC in the general provincial health services. By 30 June 2006, MOH and the Project provinces shall prepare, and submit to ADB for approval, implementation plans for integrated CDC in the Project provinces. By 31 January of each year of the Project period, MOH shall submit to ADB annual updates on changes to the integrated CDC plans, if there are any changes to	GA, Sch 5 Para. 12	**Complied with**

Cambodia		Lao PDR				Viet Nam		
Covenant	Ref in GA	Status	Covenant	Ref in GA	Status	Covenant	Ref in GA	Status
Project provinces shall implement the initial plans.			Date, all Project provinces shall implement the initial plans.			the plans. Within one year of the Effective Date, all Project provinces shall implement the initial plans.		
HIV/AIDS Control			**HIV/AIDS Control**			**HIV/AIDS Control**		
The Recipient shall ensure that the HIV/AIDS activities will be planned in consultation with the HIV/AIDS national steering committee and coordinated through provincial HIV/AIDS committees and provincial health committees. The Recipient shall further ensure that targeted high risk groups will be educated on how to prevent HIV/AIDS.	GA, Sch 5 Para. 11	**Complied with**	The Recipient shall ensure that the HIV/AIDS activities will be planned in consultation with the HIV/AIDS national steering committee and coordinated through provincial HIV/AIDS committees and provincial health committees. The Recipient shall further ensure that targeted high risk groups will be provided with continuum of care to prevent HIV/AIDS and sexually transmitted diseases.	GA, Sch 5 Para. 11	**Complied with**	Viet Nam shall ensure that the HIV/AIDS activities will be planned in consultation with the HIV/AIDS national steering committee and coordinated through provincial HIV/AIDS committees and provincial health committees. MOH shall ensure that targeted high risk groups will be educated on how to prevent HIV/AIDS.	GA, Sch 5 Para. 13	**Complied with**
Counterpart Funds			**Counterpart Funds**			**Counterpart Funds**		
The Recipient shall ensure that all necessary counterpart funds for Project implementation are provided in a timely manner and to such end, the Recipient shall make timely submissions of annual budget appropriation requests and take all other measures necessary or appropriate for prompt disbursement of appropriate funds during each year of the Project implementation.	GA, Sch 5 Para. 12	**Complied with**	The Recipient shall ensure that all necessary counterpart funds for Project implementation are provided in a timely manner and to such end, the Recipient shall make timely submissions of annual budget appropriation requests and take all other measures necessary or appropriate for prompt disbursement of appropriate funds during each year of the Project implementation.	GA, Sch 5 Para. 12	**Complied with.** The main reason for lower counterpart expenses was tax exemption for vehicles. Other reasons were lower recurrent costs and late	Viet Nam shall ensure that all necessary counterpart funds for Project implementation are provided in a timely manner and to such end, MOH shall make timely submissions of annual budget appropriation requests and take all other measures necessary or appropriate for prompt disbursement of appropriate funds during each year of the Project implementation.	GA, Sch 5 Para. 8?	**Complied with.** The main reason for lower counterpart expenses was tax exemption for vehicles. Other reasons were lower recurrent costs and late approval of the AOP. It was not due

