



GREATER MEKONG SUBREGION  
**ENVIRONMENT  
OPERATIONS CENTER**

## CEP-BCI 2012-2016 Inception Report

---

**Regional Technical Assistance  
(RETA) 7987**

*7 June 2012*

**Core Environment Program and Biodiversity Conservation Corridors Initiative in the Greater Mekong Subregion, Phase II  
(Co-financed by the Government of Finland)**

**Vision**

A poverty free and ecologically rich Greater Mekong Subregion.

The Core Environment Program and  
Biodiversity Conservation Corridors  
Initiative 2012–2016

Inception Report

©GMS EOC June 2012

GMS Environment Operations Center  
23<sup>rd</sup> Floor  
The Offices at Central World  
999/9 Rama 1 Road, Pathumwan  
Bangkok 10330  
Tel: (+66) 2 207 4444  
Fax: (+66) 2 207 4400  
Email: [info@gms-eoc.org](mailto:info@gms-eoc.org)  
Website: [www.gms-eoc.org](http://www.gms-eoc.org)

## CONTENTS

<b>I.</b>	<b>INTRODUCTION</b>	<b>5</b>
<b>II.</b>	<b>CONTEXT</b>	<b>6</b>
<b>III.</b>	<b>INCEPTION PROCESS</b>	<b>9</b>
<b>IV.</b>	<b>PROGRAM DESIGN AND STRATEGIC THRUSTS</b>	<b>10</b>
<b>V.</b>	<b>PROGRAM OVERVIEW</b>	<b>12</b>
A.	Impact, outcome and components	12
B.	Subcomponents and Overview of Activities	13
C.	Costs and Financing	17
D.	Implementation Arrangements	18
	<b>APPENDIX 1: CEP-BCI (2012–2016) DESIGN AND MONITORING FRAMEWORK</b>	<b>19</b>
	<b>APPENDIX 2: CONSOLIDATED WORK PLAN FOR 2012–2013</b>	<b>23</b>
	<b>APPENDIX 3: COUNTRY WORK PLANS</b>	<b>25</b>
E.	CEP-BCI Phase II Cambodia Work plan for 2012–2013	25
F.	CEP-BCI Phase II Lao PDR Work plan for 2012–2013	29
G.	CEP-BCI Phase II PR China Work plan for 2012–2013	34
H.	CEP-BCI Phase II Thailand Work plan for 2012–2013	37
I.	CEP-BCI Phase II Viet Nam Work plan for 2012–2013	41

## ABBREVIATIONS

ADB	–	Asian Development Bank
BCC	–	Biodiversity Conservation Corridors project
CEP-BCI	–	Core Environment Program and Biodiversity Conservation Corridors Initiative
EIA	–	Environmental Impact Assessment
EOC	–	Environment Operations Center
EMM	–	Environment Ministers' Meeting
EPA	–	environmental performance assessment
EPI	–	environmental performance index
EWEC	–	East-West Economic Corridor
FAO	–	Food and Agriculture Organization of the United Nations
GEF	–	Global Environment Facility
GIS	–	Geographic Information System
GMS	–	Greater Mekong Subregion
MRV	–	measurement, reporting, and verification
NAMAs	–	Nationally Appropriate Mitigation Actions
NSU	–	national support unit
NTFP	–	non-timber forest product
PES	–	Payments for Ecosystem Services
PFD	–	program framework document
REDD+	–	reducing emissions from deforestation and forest degradation
REL	–	Reference Emission Levels
RETA	–	regional technical assistance
SEA	–	strategic environmental assessment
WGE	–	Working Group on Environment

In this report, "\$" refers to US dollar

## I. INTRODUCTION

1. In 2005, the Greater Mekong Subregion (GMS) Core Environment Program and Biodiversity Conservation Corridors Initiative (CEP-BCI) was endorsed at the 2nd Greater Mekong Subregion Summit of Leaders represented by governments of Cambodia, PR China, Lao PDR, Myanmar, Thailand and Viet Nam. From 2006–2011, CEP-BCI was administered by the Asian Development Bank (ADB) under a regional technical assistance (RETA 6289) and co-financed by ADB, Governments of Finland, Sweden, and Netherlands as well as through the PR China Poverty Reduction Fund. The GMS Working Group on Environment (WGE) guides the program and oversees the Environment Operations Center (EOC), which provides secretariat and coordination support.

2. CEP-BCI strives to achieve a shared vision of “a poverty-free and ecologically rich GMS” and is anchored in the GMS Economic Cooperation Program (GMS Program). The focus of CEP-BCI is to mainstream sound environmental management across all GMS Program corridors and sectors to enhance its development impact and sustainability.

3. CEP-BCI's achievements were acknowledged by the second GMS Environment Ministers' Meeting (EMM) in January 2008 and the ADB and EOC were requested to begin preparations for Phase II (2012–2016). This process led to the endorsement of the *Program Framework Document 2012–2016* by the EMM in Phnom Penh, Cambodia in August 2011. ADB then prepared and approved a new RETA (7987), covering the period 2012–2015, with the Government of Finland agreeing to co-finance it (\$14 million) along with ADB (\$800,000). Additional co-financing is expected from the Government of Sweden, the Nordic Development Fund and the Global Environment Facility (GEF), which is expected to increase the RETA amount to \$28.1 million and extend the RETA duration to the end of 2016. In May 2012 the WGE endorsed the CEP-BCI Phase II work plan for 2012–2013.

4. This report describes the inception process for Phase II, outlines program components and activities, and presents the budget breakdown and funding streams as well as the consolidated work plan for 2012–2013.

## II. CONTEXT

5. **Rapid yet inequitable economic development.** During the past two decades, economic growth in the GMS has outpaced that in many other parts of the world. Between 2000 and 2009 average annual gross domestic product in the subregion grew at a rate of over 9.5%.<sup>1</sup> GMS exports have increased nearly tenfold since the early 1990s, while trade within the subregion has expanded even more dramatically – by 24 times. Foreign direct investment has contributed significantly towards development with increasing amounts originating within the region.<sup>2</sup> The development of inter-regional economic links and increasing investments has contributed to strong economic performance as well as improved resilience to global financial shocks. This has also been supported by the diversification of GMS economies with the emergence of manufacturing and service industries, such as tourism, alongside the traditional mainstay of agriculture.

6. Economic development in the subregion is positively impacting human wellbeing. Per capita incomes have increased, with gross national income (GNI) doubling in most countries between 1997 and 2007.<sup>3</sup> In addition, GMS countries are on track to achieve many of the targets set out under the Millennium Development Goals (MDG).<sup>4</sup>

7. Despite impressive gains, development benefits have been unevenly distributed, particularly between rural and urban areas, and poverty remains a major concern. Around 45 million people in the GMS live below their national poverty line, nearly 14% of the 332 million people who live in the subregion. Within countries, the gap between rich and poor has generally widened – the Gini coefficient, a measure of income distribution, increased for most GMS countries between 1990 and 2009.<sup>5</sup> This is partially attributable to the concentration of infrastructure along coastal areas and the inaccessibility of the land-locked hinterlands – particularly upland areas which support about 85 million of the 325 million people living in the GMS. As elsewhere in the world, poverty is concentrated in rural areas where most households depend on subsistence agriculture and rural women and marginalized groups such as ethnic minorities are most vulnerable.

8. **Current growth is based on unsustainable natural resource exploitation.** Driven by demand for food, energy, and commodities; economic growth in the GMS has depended on harnessing the subregion's extensive natural resources and ecosystem services. Nearly 67% of the region's population lives in rural areas where subsistence agriculture, fisheries, and forest related activities underpin economic activity. Agriculture contributes more than 21% of gross domestic product in the GMS and provides employment for 40% of the population. Biomass, especially in the form of fuel wood, remains the major source of energy for lighting and heating in rural areas in all GMS countries except Thailand. In addition, half of planned investments in power generation will be in the hydropower sector, which is directly dependent on ecosystems services such as water regulation and soil protection. Many of the GMS' ecosystems also provide the natural assets which support the subregion's growing tourism sector.

9. As a result of rapid economic growth, the natural capital of the GMS is dwindling at a concerning rate. This has been confirmed by environmental performance assessments (EPA) prepared under CEP-BCI as well as through other monitoring initiatives. Despite considerable efforts by GMS governments to sustainably manage natural resources, the magnitude of pressures is overwhelming the adequacy and efficiency of responses. For

---

<sup>1</sup> Asian Development Bank, Statistical Database System (accessed 08.03.11)

<sup>2</sup> ADB Key Indicators for Asia and the Pacific 2010

<sup>3</sup> Not adjusted for inflation

<sup>4</sup> ESCAP, ADB and UNDP, 2010. [Achieving the Millennium Development Goals in an Era of Global Uncertainty: Asia-Pacific Regional Report 2009/10](#)

<sup>5</sup> World Bank, 2011. GINI Index values for 1990–2010

example, while overall forest loss in the GMS has slowed during the last decade,<sup>6</sup> forest degradation has accelerated. Many critical biodiversity landscapes in the GMS are being damaged by forest fragmentation, placing further strain on populations of globally significant threatened species. Combined with unsustainable exploitation of wild plants and animals - through both legal and illegal means – the GMS faces an ‘empty forest syndrome.’<sup>7</sup>

10. **Concerning implications for water, food and energy security.** The continuation of unsustainable resource exploitation in the GMS will undermine future economic development and threaten water, food, and energy security.

1. *Water resources.* Poorly planned and designed water use schemes create significant social and environmental impacts by impeding downstream flows and damaging aquatic ecosystems. Increased withdrawals and dry-season shortages intensify competition for water, particularly in high irrigation areas such as the Red and Chao Phraya river deltas. On the whole, water quality in the GMS is deteriorating as a result of contaminant loading from agriculture, urban settlements, and industry.<sup>8</sup> This has implications for commerce as well as for food safety and human health.
2. *Food security.* Well managed land and water resources are essential to maximize the subregion’s food production potential. Water will increasingly become a constraining factor for agriculture due to competition from domestic, industrial and energy (i.e., hydropower) consumption. Degradation of water and soil quality, population increases, and changing dietary patterns also threaten future food security. Consumer preferences in the GMS are shifting away from cereals to animal products, fish, and vegetables. Based on expected population growth, demand for food is projected to increase some 25% by 2050.<sup>9</sup>
3. *Energy security.* Rapid economic development has resulted in energy demand exceeding supply in the GMS, and coupled with rising global fuel prices, there is growing concern over energy security. Meeting future energy demand will require substantial financial investments, which, if not planned and managed well, may create significant negative social and environmental impacts.

11. Secure access to water, energy, and food is a prerequisite for fulfilling basic human rights and meeting national targets on poverty reduction. Pro-poor development and sustainable economic growth can only be achieved through the efficient and effective management of these and other natural resources.

2. **The emerging challenge of climate change.** Climate change poses a substantial challenge for the subregion. The geographic and socio-economic features of the GMS make it particularly vulnerable, especially as many key sectors; including agriculture, energy, and tourism; depend upon natural resources. Increased weather variability and extreme weather events as well as changes to rainfall patterns and agricultural zones are predicted. If responses are not effective, climate change will impact economic development, poverty reduction, and biodiversity conservation. Most at risk are rural populations, the majority of whom are subsistence farmers and lack adequate social safety nets to cope with the anticipated impacts.

---

<sup>6</sup> FAO. 2011. Forests and Forestry in the Greater Mekong Subregion to 2020.

