



# Project Information Document/ Integrated Safeguards Data Sheet (PID/ISDS)

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Concept Stage | Date Prepared/Updated: 01-Oct-2018 | Report No: PIDISDSC23613



**BASIC INFORMATION**

**A. Basic Project Data**

Country Cambodia	Project ID P165344	Parent Project ID (if any)	Project Name Cambodia Sustainable Landscape and Ecotourism Project (P165344)
Region EAST ASIA AND PACIFIC	Estimated Appraisal Date Dec 10, 2018	Estimated Board Date Mar 21, 2019	Practice Area (Lead) Environment & Natural Resources
Financing Instrument Investment Project Financing	Borrower(s) Ministry of Economy and Finance	Implementing Agency Ministry of Environment (Cambodia)	

**Proposed Development Objective(s)**

To improve natural resources management and related value addition in selected landscapes.

**PROJECT FINANCING DATA (US\$, Millions)**

**SUMMARY**

<b>Total Project Cost</b>	50.00
<b>Total Financing</b>	50.00
<b>of which IBRD/IDA</b>	50.00
<b>Financing Gap</b>	0.00

**DETAILS**

**World Bank Group Financing**

International Development Association (IDA)	50.00
IDA Credit	50.00

Environmental Assessment Category

Concept Review Decision



## B. Introduction and Context

### Country Context

**1. Over the past two decades, Cambodia has experienced macroeconomic stability and remarkable economic growth.** Cambodia sustained an average growth rate of 7.6 percent in 1994-2015, ranking sixth in the world. GDP per capita increased fivefold, from US\$ 300 in 1994 to around US\$ 1,070 in 2015, the year in which Cambodia reached the lower middle-income status. The main drivers of growth have been garment exports, agriculture, tourism and, more recently, construction and real estate. Economic growth eased in the aftermath of the global financial crisis, while remaining strong. In terms of employment, Cambodia has benefited from a large structural transformation, with around 3.6 million new jobs created in industry and services and 0.7 million in agriculture and fisheries over the past two decades.

**2. The sustained economic performance has lifted a large proportion of the population above the national poverty line, but Cambodia is still one of the poorest countries in Southeast Asia.** Between 2007 and 2013, the incidence of poverty as measured by the proportion of the population living below the national poverty line declined from 47.8 percent to 13.5 percent of the population, leading the country to meet its Millennium Development Goal (MDG) before the 2015 deadline. Most of the poverty reduction occurred during the commodity price boom, when the headcount rate declined by twenty percentage points, driven by a significant hike in the price of rice. Despite this progress, the vast majority of the families that rose above the poverty line did so by a small margin, leaving them at risk in the event of an adverse shock. Poverty reduction in Cambodia has been accompanied by shared prosperity: the real consumption growth of the bottom 40 percent of the distribution was larger than that of the top 60 percent. This was accompanied by a decrease in inequality.

**3. The overall welfare of households described by non-monetary indicators has improved significantly throughout the past two decades, but several challenges remain.** Cambodia achieved most of the MDG targets, including those related to poverty reduction, child mortality and maternal mortality. Targets in primary education have been nearly achieved, whereas areas such as gender equality and environmental sustainability have seen less progress. Moreover, the incidence of and death rate due to TB remain high. Cambodia's Human Development Index in 2015 (UNDP) was 0.56, well below the East Asia Pacific average of 0.72, and also lower than the medium income countries average of 0.63.

### Sectoral and Institutional Context

**4. Cambodia's growth has been driven to a large extent by the country's rich and diverse natural capital.**<sup>1</sup> Natural capital such as cropland and forest resources, account for about 40% of Cambodia's wealth and contributes significantly to its economy (Figure 1). Agriculture, which depends heavily on the water flow regulation, erosion regulation and nutrient retention services provided by forests, contributed 27 percent of GDP in 2016. Freshwater mangroves and flooded forests provide habitat support for more than 300 species of fish and crustaceans, and thereby help support the fisheries industry which provides primary employment for more than 0.3 million Cambodians. Tourism is an important engine of growth for Cambodia, with strong entry points for eco-tourism and adventure-tourism, building on the