Cambodia		Lao PDR				Viet Nam		
Covenant	**Ref in GA**	**Status**	**Covenant**	**Ref in GA**	**Status**	**Covenant**	**Ref in GA**	**Status**
					approval of the AOP. It was not due to lack of funds.			to lack of funds.
Ethnic Minority Development Plan			**Ethnic Minority Development Plan**			**Ethnic Minority Development Plan**		
The Recipient shall ensure that a national ethnic minority development plan will be prepared by MOH based on the general guidelines set forth in the agreed project Ethnic Minority Development Plan, and will be implemented in a timely manner and have resources to increase the quality of, and access to, health services received by ethnic minorities.	GA, Sch 5 Para. 13	**Partially complied with.** The EMDP was prepared late and only partly implemented. In particular, recording of ethnic minority benefits was weak.	The Recipient shall ensure that a national ethnic minority development plan will be prepared by MOH based on the general guidelines set forth in the agreed project Ethnic Minority Development Plan, and will be implemented in a timely manner and have resources to increase the quality of, and access to, health services received by ethnic minorities.	GA, Sch 5 Para. 13	**Partially complied with.** The EMDP was prepared late and only partly implemented. In particular, recording of ethnic minority benefits was weak.	Viet Nam shall ensure that a national ethnic minority development plan will be prepared by MOH based on the general guidelines set forth in the agreed project Ethnic Minority Development Plan, and will be implemented in a timely manner and have resources to increase the quality of, and access to, health services received by ethnic minorities.	GA, Sch 5 Para. 15	**Partially complied with.** The EMDP was prepared late and only partly implemented. In particular, recording of ethnic minority benefits was weak.
Gender Action Plan			**Gender Action Plan**			**Gender Action Plan**		
The Recipient shall ensure that a national gender action plan will be prepared by MOH based on the general guidelines set forth in the agreed project Gender Action Plan. The gender action plan shall be implemented in a timely manner, and have adequate resources allocated for both its preparation and implementation.	GA, Sch 5 Para. 14	**Partially complied with.** The GAP was prepared late and only partly implemented. In particular, recording of gender benefits was weak.	The Recipient shall ensure that a national gender action plan will be prepared by MOH based on the general guidelines set forth in the agreed project Gender Action Plan. The gender action plan shall be implemented in a timely manner, and have adequate resources allocated for both its preparation and implementation.	GA, Sch 5 Para. 14	**Partially complied with.** The GAP was prepared late and only partly implemented. In particular, recording of gender benefits was weak.	Viet Nam shall ensure that a national gender action plan will be prepared by MOH based on the general guidelines set forth in the agreed project Gender Action Plan. The gender action plan shall be implemented in a timely manner, and have adequate resources allocated for both its preparation and implementation.	GA, Sch 5 Para. 16	**Partially complied with.** The GAP was prepared late and only partly implemented. In particular, recording of gender benefits was weak.
Resettlement			**Resettlement**			**Resettlement Plan**		
The Recipient shall screen all	GA, Sch 5	**Complied**	The Recipient shall screen all	GA, Sch 5	**Complied**	Viet Nam shall screen all	GA, Sch 5	**Complied**

Cambodia		Lao PDR				Viet Nam		
Covenant	Ref in GA	Status	Covenant	Ref in GA	Status	Covenant	Ref in GA	Status
proposed civil works and ensure that involuntary resettlement impacts are avoided. If any involuntary resettlement is unavoidable, the Recipient shall prepare a resettlement plan in accordance with ADB's Policy on Involuntary Resettlement and submit it to ADB for approval prior to commencing land acquisition activities. The Recipient shall ensure that the resettlement plan will include detailed measurement surveys, compensation unit rates based on replacement cost surveys for all categories of losses and allowances and a final database of affected persons.	Para. 15	**with.** No resettlement was involved.	proposed civil works and ensure that involuntary resettlement impacts are avoided. If any involuntary resettlement is unavoidable, the Recipient shall prepare a resettlement plan in accordance with ADB's Policy on Involuntary Resettlement and submit it to ADB for approval prior to commencing land acquisition activities. The Recipient shall ensure that the resettlement plan will include detailed measurement surveys, compensation unit rates based on replacement cost surveys for all categories of losses and allowances and a final database of affected persons.	Para. 15	**with.** No resettlement was involved.	proposed civil works and ensure that involuntary resettlement impacts are avoided. If any involuntary resettlement is unavoidable, Viet Nam shall prepare a resettlement plan in accordance with ADB's Policy on Involuntary Resettlement and submit it to ADB for approval prior to commencing land acquisition activities. Viet Nam shall ensure that the resettlement plan will include detailed measurement surveys, compensation unit rates based on replacement cost surveys for all categories of losses and allowances and a final database of affected persons.	Para. 17	**with.** No resettlement was involved.
Environment			**Environment**			**Environment**		
The recipient shall ensure that the operation of all health facilities will comply with all the Recipient's applicable laws and regulations, ADB's Environment Policy of 2002, the summary initial environmental examination and environmental management plan.	GA, Sch 5 Para. 16	**Complied with**	The recipient shall ensure that the operation of all health facilities will comply with all the Recipient's applicable laws and regulations, ADB's Environment Policy of 2002, the summary initial environmental examination and environmental management plan.	GA, Sch 5 Para. 16	**Complied with**	Viet Nam shall ensure that the operation of all health facilities will comply with all Viet Nam's applicable laws and regulations, ADB's Environment Policy of 2002, the summary initial environmental examination and environmental management plan.	GA, Sch 5 Para. 18	**Complied with**
Operation and Maintenance			**Operation and Maintenance**			**Operation and Maintenance**		