<sup>7</sup> The ‘empty forest’ syndrome describes significant gaps in the biodiversity of a forest area, caused mostly by hunting due to the illegal wildlife trade

<sup>8</sup> FAO. 2010. Aquastat: FAO Information System on Water and Agriculture.

<sup>9</sup> Johnston, R. M., Hoanh, C. T., Lacombe, G., Noble, A. N., Smakhtin, V., Suhardiman, D., Kam, S. P., Choo, P. S. 2010. *Rethinking agriculture in the Greater Mekong Subregion: how to sustainably meet food needs, enhance ecosystem services and cope with climate change.* Colombo, Sri Lanka International Water Management Institute

12. The GMS contains nearly 5% of the global population yet produces less than 2% of the world's energy related fossil fuel emissions.<sup>10</sup> However, economic development in the GMS is predicted to lead to a rapid growth in energy demand. The region accounts for close to 6% of forestry related greenhouse gas emissions even though the GMS contains only 3% of the world's forest area.

13. **Economic growth to continue.** Strong growth in larger Asian economies, particularly PR China, will continue to generate demand for goods and services produced in the GMS. Economic growth will continue, driven by investments in infrastructure, energy, trade, tourism and agriculture through the GMS Program and other investment platforms. However, long-term economic growth will largely depend on how effectively the subregion can respond to the pressures and challenges mentioned above.

---

<sup>10</sup> With the exception of PR China, greenhouse gas emissions per capita from energy use in GMS countries (ranging from 0.25 to 3.7 tons) are far lower than the global average of 4.1 tons (2005).

### III. INCEPTION PROCESS

14. The program framework document (PFD) outlines how Phase II of CEP-BCI will support GMS governments to respond effectively to existing and emerging environmental challenges. Building on the foundation established during Phase I (2006–2011), CEP-BCI will scale-up GMS awareness and capacity to undertake effective environmental planning and monitoring, biodiversity conservation and livelihood development, as well as address key issues such as climate change.

15. The development of the PFD and subsequent country work plans involved an extensive participatory process which began in 2009. Priority work areas for Phase II were identified through consultations with member countries and drew on lessons learned from implementation and independent evaluations for Phase I. These priorities were then developed into components during a series of follow-up consultations held between 2010 and 2011. In April 2012 workshops were held in each GMS country to develop country work plans for 2012–2013 with specific activities identified. This process included input from development partners as well as key sector government representatives. The consolidated work plan for 2012–2013 was then endorsed by the WGE in Jinghong, PR China in May 2012 (see Appendix 2).

16. **Activity selection criteria.** To ensure Phase II activities match the strategic priorities of the program, each proposed activity underwent a screening process. Main criteria included the activity's relevance to at least one of the program's four components, its contribution to addressing current or emerging environmental pressures within the GMS Program and economic corridors, and its alignment with country and ADB economic development investment strategies and frameworks. Other criteria included the activity's positive contribution to gender, ethnicity, and poverty issues; institutional capacity development; and regional synergies.

**Table 1: Timeline of CEP-BCI Phase 2 Inception**

Date	Event
2008	GMS Environment Ministers request ADB to design CEP-BCI Phase II.
2009	Phase I joint evaluation by Governments of Finland, Sweden and the Netherlands.
2009-2011	Modifications and adjustments to CEP-BCI in response to evaluation findings.
2009	WGE ask ADB to initiate design of CEP-BCI Phase II as requested by EMM in 2008.
2010-2011	CEP-BCI (2006-2011) evaluation and appraisal of CEP-BCI Phase II by the Government of Finland.
2010	Regional consultations for CEP-BCI Phase II held in Bangkok in February and March.
2010-2011	Country consultations to design CEP-BCI Phase II.
2010-2011	Drafting and review process for design of CEP-BCI Phase II.
2011	GMS Environment Ministers endorse PFD for CEP-BCI Phase II.
2011	ADB Board of Directors approve RETA for CEP-BCI Phase II.
2012	Inception missions to develop CEP-BCI Phase II country work plans held in April.
2012	WGE endorse 2012-2013 work plan.

## IV. PROGRAM DESIGN AND STRATEGIC THRUSTS

17. The design of CEP-BCI Phase II program is in line with the latest strategic directives issued at the GMS Environment Ministers' Meeting and GMS Ministerial Meeting, both held in 2011.<sup>11</sup> Joint ministerial statements from the meetings called for the proactive integration of environment and climate change measures into the GMS Program. CEP-BCI Phase II is also closely aligned with the GMS Program's Strategic Framework 2012–2022, and complements several other ADB technical assistances relating to economic development, environment and climate change.

18. Strategic approach. Under Phase I, CEP-BCI developed awareness, fostered collaboration, and piloted initiatives as the first steps toward mainstreaming sound environmental management in the GMS Program. Building on this, Phase II intends to scale up the integration of environmental planning, biodiversity conservation, and climate resilience measures in the GMS Program.

19. CEP-BCI Phase II will continue to follow an integrated landscape approach as a framework for understanding, measuring, tracking, and promoting the role of natural resources in GMS economic development. The program will focus on promoting the role of ecosystem services as a means to ensure food and energy security as well as to sustain economic growth and equity.

20. The program design is consistent with the 'green economy' concept. CEP-BCI aims to integrate measures to reduce carbon emissions and pollution, enhance energy and resource efficiency, and prevent the loss of biodiversity and ecosystem services that support investments and income and employment opportunities. In addition, the program will focus on leveraging investments to promote green value chains for local products in support of livelihood development. The program has four strategic thrusts:

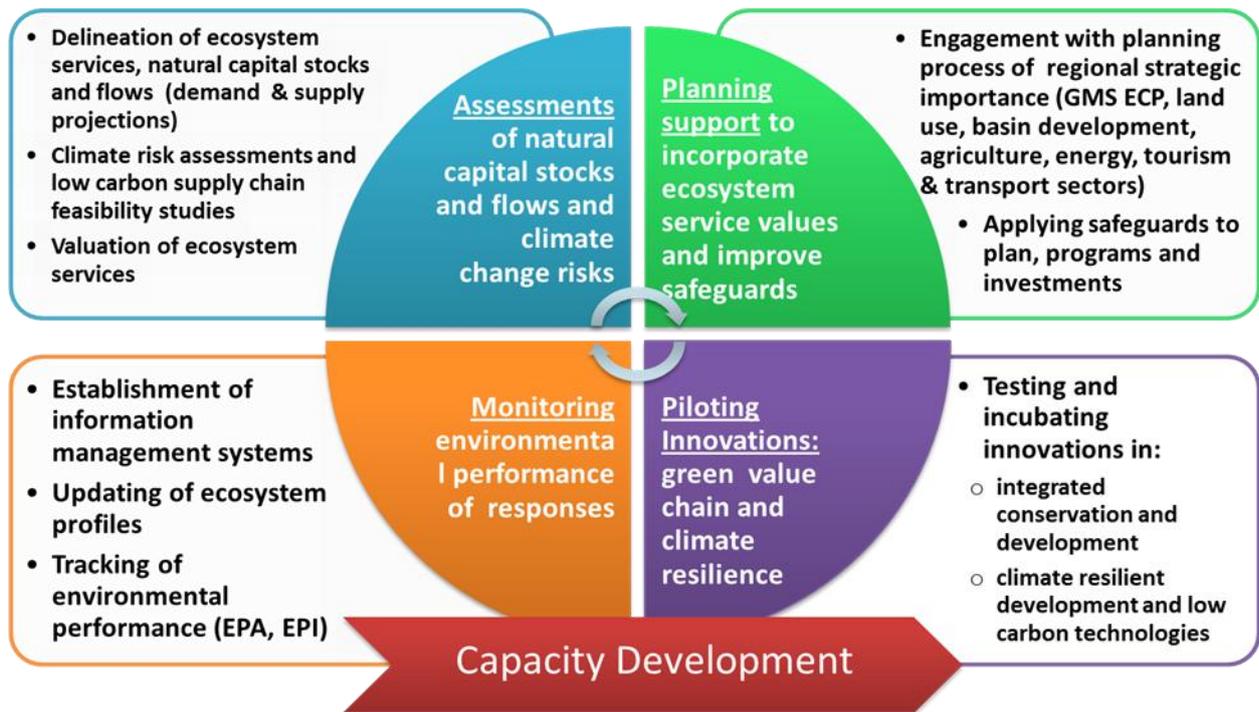
1. *Strengthen country capacity to assess natural resource stocks and flows* within key ecosystems, landscapes, and economic corridors. These assessments will foster better understanding of the relationship between economic development and ecosystem services.<sup>12</sup>
2. *Strengthen capacity to integrate environmental considerations into economic development planning.* The program will help ensure that environmental costs and the role of ecosystem services influence economic planning and investment decision making.
3. *Pilot innovative ideas and approaches* relating to integrated conservation and development, climate resilience, and low carbon technology. The program will test innovations in collaboration with other implementing partners to enable future scaling up.
4. *Strengthen monitoring capacity* to enhance country responses to environmental issues. The program will support monitoring at subregional, national, and subnational scales.

---

<sup>11</sup> Third GMS Environment Ministers' Meeting was held on 28 July 2011, in Phnom Penh, Cambodia and 17<sup>th</sup> Environment Ministerial Meeting was held on 4 August 2011, in Phnom Penh, Cambodia.

<sup>12</sup> Ecosystem services are the multitude of resources and processes that are supplied by ecosystems. They are broadly grouped as provisioning, regulating, supporting and cultural services. See <http://www.maweb.org/en/index.aspx>

Figure 1: CEP-BCI (2012–2016) Strategic areas



## V. PROGRAM OVERVIEW

### A. Impact, outcome and components

21. The anticipated impact of the program is “improved biodiversity conservation and climate resilience across the GMS,” and the outcome, an “environmentally friendly and climate resilient GMS Economic Cooperation Program.” Achievement of the impact and outcome will contribute to CEP-BCI’s vision of a “poverty free and ecologically rich GMS.” Four components provide the framework for activities under CEP-BCI Phase II.

3. **Component 1: Environmental planning systems, methods, and safeguards improved.** This component supports the application of planning tools and methods to incorporate environment and biodiversity conservation considerations into economic development strategies and key sector and economic corridor plans. The first element of this component is to *strengthen planning capacity*. Planning tools include strategic environmental assessments (SEAs) and Geographic Information System (GIS) applications (e.g. demand models, spatial multi-criteria analysis). Planning support will be complemented by capacity development on environmental safeguards (e.g. environmental impact assessments and environmental management plans). By applying such assessments early in planning and investment decision-making, environmental risk management measures and climate-friendly alternatives (e.g. resource-efficient and low-carbon measures) can be internalized. The second element is to *strengthen environmental monitoring and reporting systems* to allow GMS countries to track the effectiveness of policy responses to environmental challenges and enable environmental reporting obligations to be met. Innovative research and modeling approaches will be used to fill data gaps while dissemination initiatives will ensure that knowledge and information is readily available.

22. **Component 2: Management of transboundary biodiversity conservation landscapes and local livelihoods improved.** This component will support biodiversity conservation in important GMS landscapes. It will help develop sustainable livelihoods for local communities and enhance the performance of investments in economic corridors by maintaining and improving ecosystem goods and services. Activities will include (i) improving and updating biodiversity profiles in conservation landscapes, (ii) providing economic and other analyses to support value chain for ecosystem-based goods and services toward improved local livelihoods, and (iii) strengthening biodiversity conservation corridor management and monitoring.