Cambodia		Lao PDR				Viet Nam		
Covenant	**Ref in GA**	**Status**	**Covenant**	**Ref in GA**	**Status**	**Covenant**	**Ref in GA**	**Status**
The Recipient shall ensure that annually adequate budget is made available to the Project provinces for the operation and maintenance of project facilities during and after the Project.	GA, Sch 5 Para. 17	**Complied with**	The Recipient shall ensure that annually adequate budget is made available to the Project provinces for the operation and maintenance of Project facilities during and after the Project.	GA, Sch 5 Para. 17	**Complied with**	Viet Nam shall ensure that annually adequate budget is made available for the operation.	GA, Sch 5 Para. 19	**Complied with**
Procurement			**Procurement**			**Procurement**		
All major contract variations will need ADB's prior approval.	GA, Sch 3 Para 2	**Complied with**	All major contract variations will need ADB's prior approval.	GA, Sch 3 Para. 2	**Complied with**	All major contract variations will need ADB's prior approval.	GA, Sch 3 Para. 2	**Complied with**
Financial			**Financial**			**Financial**		
The Recipient shall (i) maintain, or cause to be maintained, separate accounts for the Project; (ii) have such accounts and related financial statements audited annually, in accordance with appropriate auditing standards consistently applied, by independent auditors whose qualifications, experience and terms of reference are acceptable to ADB; (iii) furnish to ADB, as soon as available but in any event not later than 9 months after the end of each related fiscal year, certified copies of such audited accounts and financial statements and the reports of the auditors relating thereto (including the auditor's opinion on the use of the Grant Proceeds and compliance with the financial covenants of this Grant	GA, Article IV Section 4.02 Para. (a)	**Partially complied with.** Audit reports were often 1–3 months late. Because of the type of project, auditing takes time, with multiple small expenditures and scattered locations. There were no imprest or SOE issues. Liquidation of pooled funds took time because receipts were misplaced in ADB.	The Recipient shall (i) maintain, or cause to be maintained, separate accounts for the Project; (ii) have such accounts and related financial statements audited annually, in accordance with appropriate auditing standards consistently applied, by independent auditors whose qualifications, experience and terms of reference are acceptable to ADB; (iii) furnish to ADB, as soon as available but in any event not later than 9 months after the end of each related fiscal year, certified copies of such audited accounts and financial statements and the reports of the auditors relating thereto (including the auditor's opinion on the use of the Grant Proceeds and compliance with the	GA, Article IV Section 4.02 Para. (a)	**Partially complied with.** Audit reports were often 1–3 months late. Because of the type of project, auditing takes time, with multiple small expenditures and scattered locations. There were no imprest or SOE issues. Liquidation of pooled funds took	The Recipient shall (i) maintain, or cause to be maintained, separate accounts for the Project; (ii) have such accounts and related financial statements audited annually, in accordance with appropriate auditing standards consistently applied, by independent auditors whose qualifications, experience and terms of reference are acceptable to ADB; (iii) furnish to ADB, as soon as available but in any event not later than 6 months after the end of each related fiscal year, certified copies of such audited accounts and financial statements and the reports of the auditors relating thereto (including the auditor's opinion on	GA, Article IV Section 4.02 Para. (a)	**Partially complied with.** Audit reports were often 1–3 months late. Because of the type of project, auditing takes time, with multiple small expenditures and scattered locations. There were no imprest or SOE issues. Liquidation of pooled funds took time because receipts were misplaced in ADB.

Cambodia		Lao PDR				Viet Nam		
Covenant	Ref in GA	Status	Covenant	Ref in GA	Status	Covenant	Ref in GA	Status
Agreement as well as on the use of the procedures for imprest accounts/statement of expenditures), all in the English language; and (iv) furnish to ADB such other information concerning such accounts and financial statements and the audit thereof as ADB shall from time to time reasonably request.			financial covenants of this Grant Agreement as well as on the use of the procedures for imprest accounts/ statement of expenditures), all in the English language; and (iv) furnish to ADB such other information concerning such accounts and financial statements and the audit thereof as ADB shall from time to time reasonably request.		time because receipts were misplaced in ADB.	the use of the Grant Proceeds and compliance with the financial covenants of this Grant Agreement as well as on the use of the procedures for imprest accounts/ statement of expenditures), all in the English language; and (iv) furnish to ADB such other information concerning such accounts and financial statements and the audit thereof as ADB shall from time to time reasonably request.		
The Recipient shall enable ADB, upon ADB's request, to discuss the Recipient's financial statements for the Project and its financial affairs related to the Project from time to time with the Recipient's auditors, and shall authorize and require any representative of such auditors to participate in any such discussions requested by ADB, provided that any such discussion shall be conducted only in the presence of an authorized officer of the Recipient unless the Recipient shall otherwise agree.	GA, Article IV Section 4.02 Para. (b)	**Complied with**	The Recipient shall enable ADB, upon ADB's request, to discuss the Recipient's financial statements for the Project and its financial affairs related to the Project from time to time with the Recipient's auditors, and shall authorize and require any representative of such auditors to participate in any such discussions requested by ADB, provided that any such discussion shall be conducted only in the presence of an authorized officer of the Recipient unless the Recipient shall otherwise agree.	GA, Article IV Section 4.02 Para. (b)	**Complied with**	The Recipient shall enable ADB, upon ADB's request, to discuss the Recipient's financial statements for the Project and its financial affairs related to the Project from time to time with the Recipient's auditors, and shall authorize and require any representative of such auditors to participate in any such discussions requested by ADB, provided that any such discussion shall be conducted only in the presence of an authorized officer of the Recipient unless the Recipient shall otherwise agree.	GA, Article IV Section 4.02 Para. (b)	**Complied with**

Cambodia		Lao PDR				Viet Nam		
Covenant	**Ref in GA**	**Status**	**Covenant**	**Ref in GA**	**Status**	**Covenant**	**Ref in GA**	**Status**
The Recipient shall enable ADB's representatives to inspect the Project, the goods financed out of the proceeds of the Grant, and any relevant records and documents.	GA, Article IV Section 4.03	**Complied with**	The Recipient shall enable ADB's representatives to inspect the Project, the goods financed out of the proceeds of the Grant, and any relevant records and documents.	GA, Article IV Section 4.03	**Complied with**	The Recipient shall enable ADB's representatives to inspect the Project, the goods financed out of the proceeds of the Grant, and any relevant records and documents.	GA, Article IV Section 4.03	**Complied with**

ADB = Asian Development Bank; AOP = Annual Operational Plan; APM =Administration of Preventive Medicine; CDC = communicable disease control, CDCD =Communicable Diseases Control Department, Cambodia ; DHP =Department of Hygiene and Prevention ; DPB = Department of Planning and Budget ; EMDP = ethnic minority development plan; GA = grant agreement ; HSSP = Health Sector Support Programme; IHR = International Health Regulations; Lao PDR = Lao People's Democratic Republic; MOH = Ministry of Health; MSC = MOH Steering Committee; NIA = national implementing agency ; PMU = project management unit; PSC = project steering committee ; RCU = regional steering committee; Sch = Schedule ; SOE = statement of expenditures; STI = sexually transmitted infection.