23. **Component 3: Climate-resilient and low-carbon strategies developed.** This component will promote climate-friendly development within the GMS through the integration of climate change mitigation and adaptation considerations into key sectors. Activities will focus on risk and vulnerability assessments and adaptation strategies, particularly for rural communities dependent on agriculture or tourism. Emphasis will be given to measures benefiting women and ethnic minorities. Synergies between climate change adaptation and conventional disaster risk reduction measures will be supported. Low-carbon strategies and monitoring, reporting, and verification systems will be developed for transport, energy, and other relevant sectors, including support to reduced emissions from deforestation and forest degradation (REDD+) readiness.

24. **Component 4: Institutions and financing for sustainable environmental management improved.** This component will develop capacity to strengthen institutional arrangements and enabling policies for effective GMS cooperation on environmental management within the GMS Program. It supports the development of enabling policy and regulatory conditions to promote conservation and ecosystem management through incentive-based mechanisms (e.g. payment for ecosystem service schemes). Activities will promote private financing for conservation and ecosystem management through public-

private-partnerships and innovative financing instruments (e.g. biodiversity offsets targeting logging and mining operations and philanthropic support).

## **B. Subcomponents and Overview of Activities**

### **1. Environmental planning systems, methods, and safeguards improved**

25. Under Component 1, there are three subcomponents: (i) build subregional and national planning capacities, (ii) capacity building for environmental safeguards, and (iii) strengthen country environmental monitoring processes.

26. **Build subregional and national planning capacities.** The focus of this subcomponent will be to build the capacity of environment and sector line agencies to prepare economically, socially, and environmentally sound policies, plans, and programs. Activities will address strategic environmental issues of regional and national importance relating to (i) the GMS Program, (ii) land use management in transboundary landscapes, (iii) management of ecosystem services, and iv) energy/power development. The subcomponent is designed to align with the GMS Program goal to promote “connectivity, competitiveness and community” and the food-water-energy priorities set during the GMS 2020 conference.<sup>13</sup>

1. *Economic assessment of natural capital demand and supply, and valuation of ecosystems services.* Ecosystem services refer to a broad set of resources and functions provided by nature.<sup>14</sup> They are derived from a stock of ‘natural capital’ in much the same manner as financial flows are from a stock of financial capital. There is increasing recognition that natural capital is an integral aspect of a nation’s wealth and that it needs to be appropriately accounted for in national policy, investment decisions, and safeguard measures. However there are many challenges involved, including (i) determining the extent of available natural capital stocks, (ii) the demand on natural capital stocks, (iii) the sustainable flow of ecosystem services from these stocks, (iv) the economic value of these services, and (v) appropriate arrangements for equitable access and use rights. This activity will focus on selected landscapes and map important natural capital stocks and flows, estimate the demand for ecosystem goods and services, and value ecosystem services. Partnerships with other subregional initiatives and academic institutions will be forged to establish the research base necessary to undertake this work, and government capacity will be built on related assessment approaches.
2. *Planning support to the GMS Program.* This builds on the activities described above and aims to support improved planning and decision making at the regional, national, and subnational levels. At the regional level, GMS countries are gearing up to develop master plans to transform existing infrastructure corridors into full-fledged economic corridors. This presents an opportunity to create linkages to connect urban growth centers with rural areas through green value chains. This subcomponent will focus on optimizing sustainable growth scenarios based on current trends and medium and long term regional forecasts of economic activity, including trade and urban development. Spatial decision support tools will be developed to help planners internalize environmental and social costs and preview the outcomes of investment decisions.
3. *Planning support for land use, integrated spatial development (area based) and power/energy development plans.* The quality and quantity of ecosystem services, particularly provisioning services (e.g., biodiversity and timber) and regulating services (i.e., soil conservation, water retention and control) are directly linked to key development sectors in the GMS. Sectors including agriculture, energy, tourism, and

<sup>13</sup> For information on the GMS 2020 International Conference, visit [www.gms-eoc.org/events/international-conference-gms2020](http://www.gms-eoc.org/events/international-conference-gms2020)

<sup>14</sup> For a more in-depth definition, see [www.maweb.org/en/index.aspx](http://www.maweb.org/en/index.aspx)

trade, are all heavily reliant on ecosystem services. At the same time, how these sectors operate strongly influences whether or not these services are maintained, enhanced, or reduced. The deterioration of ecosystem services creates increased financial risks for sector investments. At the broader societal level, it has a negative impact for national socio-economic planning by potentially impacting health, food, and energy security, and ultimately influencing the ability of countries to achieve their Millennium Development Goals. Therefore, economic, social, and environmental risks must be explicitly considered in sector plans. Towards this, CEP-BCI will support SEA's on area based planning, land management, and energy/power development. This will help countries build planning capacity to harmonize land use, maintain ecosystem services, optimize natural capital use, and minimize climate change risks. This will ensure a higher net rate of return from development investments. The activities will focus on building analytical capacity, improving cross-institutional understanding and coordination, and institutionalizing SEA processes. Particular emphasis will be on developing multistakeholder participatory processes, integrating spatial decision support systems, and preparing SEA regulation and guidelines.

**27. Capacity building for environmental safeguards.** Stronger safeguards and performance standards are increasingly being applied to infrastructure sectors such as transport and energy. This subcomponent will strengthen national compliance to improve the operational efficiency of projects and reduce their impact on the environment. It will contribute to the development of standards, guidelines, and environmental monitoring. To achieve this, CEP-BCI will closely work with relevant national and regional initiatives to strengthen capacity and enhance safeguard systems. The development of safeguards capacity will extend to improving compliance with multilateral environmental agreements on the movement of wildlife, timber, and other natural resources.

**28. Strengthen country environmental monitoring processes.** This subcomponent will strengthen country capacity for environmental monitoring, fill primary data gaps related to program activities, and monitor national and regional status and trends relevant to both the GMS Program and CEP-BCI. Government officials will be trained in the use of spatial decision support tools to improve their capacity to assess, monitor, and evaluate key landscape features. Emphasis will be on features such as forest and land-use state and change, biodiversity values, and ecosystem services. Activities to enhance regional monitoring of environmental trends will be undertaken and supported by the development of an environmental performance index. Baselines for environmental monitoring in biodiversity conservation corridor sites and GMS economic corridors will be developed. This will involve building the technical capacity of local institutions and universities as this will lead to more sustainable monitoring systems. A regional environmental monitoring and information system will be developed which will consolidate primary and secondary data (both spatial and non-spatial). This information will be disseminated to stakeholders through the EOC website as well as the GMS interactive atlas and indicator portal.

## **2. Management of transboundary biodiversity conservation landscapes and local livelihoods improved**

**29.** Under Component 2, there are the following three subcomponents: (i) improve and update biodiversity profiles in conservation landscapes, (ii) strengthen biodiversity conservation corridor management and monitoring in biodiversity conservation landscapes, and (iii) support value chain development based on ecosystem goods and services.

**30. Improve and update biodiversity profiles in conservation landscapes.** This subcomponent aims to update the status of key conservation landscapes in the GMS. These landscapes include areas with some form of protected status and the contiguous areas (corridors) that connect them, and are increasingly under threat from competing land uses. There is an urgent need to prioritize areas for conservation efforts and then source

investment opportunities to improve conservation effectiveness and efficiency. Updated profiles of the conservation landscapes – ecosystem services, biodiversity, land-use regimes, pressures, etc – will guide the prioritization of conservation efforts and provide a comprehensive baseline for ongoing monitoring. Towards this, national research and monitoring capacity will be strengthened to undertake ecosystem and biodiversity profiling. Networks with research and academic institutes will be established to support governments with long-term biodiversity monitoring and to apply tools such as spatial multi-criteria assessment and biodiversity modeling.

**31. Strengthen biodiversity conservation corridor management and monitoring in biodiversity conservation landscapes.** Building on the achievements of biodiversity conservation corridor pilot activities implemented during Phase I, this subcomponent will focus on strengthening regional collaboration on transboundary biodiversity conservation area management. The aim is to (i) develop mechanisms to facilitate subregional sharing of technical knowledge and best practice, (ii) support the development of biodiversity conservation plans, (iii) develop technical guidelines and operating plans for conservation areas and species management in transboundary areas, and (iv) support the development of legal instruments that recognize biodiversity conservation corridors.

**32. Support value chain development based on ecosystem goods and services.** This subcomponent will complement the Biodiversity Conservation Corridor (BCC) project by testing and incubating innovative approaches to support local livelihood development. The focus will be on establishing green value chains for agriculture, forest products, and ecosystem services (e.g. eco-tourism). This will be achieved by improving access to technology and knowledge for increasing productivity, markets, and finance. The subsistence, agrarian communities living in the BCC sites will be the target of the intervention. The objective is to reduce dependence of local communities on forest resources for livelihoods and provide incentives for them to participate in forest protection and restoration.

### **3. Climate-resilient and low-carbon strategies developed**

**33.** Under this component there are three subcomponents: (i) support climate resilience of agriculture, natural resources, and tourism sectors, and create synergies between adaptation and disaster risk reduction in water, agriculture and coastal resources; (ii) support low carbon strategies and measuring, reporting, and verification (MRV) framework for Nationally Appropriate Mitigation Actions (NAMAs); and (iii) support country REDD+ readiness and planning.

**34. Supporting climate resilience of agriculture, natural resources and tourism sectors, and building climate change adaptation capacities in communities.** Climate change poses a risk to economic growth and poverty reduction efforts in the GMS. Climate resilient interventions will build on the CEP-BCI's integrated landscape and ecosystem based approach. This subcomponent will strengthen the climate change knowledge base and adaptation capacity of GMS countries. Activities will focus on: (i) improving information about climate change projections and impacts for the region, (ii) developing sectorial approaches to assess and respond to climate change risks, and (iii) supporting communities to respond to natural disasters and adapt to a changing climate. The climate change information base will be strengthened by developing climate projections using various downscaled models, identifying areas at risk from natural hazards (risk/hazard mapping), and compiling adaptation best practice (including from indigenous knowledge).

**35.** To improve the adaptation capacity of economic sectors such as transport and energy, climate proofing will be integrated into sector planning and infrastructure investments. The capacity of communities to respond to climate change risks will be strengthened by replicating integrated ecosystem and community-based risk assessments based on participatory rural appraisal techniques. Pilot projects for early warning systems

and local finance mechanisms (e.g. risk insurance) will be developed in communities living in biodiversity conservation corridor areas.

**36. Support country REDD+ readiness and piloting.** This subcomponent will complement the integrated landscape and ecosystem based approach by seeking co-benefits arising from mitigating emissions from reduced forest conversion and degradation as well as increased forest stocks. Activities will focus on building national and subnational capacity to enable countries to seek additional REDD+ finance to further efforts towards more sustainable forest management. Capacity building will focus on improving understanding of REDD+, as well as techniques for establishing baseline Reference Emission Levels (RELs) and MRV systems. Activities will build on CEP-BCI Phase I REDD+ work that includes the application of a participatory monitoring framework and consultations on benefit sharing mechanism. Pilot projects will be designed and implemented in BCC sites to test: a) Instruments for 'free, prior, informed consent;' b) Participatory monitoring framework in support of REL/MRV, and; c) Benefit distribution mechanisms.