Source: ADB. 2013. *Completion Report: Greater Mekong Subregion Regional Communicable Diseases Control Project.* Manila.

APPENDIX 4: RATING MATRIX FOR CORE EVALUTION CRITERIA

Ratings	PCR	PPER	Comments, and Reasons for Disagreements
Relevance	Highly Relevant	Relevant	Project was aligned with CLV country CDC needs, and strategies for emerging epidemic and endemic disease control. Project relevant for countries' CDC needs and strategies regarding emerging epidemic and endemic diseases and ADB's regional cooperation and health sector strategic priorities. Grant modality adopted was appropriate, and countries demonstrated a high degree of stakeholder ownership.
			Project formulation fell short in some areas of assessment of country problems and institutions.
			Project formulation was weak in assuring that the project was complementary to efforts of other development partners. This weakness was especially evident in the design of the regional coordination component that duplicated to some extent the missions and efforts of other existing regional organizations.
Effectiveness	Effective	Effective	The PCR discussion of effectiveness focuses on achievement of final outcomes (impact) whereas the PPER focuses on intermediate outcomes in terms of systems strengthening as outlined in the DMF and GAP and EMP. Thus, ratings of the PCR and PPER documents concerning effectiveness are not based on similar measures.
			The PPER rating is based on DMF indicators only (if GAP and EMP indicators are included, the effectiveness rating falls to *less effective*).
			Project was more effective at strengthening of systems already engaged in control of endemic communicable diseases, either by extension of existing efforts to new geographic areas or starting efforts to address neglected diseases.
			Project was effective at building systems to address emerging epidemics, e.g., surveillance, but system development required actions to be put into place sequentially and progress was slower than had been envisioned at the time of project formulation and definition of the DMF.

Ratings	PCR	PPER	Comments, and Reasons for Disagreements
			The regional component was also effective, especially in terms of serving as a forum for dissemination of information. However, while biannual technical and project administrative meetings provided opportunities for regional health leaders to meet each other, they did not lead to significant progress in concrete agreements among the countries concerning sharing of information in the case of epidemics, nor cooperation related to other aspects of the IHR 2005.
Efficiency	Efficient	Efficient	Technical efficiency: PCR argued that project was efficient in terms of achieving outcomes based on general on-time disbursement of grant funds and use of existing health system institutions.
			Allocative efficiency: PCR did not include any analysis of allocative efficiency of project. PPER concluded that the project focus on prevention of disease and promotion of community IEC and hygienic practices was allocatively more efficient than a project that focused on treatment of cases only.
Sustainability	Likely Sustainable	Likely Sustainable	The PCR and PPER assessments agree that (i) the institutional developments are likely to be sustained after the end of the project; but (ii) in some countries the financial sustainability of the project's recurrent costs is less certain because of the relatively large share of total public health sector financing from development partners as well as trends in declining development partner financing for health since 2008.
Impact	Substantial	Substantial	Indicators related to endemic disease incidence or prevalence (e.g., dengue, Japanese B Encephalitis, lymphatic filariasis, STH), especially in project provinces, improved as a result of project investments in community IEC, health personnel training, provision of medicines, and insecticides or larvicides. Progress in Millennium Development Goal indicators was also by and large achieved, although data are insufficient to determine that greater progress was made in project provinces than non-project provinces.

ADB = Asian Development Bank; CDC = communicable disease control; CLV = Cambodia, the Lao People's Democratic Republic, and Viet Nam; DMF = design and monitoring framework; EMP = ethnic minority plan; GAP = gender action plan; IEC = information, education, and communication; IHR = International Health Regulations; PCR = project completion report; PPER = project performance evaluation report; STH = soil-transmitted helminth.
Source: IED study team.

APPENDIX 5: PROJECT RELEVANCE AND ACTIVITIES OF THE REGIONAL COORDINATION UNIT

Table A5.1: Greater Mekong Subregion Regional Communicable Diseases Control Project, 2006–2009
Relevance to Communicable Disease and Regional Cooperation Policies, Strategies, and Regulations

Organization Name of Policy, Plan, Strategy	Content Pertaining to Communicable Disease Control and/or Regional Cooperation	Before CDC1	During CDC1	After CDC1
ADB. 2004. *Enhancing the Fight against Poverty in Asia and the Pacific: The Poverty Reduction Strategy of the Asian Development Bank*. Manila.		X		
ADB. 2005. *Development, Poverty and HIV/AIDS: ADB's Strategic Response to a Growing Epidemic*. Manila.		X		
ADB. 2006. *Regional Cooperation and Integration Strategy*. Manila.			X	
ADB. 2006. *Medium-Term Strategy, 2006-2008*. Manila.			X	
ADB. 2008. *Strategy 2020: The Long-Term Strategic Framework of the Asian Development Bank, 2008–2020*. Manila.	Regional integration is one of the three strategic priorities of Strategy 2020. "This strategic agenda will exploit the great promise that RCI activities present for accelerating economic growth, raising productivity and employment, reducing economic disparities, and achieving closer policy coordination and collaboration in support of regional and global public goods, including work to combat climate change and HIV/AIDS."		X	X
ADB. 2008. *An Operational Plan for Improving Health Access and Outcomes Under Strategy 2020*. Manila.			X	X
ADB. 2011. *The Greater Mekong Subregion Economic Cooperation Program Strategic Framework, 2012–2022*. Manila.				X
ADB. 2011. *Strategic Directions Paper on HIV/AIDS, 2011–2015*. Manila.	-Mitigation of HIV risks and vulnerabilities linked to economic corridors -Support for HIV prevention through regional and subregional cooperation (with other regional organizations) -Knowledge solutions and policy dialogue (develop regional research priorities)			X
ADB. 2013. *Strategic Framework and Action Plan for Human Resource Development in the Greater Mekong Subregion, 2013–2017*. Manila.	Three of the strategy's seven priority areas are related to communicable disease: (i) regional health issues, (ii) mitigating social costs in the economic corridors, and (iii) strengthening institutions and mechanisms for GMS HRD cooperation.			X

Organization Name of Policy, Plan, Strategy	Content Pertaining to Communicable Disease Control and/or Regional Cooperation	Before CDC1	During CDC1	After CDC1
ASEAN Secretariat. 12-14 December 2007. *Protocol: Communicable and Information Sharing on Emerging Infection Diseases in the ASEAN Plus Three Countries*. Jakarta.	The communication and information sharing protocol addresses the following aspects of sharing information on emerging infectious diseases: (i) content areas, (ii) mechanism for sharing, (iii) institutional responsibility to ensure information is shared, (iv) regularity and timing for sharing of information, (v) mechanisms for ASEAN+3 to monitor and disseminate results on compliance with protocol.		X	X
Kingdom of Cambodia. 2002. *Ministry of Health. Health Strategic Plan 2003-2007.* Phnom Penh.		X		
Kingdom of Cambodia. 2008. *Ministry of Health. Health Strategic Plan, 2008-2015.* Phnom Penh.			X	X
Government of the Lao People's Democratic Republic, Ministry of Health. 2011. *The VIIth Five-Year Health Sector Development Plan, 2011-2015 (Provisional Non-Official Translation)*. Vientiane.				X
Government of the Lao People's Democratic Republic. 2010. *Ministry of Health. National Strategy for Malaria Control and Pre-Elimination, 2011-2015*. Vientiane.				X
Government of Viet Nam. 2010. *Five Year Health Sector Development Plan, 2011-2015*. Hanoi.				X
Mekong Basin Disease Surveillance Initiative, 2000/1 to at least 2010	Objectives: (i) improve cross-border infectious disease outbreak investigations and response by sharing surveillance data and best practices in disease recognition and reporting by jointly responding to outbreaks, (ii) develop expertise in epidemiology surveillance, and (iii) enhance communication between countries.	X	X	X
WHO. 2005. *International Health Regulations.* Geneva.			X[a]	X

ADB = Asian Development Bank; ASEAN = Association of Southeast Asian Nations; CDC1 = Greater Mekong Subregion Regional Communicable Diseases Control Project, 2006–2009; GMS = Greater Mekong Subregion; HRD = human resource development; RCI = regional cooperation and integration.