**37. Support low carbon strategies and MRV framework for NAMAs.** Activities under this subcomponent will strengthen the technical capacity of GMS countries for climate change mitigation by building monitoring capacity and supporting interventions that reduce greenhouse gas emissions. For monitoring capacity, sector-based carbon footprint assessments will be conducted to support the development of national MRV standards and help identify areas for intervention. Activities will also support country responses related to mitigation actions, policies, and strategies (e.g. national climate change strategies, development of NAMAs). For developing low carbon interventions, program activities will focus on analyzing the feasibility of energy efficiency and renewable energy in the transport and energy sectors (e.g. through the development of Marginal Abatement Cost Curves). Pilot mechanisms will be deployed to test these interventions and will focus on small and medium sized enterprises (i.e. green freight and fuel efficiency measures) and technologies for communities.

#### **4. Strengthened institutions and financing for sustainable environmental management**

**38.** Under Component 4 there are three subcomponents: (i) strengthening of national and subnational level capacity for environmental management and monitoring with particular emphasis on the roles of WGE and national support units in delivering sub-regional outcomes and impacts; (ii) provide policy support for sustainable financing; and (iii) facilitate public-private-partnerships for gender sensitive and ethnic minority friendly conservation and ecosystem management.

**39. Strengthening of national and subnational level capacity for environmental management and monitoring with particular emphasis on roles of WGE and national support units for delivering subregional outcomes and impacts.** CEP-BCI's primary focus is to develop capacity of national systems to better manage environmental assets and services. Under CEP-BCI Phase II, there is a recognized need for enhanced institutional capacity development to ensure effective program implementation and to achieve program outcomes. A priority is to enable the WGE and national support units under their purview to assume full responsibility to coordinate national inter-sectorial initiatives, as well as facilitate transboundary cooperation in agriculture, energy, tourism, and transport sectors.

**40.** Universities play a crucial role in establishing the necessary research and monitoring base for effective policy decisions. The EOC will continue to develop itself as a regional platform to facilitate policy-science linkages by engaging with international and regional universities and also through its internship program.

**41. Provide policy support for sustainable financing.** During CEP-BCI Phase I, several study tours and capacity building events were held to acquaint high level GMS

officials with different payment for ecosystem services (PES) modalities including: (i) carbon offsets, (ii) wetland offsets, (iii) transfer of payments for water services, and (iv) public payments for ecosystem services. This subcomponent will continue to build PES capacity in the region through:

1. Identifying ecosystem services that individually or bundled together would be able to compete with other uses. Currently, carbon sequestration, water, and ecotourism services have strong market potential;
  2. Creating enabling policy conditions by supporting promulgation of pilot PES schemes.
  3. Testing/piloting PES implementation at the site level for bundling ecosystem services such as carbon storage, water regulation, and eco-tourism assets etc;
  4. Establishing monitoring and verification systems for PES by building human resource capacity through a learn-by-doing approach;
  5. Incorporating PES into national plans (socio-economic, environment and biodiversity conservation, energy development, and tourism development); and
  6. Scaling up PES interventions based on experience gained from pilot activities.
42. **Facilitate public-private-partnerships for gender sensitive and ethnic minority friendly conservation and ecosystem management.** This subcomponent will identify and explore opportunities for public-private-partnership investments emerging from program activities. Financial and economic analyses will be conducted to establish the feasibility of green economy actions.

### C. Costs and Financing

43. Table 2 shows the cost estimates for implementing CEP-BCI Phase II for period 2012–2016 and the budget allocated for 2012–2013 work plan. The estimates were computed on a base case model where Phase II is complemented by other programs including the BCC project and the GEF-supported GMS Forest and Biodiversity Conservation Program.

**Table 2: Budget Estimate by Components in \$ '000**

No.	Components	Amount (2012–2016)	%	Amount (2012-2013)	%
1	Environmental planning systems, methods and safeguards improved	7,300	26	3,019	31
2	Management of transboundary biodiversity conservation landscapes and local livelihoods improved	4,700	17	1,758	18
3	Climate resilient and low carbon strategies developed	5,700	20	2,126	22
4	Institutions and financing for sustainable environmental management improved	6,800	24	1,917	19
	EOC Administrative Cost	2,200	8	652	7
	ADB Administrative Fee	1,400	5	415	4
	<b>Total</b>	<b>28,100</b>	<b>100</b>	<b>9,886</b>	<b>100</b>

Source: ADB estimates, May 2012

44. Table 3 shows funding sources and flow per year for Phase II.

**Table 3: Budget Estimate by Financiers and Fund Flow 2012–2016 in \$ '000**

No.	Financiers	Amount	2012	2013	2014	2015	2016
1	ADB	800			300	500	
2	Government of Finland	14,000	2,500	4,000	4,000	3,500	
3	Sida	7,800	500	1,500	1,650	1,000	3,150
4	NDF	4,500		1,000	1,000	2,000	500
5	GEF	1,000		500	500		
	<b>Total</b>	<b>28,100</b>	<b>3,000</b>	<b>7,000</b>	<b>7,450</b>	<b>7,000</b>	<b>3,650</b>

Source: ADB estimates, May 2012

#### **D. Implementation Arrangements**

45. ADB will be the executing agency for CEP-BCI Phase II in continuation of arrangements established during Phase I. Accordingly, WGE focal agencies in each country will be responsible for coordinating and monitoring activities at the country level and endorsing CEP-BCI annual work plans and budgets. Coordination will involve ensuring that CEP-BCI activities complement other relevant programs and projects. This will require focal agencies liaising with sector line agencies at both national and provincial levels, as well as with non-government organizations (NGOs) and ADB Resident Missions. Implementation will be the responsibility of the relevant sector line agency and where appropriate, activities will be undertaken by implementing partners consisting of NGOs and academic/research institutions via Letters of Agreement with the EOC.

46. The WGE Focal Agencies will be assisted by national support units (NSU) to carry out the above responsibilities. NSU staff will facilitate coordination meetings, support implementation of activities in coordination with EOC staff, monitor progress, and report to the WGE Focal Point and EOC. The NSU will forge links with relevant GMS Program sector entities and will contribute towards updating the GMS-wide information system which will link each sector agency to the GMS secretariat and the EOC. NSU staff will also contribute to 6-monthly CEP-BCI progress reports.

47. The EOC will continue to serve as the program management unit and technical secretariat to the WGE. It will house the core technical team for the program, and be responsible for overall coordination as well as financial and administrative functions.

## APPENDIX 1: CEP-BCI (2012–2016) DESIGN AND MONITORING FRAMEWORK

Design Summary	Performance Targets and Indicators with Baselines	Data Sources and Reporting Mechanisms	Assumptions and Risks
<p><b>Impact</b></p> <p>Improved biodiversity conservation and climate resilience across the GMS</p>	<p>Compared to 2011 baselines by 2022:<sup>a</sup>            Forest patch sizes maintained in GMS biodiversity conservation corridors and landscapes  <i>Baseline for Cambodia, Lao PDR and Viet Nam: (a) Max patch size ('000 ha): 254 (2010), 205 (2001); (b) Mean patch size (ha): 3,406 (2010), 3,643 (2001)</i></p> <p>Climate change adaptation and disaster risk preparedness improved in at least 500 communities in GMS conservation landscapes  <i>Baseline: Risk and vulnerability assessment piloted in 10 communities (2011)</i></p>	<p>National and FAO forestry reports</p> <p>EPA and environmental performance index reports</p> <p>Provincial and local development plans</p> <p>BCC socioeconomic baseline in Cambodia, the Lao PDR, and Viet Nam</p> <p>CEP-BCI progress reports</p>	<p><b>Assumptions</b></p> <p>GMS governments remain committed to inclusive growth and sound environmental practices.</p> <p>Investment financing (public and private) is available.</p> <p><b>Risk</b></p> <p>Impact of rapid economic growth outpaces environmental response times.</p>
<p><b>Outcome</b></p> <p>Environment-friendly and climate-resilient GMS ECP</p>	<p>Compared to 2011 baselines, by 2015:            ECP portfolio comprises at least 20% of pro-environment and climate-resilient investments  <i>Baseline: 1.4% (2011)</i></p> <p>Livelihoods (cash and noncash elements) of at least 50% of participating households in the conservation landscapes are improved, with at least 35% women beneficiaries  <i>Baseline: Average annual household incomes in BCC communes / villages (2010) - Cambodia -\$600 (Koh Kong), \$160 (Mondulkiri); Lao PDR - \$2500; Viet Nam - \$960 to \$1587</i></p>	<p>GMS sector and line agency reports</p> <p>Regional, national, and sector publications on economic indicators</p> <p>Reports to GMS ministers' meetings and EMM</p> <p>CEP-BCI progress reports</p>	<p><b>Assumptions</b></p> <p>GMS governments remain committed to mainstreaming environmental concerns.</p> <p>Community and local agency support and ownership of activities continue.</p> <p><b>Risk</b></p> <p>Short-term development needs override long-term sustainable development priorities.</p>
<p><b>Outputs</b></p> <p>Environmental planning</p>	<p>By 2015:            Environmental and social considerations included in at least 10 GMS sector or corridor</p>	<p>GMS sector plans and strategies</p> <p>National</p>	<p><b>Assumption</b></p> <p>Sector agency support is received for environmental</p>

Design Summary	Performance Targets and Indicators with Baselines	Data Sources and Reporting Mechanisms	Assumptions and Risks
systems, methods, and safeguards improved	<p>strategies and plans <i>Baseline: 7 (2011)</i></p> <p>At least 150,000 people in the GMS economic corridors benefit from environmental measures, at least 35% of them women</p> <p>At least 100 agency staff (at least 35% women) able to implement safeguard assessments <i>Baseline: 210 staff trained, 30% women (2011)</i></p>	<p>environmental and social safeguards regulations and guidelines</p> <p>GMS country state of the environment reports</p> <p>CEP-BCI progress reports and baseline database</p>	<p>initiatives.</p> <p><b>Risk</b> Sector authorities promote unsustainable development for short-term revenue target gains.</p>
Management of transboundary biodiversity conservation landscapes and local livelihoods improved	<p>By 2015: Biodiversity corridors are gazetted in at least three GMS countries. <i>Baseline: none (2011)</i></p> <p>Co-management and maintenance of areas designated for strict protection is in place in at least three landscapes <i>Baseline: Co-management mechanisms initiated in two landscapes (2011)</i></p> <p>Payment for environmental services guidelines developed in at least two countries <i>Baseline: Viet Nam (2011)</i></p>	<p>Provincial regulations, decisions</p> <p>Provincial land-use plans</p> <p>GMS program evaluation reports</p> <p>TRAFFIC and WWF reports on wildlife and timber trade</p> <p>Program baseline and progress reports</p> <p>Socioeconomic surveys</p>	<p><b>Assumption</b> GMS cooperate on cross-border conservation activities.</p> <p><b>Risks</b> Conservation and sustainable livelihoods gains negated by <i>ad hoc</i> development</p> <p>Growing demand for wildlife and forest products</p>
Climate-resilient and low-carbon strategies developed	<p>By 2015: At least 3 national, provincial, or city-based MRV systems developed <i>Baseline: REDD+ and EWEC MRV systems tested (2011)</i></p> <p>At least three investment proposals on low-carbon technologies prepared <i>Baseline: none (2011)</i></p> <p>Climate change coping strategies adopted by at least 100 community groups, with at least 35% women beneficiaries</p>	<p>ADB climate change fund progress reports</p> <p>GMS ECP sector progress reports</p> <p>GMS country REDD reporting</p> <p>GMS business forum reports</p>	<p><b>Assumptions</b> Availability of funds for climate change activities</p> <p>Sufficient demand for low-carbon and energy-efficient growth</p> <p><b>Risk</b> Affordability and accessibility of climate proofing technology</p>