[a] The International Health Regulations became effective on 15 June 2007. The governments of Cambodia, the Lao People's Democratic Republic, and Viet Nam were among the state parties that agreed without objection to the IHR. World Health Organization. State Parties to the International Health Regulations (2005). http://www.who.int/ihr/legal_issues/ states_parties/en/

Source: IED study team.

Table A5.2: Regional Communicable Disease Control Initiatives Existing Prior to, or Under Preparation, during Formulation of Greater Mekong Subregion Regional Communicable Diseases Control Project, 2006–2009

Regional CDC Initiative	Ref.	Purpose/Objectives
Mekong Basin Disease Surveillance Initiative (2000 to at least 2010)	1	To improve human resources for disease surveillance in developing countries, thus bolstering national capacity to monitor, report, and respond to outbreaks; to support regional networks to promote collaboration in disease surveillance and response across countries; and to build bridges between regional and global monitoring efforts.
ASEAN +3 Emerging Infectious Diseases Programme (2004 to present)	2	Develop and coordinate public health strategies for control of emerging infectious diseases at a regional level including support for training courses, seminars and workshops, promotion of closer links between human and animal health sectors, and exchanges of staff between laboratories in the region. In addition, the project website has served as a platform for sharing epidemiological data and surveillance information across Member States.
Surveillance and Investigation of Epidemic Situations in South-East Asia (2006–2011)	2	To improve the diagnostic capabilities of national referential laboratories (i.e., Institut Pasteur Network in Cambodia, the People's Republic of China, and Viet Nam, and the National Center for Laboratory and Epidemiology in the Lao People's Democratic Republic) and integrating them into a network To strengthen national epidemiological surveillance systems To strengthen coordination of laboratories at the national and regional levels

ASEAN = Association of Southeast Asian Nations, CDC = communicable disease control.

Sources:

1. C.A. Ancheta et.al. 2010. *Final Evaluation of the Rockefeller Foundation's Disease Surveillance Networks Initiative in Asia*. New York: Rockefeller Foundation.
2. M. Liverani, P. Hanvoravongchai, and R. Coker. 2013. *Regional Mechanisms of Communicable Disease Control in Asia and Europe*. Singapore: Asia-Europe Foundation.

Table A5.3: Emerging and Infectious Disease Control Initiatives, 2000–present, Southeast Asia

Time Frame	Main Financier(s)	Activities						Country Coverage						
		Capacity Building	Information Sharing	Policy Analysis	Research	Surveillance	Training	Cambodia	PRC	Lao PDR	Myanmar	Thailand	Viet Nam	Others
Mekong Basin Disease Surveillance Project														
I : 2000–2003 II: 2003–2007 III:2007–2010	Rockefeller Foundation	X	X			X	X	X	X	X	X	X	X	
ASEAN+3 Emerging Infectious Disease Programme														
I: 2004–2005 II: 2007-2009 III: unknown	Government of Australia (AusAID) and other OECD member states	X	X	X		X	X	X	X	X	X	X	X	Brunei Darussalam, Indonesia, Japan, Republic of Korea, Malaysia, the Philippines, Singapore
South East Asia Infectious Disease Clinical Research Network														
2005–2010	US National Institutes of Health; Wellcome Trust, UK				X							X	X	Indonesia, Singapore
Greater Mekong Subregion Communicable Disease Control Project														
2005–2010	ADB	X	X		X	X	X	X		X			X	
Surveillance and Investigation of Epidemic Situations in South-East Asia Project														
2006–2011	Agence Française de Développement	X				X	X	X	X	X			X	
Asian Partnership on Emerging Infectious Diseases Research														
2007–present	Canadian International Development Research Centre			X	X			X	X			X	X	Indonesia

ADB = Asian Development Bank, ASEAN = Association of Southeast Asian Nations, AusAID = Australian Agency for International Development, PRC = People's Republic of China, Lao PDR = Lao People's Democratic Republic, OECD = Organisation for Economic Co-operation and Development, UK = United Kingdom, US = United States.
Source: M. Liverani, P. Hanvoravongchai, and R. Coker. 2013. *Regional Mechanisms of Communicable Disease Control in Asia and Europe*. Singapore: Asia-Europe Foundation.