Design Summary	Performance Targets and Indicators with Baselines	Data Sources and Reporting Mechanisms	Assumptions and Risks
	<i>Baseline: Risk and vulnerability assessment piloted in 10 communities (2011)</i>		
Institutions and financing for sustainable environmental management improved	<p>By 2015: NSUs fully operational in at least four countries <i>Baseline: NSUs partially operational in three GMS countries (2011)</i></p> <p>At least 50% of EOC professional staff are from GMS, at least 40% of them women <i>Baseline: 55% EOC consultants from GMS countries, 33% of them women (2011).</i></p> <p>At least two bankable private sector projects in environment and natural resources developed and collaboration secured <i>Baseline: none (2011)</i></p>	Government circulars CEP-BCI progress reports	<p><b>Assumption</b> Sufficient financial resources and support for environmental service delivery</p> <p><b>Risk</b> Sustainable financing systems generate only limited income, with high transaction costs.</p>

Subcomponents
<p><b>Component 1: Improved environmental planning systems, methods and safeguards</b></p> <p>1.1 Build sub regional and national planning capacities</p> <p>1.2 Capacity building for environmental safeguards</p> <p>2.1 Strengthen country environmental monitoring processes (including improve compliance with multilateral environmental agreements on the movement of wildlife, timber and other natural resources)</p> <p><b>Component 2: Management of transboundary biodiversity conservation landscapes and local livelihoods improved</b></p> <p>2.1 Improve/update biodiversity profiles in conservation landscapes</p> <p>2.2 Strengthen biodiversity conservation corridor management and monitoring in biodiversity conservation landscapes</p> <p>2.3 Support value chain development based on ecosystem goods and services</p> <p><b>Component 3: Climate resilient and low carbon strategies developed</b></p> <p>3.1 Support climate resilience of agriculture, natural resources and tourism sectors, and create synergies between adaptation and disaster risk reduction in water, agriculture &amp; coastal resources</p> <p>3.2 Support country REDD readiness and piloting</p> <p>3.3 Support low carbon strategies and MRV framework for NAMAs in energy and transport</p>

sectors

**Component 4: Strengthened institutions and financing for sustainable environmental management**

- 4.1 Strengthening of national and subnational level capacity for environmental management and monitoring with particular emphasis on roles of WGE and NSUs for delivering subregional outcomes and impacts
- 4.2 Provide policy support for sustainable financing
- 4.3 Facilitate public-private-partnerships for conservation and ecosystem management

## APPENDIX 2: CONSOLIDATED WORK PLAN FOR 2012–2013

Activities	Geographic Scope							Timeline
	REG	CAM	PRC	LAO	MYA	THA	VIE	
<b>Component 1: Improved environmental planning systems, methods and safeguards</b>								
<b>1.1 Build subregional and national planning capacities</b>								
Economic assessment of natural capital (demand and supply) and valuation of ecosystem services	y							2012-2014
Planning support (e.g. SEA, spatial decision support) to GMS ECP master plan	y							2012-2013
Support spatial development planning for management of ecosystem services		y		y		y	y	2012-2015
Planning support (e.g. SEA, spatial decision support) to land use plans		y	y	y	y			2012-2014
Planning support (e.g. SEA, spatial decision support) to power/energy development plans		y			y		y	2012-2014
<b>1.2 Capacity building for environmental safeguards</b>								
Development of environmental safeguards monitoring and compliance capacity (e.g. improving compliance with multilateral environmental agreements on the movement of wildlife, timber and natural resources)		y	y	y	y	y	y	2012-2016
<b>1.3 Strengthen country environmental monitoring processes</b>								
GMS Environmental Information Management System (program monitoring, monitoring of specific GMS economic corridors, development of dissemination tools)	y							2012-2016
Development of EPI and follow on to EPA		y	y	y	y	y	y	2012-2015
Monitoring of biodiversity and socio-economic trends in biodiversity conservation corridors		y		y		y	y	2012-2014
<b>Component 2: Management of transboundary biodiversity conservation landscapes and local livelihoods improved</b>								
<b>2.1 Improve/update biodiversity profiles in conservation landscapes</b>								
Update delineation of ecosystems and biodiversity profile of transboundary landscapes	y							2012-2015
<b>2.3 Strengthen biodiversity conservation corridor management and monitoring in biodiversity conservation landscapes</b>								
Continuation of BCI pilots			y		y	y	y	2012-2015
Transboundary protected area management		y	y	y	y	y	y	2012-2014
<b>2.2 Support value chain development based on ecosystem goods and services</b>								
Feasibility assessments to promote green value chains (eco-tourism, NTFP, agro-biodiversity products) in support of local livelihoods		y		y	y	y	y	2012-2013

Activities	Geographic Scope							Timeline
	REG	CAM	PRC	LAO	MYA	THA	VIE	
<b>Component 3: Climate resilient and low carbon strategies developed</b>								
<b>3.1 Support climate resilience of agriculture, natural resources and tourism sectors, and create synergies between adaptation and disaster risk reduction in water, agriculture &amp; coastal resources</b>								
Development of climate change knowledge base in support of risk assessment and climate proofing (downscaled models and hazard maps)	y							2012-2015
Eco-system/community-based climate change risk assessments		y	y	y		y	y	2012-2014
<b>3.2 Support low carbon strategies and MRV framework for NAMAs</b>								
Low carbon transport pilot projects (EWEC)				y		y	y	2012-2015
Technical capacity development on NAMA and MRV						y	y	2012-2014
<b>3.3 Support country REDD readiness and piloting</b>								
Build REDD+, REL and MRV systems using participatory methods				y		y	y	2012-2013
<b>Component 4: Strengthened institutions and financing for sustainable environmental management.</b>								
<b>4.1 Strengthening of national and sub-national level capacity for environmental management and monitoring with particular emphasis on roles of WGE and NSUs for delivering sub-regional outcomes and impacts</b>								
Build WGE capacity for regional cooperation	y							2012-2016
Establishment of fully functional NSUs capable of program implementation and country/sector/regional coordination		y	y	y	y	y	y	2012-2016
Regional exchange events (including under the GMS Phnom Penh Plan)	y							2012-2016
Support for participation of academic and research institutions in CEP-BCI	y							2012-2016
Knowledge products and outreach materials	y							2012-2016
<b>4.2 Provide policy support for sustainable financing</b>								
Feasibility assessment to explore PES opportunities from biodiversity premium, water premiums etc. with a focus on engaging the private sector		y		y	y	y	y	2012-2014

Note: The timeline of some activities exceed 2013, however, the approved work plan covers the period of 2012–2013.

## APPENDIX 3: COUNTRY WORK PLANS

### E. CEP-BCI Phase II Cambodia Work plan for 2012–2013

Activities	Scope	Entry points (Plan/ policy/ initiatives)	Timeline	Implementing arrangement	Coordination Arrangement	Comments
<b>Component 1: Improved environmental planning systems, methods and safeguards</b>						
<b>1.1 Build subregional and national planning capacities</b>						
Economic assessment of natural capital (demand and supply) and valuation of ecosystem services	Regional	National EIA sub-decree	2012–2014	MoE	CDC, MAFF, MEF, MLMUPC  TEEB, UNDP/SEI, GIZ	Focus on building capacity and awareness, look into existing legal requirements, case study on the ground
Planning support (e.g. SEA, spatial decision support) to GMS ECP master plan	Regional	GMS ECP Master Plan	2012–2013	CDC through ADB GMS Secretariat	WGE, MPWT	
Support spatial development planning for management of ecosystem services in 3Ss sub-basin	Lao PDR, Thailand, Viet Nam	Water resources planning process	2012–2015	MoE	MIME, MWR, MRC	
Planning support (e.g. SEA, spatial decision support) to land use plans	Cambodia; PR China; Lao PDR; Myanmar	Commune land use planning, urban planning	2012–2014	MLMUPC and MoE	MAFF, MoE, provincial authorities	This activity will also include capacity building for monitoring of land use changes using GIS and remote sensing tools (building on Phase 1 training)
Planning support (e.g. SEA, spatial decision support) to power/energy development plans	Cambodia; Myanmar; Viet Nam	Power development planning process	2012–2014	MoE and MIME		Capacity development on internalizing environmental and social externalities into energy sector CBA; ex-post SEA with on the job training.
<b>1.2 Capacity building for environmental safeguards</b>						
Development of environmental safeguards monitoring and compliance capacity (including improving compliance with	Cambodia; PR China; Lao PDR; Myanmar; Thailand; Viet	EIA sub-decree; Sub-decree on water quality	2012–2016	MPWT (Road Department); MoE (Pollution Control; EIA department)		This activity will support: 1) Generic EIA capacity building; 2) illegal flora and fauna trade compliance; 3) development of

Activities	Scope	Entry points (Plan/ policy/ initiatives)	Timeline	Implementing arrangement	Coordination Arrangement	Comments
multilateral environmental agreements on the movement of wildlife, timber and natural resources)	Nam					water quality standards and monitoring.  MEAs ratified by GMS countries.
<b>1.3 Strengthen country environmental monitoring processes</b>						
GMS Environmental Information Management System (program monitoring, monitoring of specific GMS economic corridors, development of dissemination tools)	Regional	CEP-BCI, GMS ECP	2012 – 2016	NSU/EOC	Relevant line agencies and provincial authorities (SEC)	Support development of institutional arrangement to collect and store data from line ministries
Development of EPI and follow on from EPA	Cambodia; PR China; Lao PDR; Myanmar; Thailand; Viet Nam	CEP-BCI	2012 – 2015	MoE, NSU/EOC		
Monitoring of biodiversity and socio-economic trends in biodiversity conservation corridors	Cambodia; Lao PDR; Thailand; Viet Nam	Existing BCC project	2012 – 2014	MoE, MAFF	NGO's, academic and research institutes	Development of baseline for and monitoring of BCC projects
<b>Component 2: Management of transboundary biodiversity conservation landscapes and local livelihoods improved</b>						
<b>2.1 Improve / update biodiversity profiles in conservation landscapes</b>						
Update delineation of ecosystems and biodiversity profile of transboundary landscapes	Regional	CEP-BCI, BCC project	2012 – 2015	EOC, MoE, MAFF,	EOC/NSU, MLMUPC	
<b>2.2 Support value chain development based on ecosystem goods and services</b>						
Feasibility assessments to promote green value chains (eco-tourism, NTFP, agro-biodiversity products) in support of local livelihoods	Cambodia; Lao PDR; Myanmar; Thailand; Viet Nam	BCC project, GMS tourism and agriculture programs	2012 – 2013	MoE/NSU; MAFF,	MLMUPC, MoT, MRD, MWR, provincial authorities	Development of an inventory of regionally important agro-biodiversity products
<b>2.3 Strengthen biodiversity conservation corridor management and monitoring in biodiversity conservation landscapes</b>						
Transboundary protected area	Cambodia; PR	CEP-BCI, BCC	2012 – 2014	MoE, MAFF	Ministry Interior	This will include development of

Activities	Scope	Entry points (Plan/ policy/ initiatives)	Timeline	Implementing arrangement	Coordination Arrangement	Comments
management	China; Thailand; Viet Nam	project				regional cooperation protocols, biodiversity conservation plans, technical methodologies (corridor design and delineation) and operational management plans, development of legal instruments
<b>Component 3: Climate resilient and low carbon strategies developed</b>						
<b>3.1 Support climate resilience of agriculture, natural resources and tourism sectors, and create synergies between adaptation and disaster risk reduction in water, agriculture &amp; coastal resources</b>						
Development of climate change knowledge base in support of risk assessment and climate proofing (downscaled models and hazard maps)	Regional	Draft climate change strategy; PPCR	2012 – 2015	EOC, MoE (Department of Climate Change)	MPWT (Rail and Road Departments)	Downscaled models; Flood implications for road projects
Eco-system/community based climate change risk assessments	Cambodia; PR China; Lao PDR; Thailand; Viet Nam	Climate change strategy, NAPA, NBSAP	2012 – 2014	MoE (Department of Climate Change)	National Climate Change Committee (MAFF, MRD, MWR, NCDM)	In Cambodia, this activity will focus on development of guidelines and training on ecosystem based approach to climate change adaptation.
<b>Component 4: Strengthened institutions and financing for sustainable environmental management.</b>						
<b>4.1 Strengthening of national and sub-national level capacity for environmental management and monitoring with particular emphasis on roles of WGE and NSUs for delivering sub-regional outcomes and impacts</b>						
Build WGE capacity to promote regional collaboration	Regional	CEP-BCI	2012 – 2016	MoE (WGE focal point, NSU), EOC	GMS Secretariat, GMS working groups	
Establishment of fully functional NSUs capable of program implementation and country/ sector/ regional coordination	Cambodia; PR China; Lao PDR; Myanmar; Thailand; Viet Nam	CEP-BCI	2012 – 2016	MoE (WGE focal point, NSU), EOC	GMS sector working groups	
Support for participation of academic and research institutions in CEP-BCI	Regional	CEP-BCI	2012 – 2016	MoE (WGE focal point, NSU), EOC	Research and academic institutions	
Regional exchange events (including under the GMS Phnom Penh Plan)	Regional	CEP-BCI	2012 – 2016	MoE (WGE focal point, NSU), EOC	GMS PPP	This activity will include regional exchange events on SEA, transboundary landscape

Activities	Scope	Entry points (Plan/ policy/ initiatives)	Timeline	Implementing arrangement	Coordination Arrangement	Comments
						management and climate change. It will also include training under the GMS Phnom Penh Plan.
Knowledge products and outreach materials	Regional	CEP-BCI	2012 – 2016	MoE (WGE focal point, NSU), EOC		
<b>4.2 Provide policy support for sustainable financing</b>						
Feasibility assessment to explore PES opportunities from biodiversity premium, water premiums etc (agri-businesses, tourism, and hydropower) with a focus on engaging private sector	Cambodia; Lao PDR; Myanmar; Thailand; Viet Nam	BCC project	2012 – 2014	EOC, MoE	MIME, MoT, MAFF	Initiation of public-private partnerships for sustainable forest management and ecosystem service-based enterprises

## F. CEP-BCI Phase II Lao PDR Work plan for 2012–2013

Activities	Scope	Entry points (Plan/ policy/ initiatives)	Timeline	Implementing arrangement	Coordination Arrangement	Comments
<b>Component 1: Improved environmental planning systems, methods and safeguards</b>						
<b>1.1 Build sub regional and national planning capacities</b>						
Economic assessment of natural capital (demand and supply) and valuation of ecosystem services	Regional	Biodiversity Conservation Corridors (BCC)	2012 – 2014	MAF; MONRE (NSU)	Relevant provincial authorities; academic institutions and universities; GMS focal points	
Planning support (e.g. SEA, spatial decision support) to GMS ECP master plan	Regional	GMS ECP Master Plan	2012 – 2013	MONRE (NSU)	GMS focal points	
Support spatial development planning for management of ecosystem services in 3Ss sub-basin	Lao PDR, Thailand, Viet Nam	Draft SEA decree	2012 - 2015	MONRE - Department of Water Resources; MONRE - Department of Environmental and Social Impact Assessment; MONRE - Department of Environment Promotion Relevant provincial authorities	GMS Focal Points, MEM, MRC	
Planning support (e.g. SEA, spatial decision support) to land use plans	Cambodia, PR China, Lao PDR, Myanmar	Land Use Master Plan for Lao PDR (draft)	2012 - 2014	MONRE: Department of land use and development	MPI, GMS focal points	Draft LUP is due to be published within 2012 – this activity should focus on rapid assessment of LUP
<b>1.2 Capacity building for environmental safeguards</b>						
Development of environmental safeguards monitoring and compliance capacity (including improving compliance with multilateral environmental agreements on the movement of wildlife, timber and natural resources)	Cambodia, PR China, Lao PDR, Myanmar, Thailand, Viet Nam	Draft Pollution Control Decree, EIA guidelines, pre-approval project assessment	2012 - 2016	MONRE – Department of Pollution Control; MONRE - Department of Water Resources; MONRE – Department of Environmental and Social Impact Assessment  MPI – Department of	GMS focal points, EMSP; MRC	MEAs ratified by GMS countries.

Activities	Scope	Entry points (Plan/ policy/ initiatives)	Timeline	Implementing arrangement	Coordination Arrangement	Comments
				Evaluations  MEM – Department of Policy and Planning (Energy Development)		
<b>1.3 Strengthen country environmental monitoring processes</b>						
GMS Environmental Information Management System (program monitoring, monitoring of specific GMS economic corridors, development of dissemination tools)	Regional	GMS CEP-BCI, GMS SAP's (NSEC, EWEC), BCC project	2012-2016	MONRE (NSU); Natural Resources and Environment Institute;	GMS Focal points; Relevant provincial authorities from NSEC, EWEC and BCC provinces; EMSP; MRC	
Development of EPI and follow on to EPA	PR China, Lao PDR, Myanmar, Thailand, Viet Nam	Follow on to EPA (Phase 1)	2012 - 2015	MONRE		
Monitoring of biodiversity and socio-economic trends in biodiversity conservation corridors	Cambodia, Lao PDR, Thailand, Viet Nam	BCC project	2012 - 2014	MONRE (NSU)	Relevant provincial and district authorities	
<b>Component 2: Management of transboundary biodiversity conservation landscapes and local livelihoods improved</b>						
<b>2.1 Improve/update biodiversity profiles in conservation landscapes</b>						
Update delineation of ecosystems and biodiversity profile of transboundary landscapes	Regional	BCC project, National and provincial land use plans	2012 - 2015	EOC; MONRE (NSU)	MAF, relevant conservation organizations / NGO's	
<b>2.2 Support value chain development based on ecosystem goods and services</b>						
Feasibility assessments to promote green value chains (eco-tourism, NTFP, agro-biodiversity products) in support of local livelihoods	Cambodia, Lao PDR, Myanmar, Thailand, Viet Nam	Follow up on SEA of the Golden Quadrangle tourism plan (Phase 1), BCC project, National ecotourism investment and projects (e.g. GMS Sustainable	2012 - 2013	Ministry of Information, Culture and Tourism (Dept. of Tourism)	GMS focal points, academic institutions and universities	Study will focus on review of tourism sector and is expected to lead to a demonstration project on tourism market chains for local livelihoods.

Activities	Scope	Entry points (Plan/ policy/ initiatives)	Timeline	Implementing arrangement	Coordination Arrangement	Comments
		Tourism),				
<b>2.3 Management of transboundary biodiversity landscapes and local livelihoods improved</b>						
Transboundary protected area management	Cambodia, PR China, Lao PDR, Myanmar, Thailand, Viet Nam	BCC project, National and provincial land use plans	2012 – 2014	EOC; MONRE (NSU)	MAF, relevant conservation organizations / NGO's	This activity will include development of regional cooperation protocols, biodiversity conservation plans, technical methodologies (corridor design and delineation) and operational management plans, development of legal instruments
<b>Component 3: Climate resilient and low carbon strategies developed</b>						
<b>3.1 Support climate resilience of agriculture, natural resources and tourism sectors, and create synergies between adaptation and disaster risk reduction in water, agriculture &amp; coastal resources</b>						
Development of climate change knowledge base in support of risk assessment and climate proofing (downscaled models and hazard maps)	Regional	National Climate Change Strategy	2013 - 2015	EOC; MONRE – Department of Climate Change	University of Lao, SEA START	
Ecosystem/community based climate change risk assessments	Cambodia, PR China, Lao PDR, Thailand, Viet Nam	Continuation of Phase 1; BCC project, NAPA	2012 - 2014	MONRE: National Disaster Management and Climate Change Department; MAF	Relevant provincial authorities; Academic institutions and universities	
<b>3.2 Support low carbon strategies and MRV framework for NAMAs in energy and transport sectors</b>						
Low carbon transport pilot projects (EWEC)	Lao PDR, Thailand, Viet Nam	Climate change strategy; Building on NAMA intervention in transport (Vientiane Urban Transport Plan) EST Strategy	2012 - 2015	MONRE – Department of Pollution Control; MONRE - National Disaster Management and Climate Change Department; MONRE – Department of Natural Forest Management	GMS FRETA, GMS Business Forum, LIFFA	

Activities	Scope	Entry points (Plan/ policy/ initiatives)	Timeline	Implementing arrangement	Coordination Arrangement	Comments
<b>3.3 Support country REDD readiness and piloting</b>						
Build REDD+, REL and MRV systems using participatory methods	Lao PDR, Thailand, Viet Nam	Continuation of CEP-BCI Phase 1 activity under CCF funding, R-PP	2012 - 2013	DNP, ONEP, TGO, Department of Marine and Coastal Resources, RFD	World Bank (R-PP), USAID LEAF	
<b>Component 4: Strengthened institutions and financing for sustainable environmental management.</b>						
<b>4.1 Strengthening of national and sub-national level capacity for environmental management and monitoring with particular emphasis on roles of WGE and NSUs for delivering sub-regional outcomes and impacts</b>						
Establishment of fully functional NSUs capable of program implementation and country/ sector/regional coordination	Cambodia, PR China, Lao PDR, Myanmar; Thailand, Viet Nam	CEP-BCI	2012 - 2016	WGE focal point, EOC, NSU	GMS focal points, GMS secretariat	
Build WGE capacity to promote regional collaboration	Regional	CEP-BCI	2012 - 2016	WGE, EOC, NSU	GMS focal points, GMS Secretariat, relevant sectors, MRC	Activity should conduct meetings of all WGs to share information and explore collaboration opportunities
Support for participation of academic and research institutions in CEP-BCI	Regional	CEP-BCI	2012 - 2016	Ministry of Science and Technology: Institute of Science Research.	Universities and academic institutions such as Champassak University, National University of Laos	
Regional exchange events (including under the GMS Phnom Penh Plan)	Regional	CEP-BCI, GMS PPP	2012 - 2016	MONRE (NSU), EOC	GMS PPP, GMS focal points, relevant national, provincial and district authorities, academic institutions and Universities; R-PLAN; FIP	This activity will include regional exchange events on SEA, transboundary landscape management and climate change. It will also include training under the GMS Phnom Penh Plan, and Regional exchange events to share best practice under 3.3. Support country REDD readiness and piloting