Table A5.4: Activities of the Regional Coordination Unit

Item	
No. of years of activity	3 years, 5 months
No. of RCU staff at any time	4
No. of RCU-recruited personnel [a]	17
No. of requests for endorsement by RSC prior to action [b]	>30
No. of RSC vetoes	1
No. of consultations of development partners prior to action [c]	>318
No. of working papers produced	46
Pooled fund money managed directly by RCU [d]	$0.8 million
Percentage of pooled fund managed by RCU	18.6%
No. of presentations delivered	34
No. of contracts signed [e]	8
No. of reports produced [f]	158
No. of visits to GMS CDC1 website	24,300
No. of electronic communities of practice created [g]	5
No. of cross-border collaboration events	6
No. of cross-border collaboration plans [h]	5
No. of regional events organized[i]	33
No. of GMS CDC newsletters produced	13
No. of health professionals contacted [j]	>800
No. of questionnaires designed [k]	10
No, of guidelines produced [l]	15
No. of technical resources in repository [m]	>740
No. of senior CLV managers briefed on knowledge management [n]	71
No. of research studies contracted or completed	8
No. of miscellaneous other products [o]	31
No. of press releases/ads published	14

[a] Includes successive RCU staff, RCU-contracted outside labor, and an Australian volunteer
[b] Through the special GMS CDC project's "Cyber-RSC no objection procedure"
[c] This includes mainly consultation with the World Health Organization and ADB but also events co-organized by CLV national institutions, PMU managers, and co-sponsors such as IFRC, SISEA, and Kenan Institute Asia.
[d] 81.4% of the pooled fund was managed from ADB headquarters, which managed the charging of pooled fund expenditure on the respective CLV grants.
[e] Included research study contracts (7) and work contract (database).
[f] All combined (RCU progress reports, study progress and final and scientific reports, mission reports, regional coordinator consultant reports, notes for the records, etc.).
[g] Google groups (Dengue, Helminths, Japanese Encephalitis, Lab and Research)
[h] 3-year cross-border collaboration plan at five key cross-border sites involving the People's Republic of China, Cambodia, the Lao People's Democratic Republic, and Viet Nam.
[i] Includes regional technical forums, regional workshops, regional training, regional project manager meetings, cross-border simulation exercises, regional steering committee meetings, etc.
[j] Contact details recorded by RCU after first encounter
[k] Ready-made questionnaires to consult countries to collect data and information, analyze them, and redistribute the findings (cross-border activities, directories, etc.).
[l] Includes job aids to organize events, monitor training quality, etc.
[m] All combined, helpful technical resources collected by RCU, uploaded onto the GMS CDC website, and made publicly available to all professionals.
[n] Included directors of national institutes, Ministry of Health directors of departments, etc.
[o] Includes GMS CDC activity photo gallery, yearly wall planner poster, etc.

ADB = Asian Development Bank; CLV = Cambodia, the Lao People's Democratic Republic, and Viet Nam; GMS CDC = Greater Mekong Subregion Regional Communicable Diseases Control Project; IFRC = International Federation of Red Cross; PMU = project management unit, RCU = Regional Coordination Unit; RSC = regional steering committee; SISEA = Surveillance and Investigation of Epidemic Situations in Southeast Asia.

Source: RCU. 2010. *Completion Report: Report of the Regional Coordination Unit: Greater Mekong Subregion Regional Communicable Diseases Control Project*. Hanoi; and IED study team.