Activities	Scope	Entry points (Plan/ policy/ initiatives)	Timeline	Implementing arrangement	Coordination Arrangement	Comments
Knowledge products and outreach materials	Regional	CEP-BCI	2012 - 2016	WGE focal points; NSU		
<b>4.2 Provide policy support for sustainable financing</b>						
Feasibility assessment to explore PES opportunities from biodiversity premium, water premiums etc (agri-businesses, tourism, and hydropower) with a focus on engaging private sector	Cambodia, Lao PDR, Myanmar; Thailand, Viet Nam	BCC project; CEP-BCI	2012 - 2014	MONRE (NSU), EOC	Relevant sector line ministries	

## G. CEP-BCI Phase II PR China Work plan for 2012–2013

Activities	Scope	Entry points (Plan/ policy/ initiatives)	Timeline	Implementing arrangement	Coordination Arrangement	Comments
<b>Component 1: Improved environmental planning systems, methods and safeguards</b>						
<b>1.1 Build sub regional and national planning capacities</b>						
Economic assessment of natural capital (demand and supply) and valuation of ecosystem services	Regional	CEP-BCI, eco-compensation and market based initiatives	2012–2014	GEPD, YEPD	Research and academic institutions	This activity will include study on valuation of ecosystem services of BCI in XSBN
Planning support (e.g. SEA, spatial decision support) to GMS ECP master plan	Regional	GMS ECP Master Plan	2012–2013	MEP, MoF, NSU	Relevant provincial and national sector line agencies	
Planning support (e.g., SEA, biodiversity impact assessment) for land use management in Guangxi	Cambodia; PR China; Lao PDR; Myanmar;	Ongoing or proposed projects/initiatives, plans for land use and land consolidation	2012–2014	GEPD	Academic institutions	
<b>1.2 Capacity building for environmental safeguards</b>						
Development of environmental safeguards monitoring and compliance capacity	Cambodia; PR China; Lao PDR; Myanmar; Thailand; Viet Nam	National/ provincial safeguards requirements (e.g. EIA regulation, environmental quality standards, and reporting requirements); National standards and guidelines on assessment of biodiversity	2012–2016	MEP, YEPD, GEPD	Research and academic institutions	
<b>1.3 Strengthen country environmental monitoring processes</b>						
GMS Environmental Information Management System (program monitoring, monitoring of specific GMS economic corridors, development of dissemination tools)	Regional	CEP-BCI (BCI pilots)	2012 – 2016	MEP, YEPD, GEPD, GMS NSU	Research and academic institutions  For baseline of GMS economic corridors: MDG, CBD implementing office, relevant provincial line agencies	

Activities	Scope	Entry points (Plan/ policy/ initiatives)	Timeline	Implementing arrangement	Coordination Arrangement	Comments
Development of EPI and follow on to EPA	PR China; Lao PDR; Myanmar; Thailand; Viet Nam	Ongoing EPA activities	2012 – 2015	YEPD, GEPD	International and national research and academic institutions	
<b>Component 2: Management of transboundary biodiversity conservation landscapes and local livelihoods improved</b>						
<b>2.1 Improve / update biodiversity profiles in conservation landscapes</b>						
Update delineation of ecosystems and biodiversity profile of transboundary landscapes	Regional	BCI, NBSAP, Provincial Biodiversity Strategy and Action Plans (PBSAPs)	2012 – 2015	MEP, YEPD, GEPD	CBD implementing agencies	
<b>2.3 Strengthen biodiversity conservation corridor management and monitoring in biodiversity conservation landscapes</b>						
Continuation of BCI pilots	PR China; Myanmar; Thailand; Viet Nam	CEP-BCI: pilot projects in Yunnan (Xishuangbanna corridor, Deqin) and Guangxi (Guangxi-Cau Bang corridor)	2012 - 2015	YEPD, GEPD	Prefecture/County EPBs	This activity will also include support for the establishment of Mengban-Yixu nature reserve in XSBN
Transboundary protected area management	Cambodia; PR China; Thailand; Viet Nam	BCI, NBSAP, PBSAPs; Shangyong (XSBN)- Nam Ha and Phongsaly (Lao PDR); Bulong NR (XSBN) and four special zones in Myanmar	2012 - 2015	MEP, YEPD	CBD implementing agencies and other related departments	This activity will include support to biodiversity conservation strategy in Yunnan
<b>Component 3: Climate resilient and low carbon strategies developed</b>						
<b>3.1 Support climate resilience of agriculture, natural resources and tourism sectors, and create synergies between adaptation and disaster risk reduction in water, agriculture &amp; coastal resources</b>						
Development of climate change knowledge base in support of risk assessment and climate proofing (downscaled models and hazard maps)	Regional	NCCP (provincial plans), CEP-BCI Phase 1 (study in Yunnan, BCI pilots)	2012 – 2014	YEPD, GEPD	Research and academic institutions	
Eco-system/community based climate change risk assessments	Cambodia; PR China; Lao PDR; Thailand; Viet Nam;	NCCP, CEP-BCI Phase 1 (study in Yunnan, BCI pilots)	2012 – 2014	YEPD, GEPD	Research and academic institutions	

Activities	Scope	Entry points (Plan/ policy/ initiatives)	Timeline	Implementing arrangement	Coordination Arrangement	Comments
<b>Component 4: Strengthened institutions and financing for sustainable environmental management.</b>						
<b>4.1 Strengthening of national and sub-national level capacity for environmental management and monitoring with particular emphasis on roles of WGE and NSUs for delivering sub-regional outcomes and impacts</b>						
Build WGE capacity to promote regional collaboration	Regional	CEP-BCI	2012 - 2016	MEP, YEPD, GEPD	GMS sector working groups	
Establishment of fully functional NSUs capable of program implementation and country/ sector/regional coordination	Cambodia; PR China; Lao PDR; Myanmar; Thailand; Viet Nam;	CEP-BCI	2012 - 2016	MEP, YEPD, GEPD	Provincial EPBs, GMS sector working groups	
Support for participation of academic and research institutions in CEP-BCI	Regional	CEP-BCI	2012 - 2016	MEP, YEPD, GEPD	China-ASEAN Environmental Cooperation Center  Academic and research institutions	
Regional exchange events (including under the GMS Phnom Penh Plan)	Regional	CEP-BCI	2012 - 2016	MEP, YEPD, GEPD	GMS sector working groups	This activity will include regional exchange events on SEA, green economy, transboundary landscape management and climate change. It will also include training under the GMS Phnom Penh Plan.
Knowledge products and outreach materials	Regional	CEP-BCI	2012 - 2016	MEP, YEPD, GEPD	GMS sector working groups	

## H. CEP-BCI Phase II Thailand Work plan for 2012–2013

Activities	Scope	Entry points (Plan/ policy/ initiatives)	Timeline	Implementing arrangement	Coordination Arrangement	Comments
<b>Component 1: Improved environmental planning systems, methods and safeguards</b>						
<b>1.1 Build sub regional and national planning capacities</b>						
Economic assessment of natural capital (demand and supply) and valuation of ecosystem services	Regional	GMS Economic Cooperation Program (ECP), CEP-BCI	2012 - 2014	NESDB and MNRE/ONEP	The economics of ecosystems and biodiversity (TEEB)	
Planning support (e.g. SEA, spatial decision support) to GMS ECP master plan	Regional	GMS ECP Master Plan; CEP-BCI	2012 – 2013	NESDB and MNRE/ONEP	GMS Secretariat and national focal point	
Support spatial development planning for management of ecosystem services and flood control	Cambodia; Lao PDR; THA; Viet Nam;	Emergency decree (borrowing US\$11.48 billion) in flood and water management, ADB PATA on Flood Control, National Climate Change Strategy	2012 - 2015	NWRFP, Department of Water Resources, WRMEC, WRFMP, NESDB, ONEP/MNRE, RID	ADB TRM	
<b>1.2 Capacity building for environmental safeguards</b>						
Development of environmental safeguards monitoring and compliance capacity (including illegal flora and fauna trade control)	Cambodia; PR China; Lao PDR; Myanmar; THA; Viet Nam;	EIA Law, ADB's safeguards requirements in transport sector; ADB TA on low carbon transport and safeguards  For support in illegal flora and fauna trade control: Several illegal trade control initiatives in DNP	2012 - 2016	ONEP/MNRE, MOT  For support in illegal flora and fauna trade control: DNP/MNRE	For support in illegal flora and fauna trade control: ASEAN WEN	
<b>1.3 Strengthen country environmental monitoring processes</b>						
GMS Environmental Information Management System (program monitoring, monitoring of specific GMS economic corridors, development of dissemination tools)	Regional	GMS CEP-BCI, WGE  For corridors baseline: GMS ECP Master Plan	2012 - 2016	EOC/ NSU, MNRE  For corridors baseline: GMS focal point (NESDB) and MNRE/ONEP	GMS Focal points; MRC  For corridors baseline: GMS Secretariat and national focal point	
Development of EPI and follow on to EPA	PR China; Lao PDR; Myanmar;	Follow on to EPA (Phase 1)	2012 - 2015	ONEP/MNRE		

Activities	Scope	Entry points (Plan/ policy/ initiatives)	Timeline	Implementing arrangement	Coordination Arrangement	Comments
	THA; Viet Nam;					
Monitoring of biodiversity and socio-economic trends in biodiversity conservation corridors	Cambodia; Lao PDR; THA; Viet Nam;	BCI Phase I achievements	2012 - 2014	DNP/MNRE	Protected area management authorities	
<b>Component 2: Management of transboundary biodiversity conservation landscapes and local livelihoods improved</b>						
<b>2.1 Improve / update biodiversity profiles in conservation landscapes</b>						
Update delineation of ecosystems and biodiversity profile of transboundary landscapes	Regional	GMS CEP-BCI	2012 - 2015	DNP/MNRE	WCS, Critical Ecosystem Partnership Fund, WWF conservation landscapes	
<b>2.2 Support value chain development based on ecosystem goods and services</b>						
Feasibility assessments to promote green value chains (eco-tourism, NTFP, agro-biodiversity products) in support of local livelihoods	Cambodia; Lao PDR; Myanmar; THA; Viet Nam;	BCI phase 1, GMS CASP, G-mark initiative	2012 - 2013	DNP/MNRE, BEDO, RFD	Ministry of Agriculture and Cooperatives, Ministry of Tourism	This will include support to develop model system for agro-biodiversity certification and eco-labeling
<b>2.3 Strengthen biodiversity conservation corridor management and monitoring in biodiversity conservation landscapes</b>						
Transboundary protected area management	Cambodia; PR China; THA; Viet Nam;	Continuation of Tenasserim BCI pilot site activities; NBSAP	2012 - 2014	DNP/MNRE, RFD For planning support: ONEP/MNRE		This will include development of regional cooperation protocols, biodiversity conservation plans, technical methodologies (corridor design and delineation) and operational management plans, development of legal instruments
Continuation of BCI pilots	PR China; Myanmar; THA; Viet Nam;	Continuation of Tenasserim BCI pilot site	2012 - 2015	DNP/MNRE, RFD		
<b>Component 3: Climate resilient and low carbon strategies developed</b>						

Activities	Scope	Entry points (Plan/ policy/ initiatives)	Timeline	Implementing arrangement	Coordination Arrangement	Comments
<b>3.1 Support climate resilience of agriculture, natural resources and tourism sectors, and create synergies between adaptation and disaster risk reduction in water, agriculture &amp; coastal resources</b>						
Development of climate change knowledge base in support of risk assessment and climate proofing (downscaled models and hazard maps)	Regional	NAPA, National climate change strategy, ADB Flood control TA	2012 - 2015	ONEP/ MNRE	SEA-START, Universities, Department of Disaster Prevention	
Eco-system/ community based climate change risk assessments	Cambodia; PR China; Lao PDR; THA; Viet Nam	Continuation of CEP-BCI Phase I, NAPA, National climate change strategy, GEF Regional Program	2012 - 2014	ONEP/ DNP/ MNRE	Department of agriculture, UNDP project, SEA-START, GMS WGA	
<b>3.2 Support low carbon strategies and MRV framework for NAMAs in energy and transport sectors</b>						
Low carbon transport pilot projects (EWEC)	Lao PDR; THA; Viet Nam;	Climate change Strategy; ADB proposed TA for 2013 on low carbon transport; Building on NAMA intervention in transport, CNTC feasibility study	2012 - 2015	MOT, MNRE/TGO/ ONEP	Transport associations, NGO's, academic and research institutes	
Technical capacity development on NAMA and MRV	THA; Viet Nam;	National climate change strategy	2012 - 2014	MNRE/ TGO/ONEP/ DNP	NESDB, relevant sector agencies / ministries (Ministry of Energy, Ministry of Transport, Ministry of Agriculture and Cooperatives)	Capacity building for NAMA (e.g. through training, technical workshops), focus on forestry sector
<b>3.3 Support country REDD readiness and piloting</b>						
Build REDD+, REL and MRV systems using participatory methods	Lao PDR; THA; Viet Nam;	Continuation of CEP-BCI Phase I activity under CCF funding, R-PP	2012 - 2013	DNP, ONEP, TGO, Department of Marine and Coastal Resources, RFD	World Bank (R-PP), USAID LEAF	
<b>Component 4: Strengthened institutions and financing for sustainable environmental management.</b>						
<b>4.1 Strengthening of national and sub-national level capacity for environmental management and monitoring with particular emphasis on roles of WGE and NSUs for delivering sub-regional outcomes and impacts</b>						
Build WGE capacity to promote regional collaboration	Regional	CEP-BCI	2012 - 2016	WGE focal point, EOC, NSU	GMS focal points; GMS Secretariat	
Establishment of fully functional NSUs capable of program implementation and country/ sector/ regional coordination	PR China; Lao PDR; Myanmar; THA; Viet Nam;	CEP-BCI	2012 - 2016	WGE focal point, EOC, NSU	GMS focal points; GMS Secretariat	

Activities	Scope	Entry points (Plan/ policy/ initiatives)	Timeline	Implementing arrangement	Coordination Arrangement	Comments
Support for participation of academic and research institutions in CEP-BCI	Regional	CEP-BCI	2012 - 2016	WGE focal point, EOC, NSU	GMS focal points; Academic and research institutions	
Regional exchange events (including under the GMS Phnom Penh Plan)	Regional	CEP-BCI	2012 - 2016	WGE focal point, EOC, NSU	GMS focal points; GMS PPP	This activity will include regional exchange events on SEA, transboundary landscape management and climate change. It will also include training under the GMS Phnom Penh Plan.
Knowledge products and outreach materials	Regional	CEP-BCI	2012 - 2016	WGE focal point, EOC, NSU	GMS focal points; GMS Secretariat	
<b>4.2 Provide policy support for sustainable financing</b>						
Feasibility assessment to explore PES opportunities from biodiversity premium, water premiums etc (agri-businesses, tourism, and hydropower) with a focus on engaging private sector	Cambodia, Lao PDR, Myanmar; Thailand, Viet Nam	CEP-BCI	2012 - 2014	DNP/MNRE BEDO, RFD		

## I. CEP-BCI Phase II Viet Nam Work plan for 2012–2013

Activities	Scope	Entry points (Plan/ policy/ initiatives)	Timeline	Implementing arrangement	Coordination Arrangement	Comments
<b>Component 1: Improved environmental planning systems, methods and safeguards</b>						
<b>1.1 Build sub regional and national planning capacities</b>						
Economic assessment of natural capital (demand and supply) and valuation of ecosystem services	Regional	Green growth policy	2012-2014	MARD; MONRE	Relevant line ministries	
Planning support (e.g. SEA, spatial decision support) to GMS ECP master plan	Regional	GMS ECP Master Plan	2012-2013	MONRE	GMS focal points	
Support spatial development planning for management of ecosystem services	Lao PDR, Thailand, Viet Nam	Area development plans (Red River); national and provincial land use plans	2012-2014	MONRE, DONRE	EOC, NSU, related line ministries and provincial departments	
Planning support (e.g. SEA, spatial decision support) to power/energy development plans	Cambodia, Myanmar, Viet Nam	Review work (implementation ongoing) by Ministry of Trade for sustainable energy use and development; Energy / Electric Power Development Plan; Renewable Energy Strategy	2012-2014	MOIT; MONRE	EOC, NSU, related line ministries and departments	
<b>1.2 Capacity building for environmental safeguards</b>						
Development of environmental safeguards monitoring and compliance capacity (including improving compliance with multilateral environmental agreements on the movement of wildlife, timber and natural resources)	PR China, Myanmar, Thailand, Viet Nam	Decision number 249/2005/QĐ-TTg of Prime Minister; Decision number 49/2011/QĐ-TTg; Decision number 909/QĐ-TTg; Decision number QĐ 51/2011/QĐ-TTg	2012-2016	MOT	Related line ministries and departments	MEAs ratified by GMS countries
<b>1.3 Strengthen country environmental monitoring processes</b>						
GMS Environmental Information Management System (program monitoring, monitoring of	Regional	National Socio-Economic Development Plan (SEDP) 2011-2020	2012-2016	MONRE	EOC, NSU, DONRE (corridor	

Activities	Scope	Entry points (Plan/ policy/ initiatives)	Timeline	Implementing arrangement	Coordination Arrangement	Comments
specific GMS economic corridors, development of dissemination tools)					provinces), GMS focal points	
Development of EPI and follow on to EPA	Cambodia, PR China, Lao PDR, Myanmar, Thailand, Viet Nam	Continuation on EPA development process Phase I; Law on Environment Protection (2005);	2012-2015	MONRE	NSU, EOC	
Monitoring of biodiversity and socio-economic trends in biodiversity conservation corridors	Cambodia, Lao PDR, Viet Nam	BCC project	2012-2014	MONRE, DONRE	Line ministries and provincial departments	
<b>Component 2: Management of transboundary biodiversity conservation landscapes and local livelihoods improved</b>						
<b>2.1 Improve / update biodiversity profiles in conservation landscapes</b>						
Update delineation of ecosystems and biodiversity profile of transboundary landscapes	Regional	CEP-BCI, NBSAP	2012-2015	MONRE	MARD	
<b>2.2 Support value chain development based on ecosystem goods and services</b>						
Feasibility Assessments to promote green value chains (eco-tourism, NTFP, agro-biodiversity products) in support of local livelihoods	Cambodia, Lao PDR, Myanmar, Thailand, Viet Nam	BCC project, CEP-BCI	2012-2013	MARD	MONRE, other relevant line ministries and departments	
<b>2.3 Strengthen biodiversity conservation corridor management and monitoring in biodiversity conservation landscapes</b>						
Transboundary protected area management	Cambodia, PR China, Thailand, Viet Nam	CEP-BCI	2012-2014	MONRE	MARD; MPI and related provincial departments	This activity should support development of a biodiversity plan in Viet Nam, and should complement GEF project on CBD.  This activity could include : development of regional cooperation protocols, biodiversity conservation plans, technical methodologies (corridor

Activities	Scope	Entry points (Plan/ policy/ initiatives)	Timeline	Implementing arrangement	Coordination Arrangement	Comments
						design and delineation) and operational management plans, development of legal instruments
Continuation of BCI pilots	PR China, Myanmar, Thailand, Viet Nam	Continuation of BCI Cao Bang	2012-2015	MONRE; DONRE	MARD; DARD; DPI; Department of Health	
<b>Component 3: Climate resilient and low carbon strategies developed</b>						
<b>3.1 Support climate resilience of agriculture, natural resources and tourism sectors, and create synergies between adaptation and disaster risk reduction in water, agriculture &amp; coastal resources</b>						
Development of climate change knowledge base in support of risk assessment and climate proofing (downscaled models and hazard maps)	Regional	Climate Change Strategy	2012-2015	EOC, NSU	Academic institutes and universities, SEA START	
Ecosystem/community based climate change risk assessments	Cambodia, PR China, Lao PDR, Thailand, Viet Nam	Climate Change Strategy, NAPA	2012-2014	EOC, NSU	Academic institutes and universities, SEA START	This activity will focus on ecosystem-based approach to climate change adaptation
<b>3.2 Support low carbon strategies and MRV framework for NAMAs in energy and transport sectors</b>						
Technical capacity development on NAMA and MRV	Thailand, Viet Nam	Climate Change Strategy	2012-2014	MONRE (NSU)	MOT; MOIT	
Low carbon transport pilot projects (EWEC)	Lao PDR, Thailand, Viet Nam	Ongoing activity (CEP-BCI)	2012-2015	MONRE	MOT, FRETA, relevant transport associations	
<b>3.3 Support country REDD readiness and piloting</b>						
Build REDD+, REL and MRV systems using participatory methods	Lao PDR, Thailand, Viet Nam	BCC project; provincial REDD+ initiatives	2012-2013	MARD	Relevant line ministries and departments	It is necessary to support the development of information sharing between MARD and other ministries
<b>Component 4: Strengthened institutions and financing for sustainable environmental management.</b>						
<b>4.1 Strengthening of national and sub-national level capacity for environmental management and monitoring with particular emphasis on roles of WGE and NSUs for delivering sub-regional outcomes and impacts</b>						
Establishment of fully functional NSUs capable of program	PR China, Lao PDR,	CEP-BCI	2012-2016	WGE focal point, NSU	MPI, MARD, MOIT, Ministry of Culture and	

Activities	Scope	Entry points (Plan/ policy/ initiatives)	Timeline	Implementing arrangement	Coordination Arrangement	Comments
implementation and country/sector/regional coordination	Myanmar; Thailand, Viet Nam				Tourism, DONRE, EOC	
Build WGE capacity to promote regional collaboration	Regional	CEP-BCI	2012-2016	WGE focal point, NSU	EOC	
Support for participation of academic and research institutions in CEP-BCI	Regional	Participation of NGOs, universities and other institutions in CEP-BCI Phase I activities and current phase 2 planning	2012-2016	WGE focal point	NSU/EOC, WWF, UNDP, Hanoi University, National Economic University, Inst. Of Meteorology, Viet Nam Academy of Sciences	
Regional exchange events (including under the GMS Phnom Penh Plan)	Regional	CEP-BCI	2012-2016	MONRE (NSU); EOC	GMS PPP; Ministry of National Defence; Ministry of Public Security, other concerned line ministries and departments	This activity will include regional exchange events on SEA, transboundary landscape management and climate change. It will also include training under the GMS Phnom Penh Plan.
Knowledge products and outreach materials	Regional	CEP-BCI	2012-2016	MONRE (NSU), EOC		
<b>4.2 Provide policy support for sustainable financing</b>						
Feasibility assessment to explore PES opportunities from biodiversity premium, water premiums etc (agri-businesses, tourism, and hydropower) with a focus on engaging private sector	Cambodia, Lao PDR, Myanmar; Thailand, Viet Nam	BCC project	2012-2014	MONRE; MARD		Initiation of public-private partnerships for sustainable forest management and ecosystem service-based enterprises