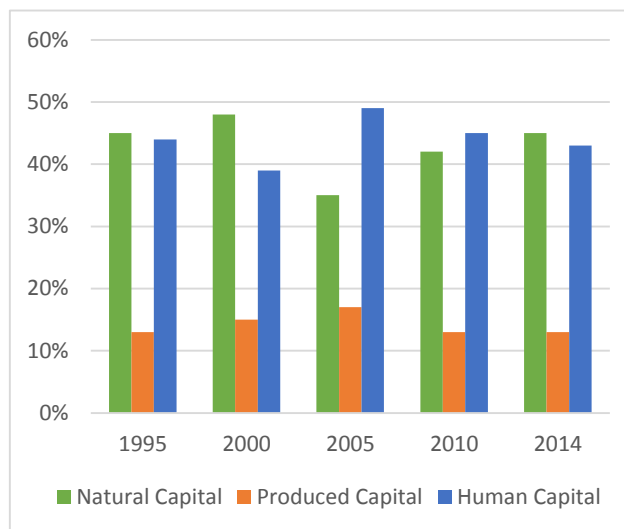
<sup>1</sup> Natural capital are assets that provide natural resource inputs and environmental services for economic production.



country’s considerable natural capital in key landscapes.<sup>2</sup> The country’s growing energy needs are met in part by hydropower, for which forest systems are important for water flow and sediment regulation in rivers. The RGC estimates that hydropower will become an increasingly important part of its energy supply mix in the medium term (from 26 percent in 2013 to about 50 percent by 2020), which underscores the importance of sustainable management of natural capital.<sup>3</sup>

**5. A significant proportion of this capital is found in the ecosystems in the Cardamom Mountains-Tonle Sap landscape, which makes the area important for supporting growth and development in Cambodia.** The Cardamoms-Tonle Sap landscape, which includes one of the world’s most productive freshwater fisheries and the largest protected forest in Indochina, is a global biodiversity hotspot.<sup>4</sup> Forests in the Cardamom Mountains provide a number of services that underpin economic activities in the area. Water provision and slope protection services provided by these forests support agriculture in areas downstream of the Cardamom Mountains, including in Pursat, Battambang, and Kampong Chhanang, and provide freshwater and nutrients to support fisheries in the Tonle Sap Lake. An estimated 6.2 billion cubic metres of high quality freshwater is provided by the Central Cardamoms Protected Forests.<sup>5</sup> Many households in the landscape depend on farming and fishing on a full-time, part-time or seasonal basis to supplement their income, and depend heavily on fish for their protein and other nutritional needs.<sup>6</sup> Overall, the landscape supports an estimated five million Cambodians with income, food and water, and resilience to climate change and natural disasters.

**Figure 1: Natural, produced and human capital in Cambodia as a proportion of total wealth for the period 1995 – 2014.**



Source: World Bank Data at 2014 constant USD.

**6. However, pressure for land, unsustainable use of natural resources, and heightened impacts of climate change, are threatening the long-term sustainability of these natural assets with consequent adverse impacts on people.** According to official estimates, forest cover declined from nearly 60 percent in 2006 to less than 47 percent in 2014, mainly due to the conversion of forests to agriculture or rubber plantations within economic land concessions (ELCs). Forest degradation is also pervasive and attributed to unsustainable logging practices and fuelwood extraction, driven by high dependency of the population, about 88 percent, on traditional biomass for cooking. In the Cardamom Mountains, threats include land use change such as the encroachment on forest and protected areas for cultivation, illegal timber harvesting and wildlife poaching to supply lucrative international markets, and the development of

<sup>2</sup> The term ‘landscape’ is defined as a heterogeneous land area comprising a cluster of interacting ecosystems that is repeated in similar form throughout.

<sup>3</sup> De Ferranti et al. 2017. Switching On: Cambodia’s Path to Sustainable Energy Security.

<sup>4</sup> The Central Cardamoms have 66 species of mammals, 174 species of birds, 74 species of reptiles, 32 species of amphibians, 44 fish species and 300 species of moths and butterflies. It is also one of the few remaining large habitats for elephants in Cambodia, and is home to approximately one-third of all endangered and rare species listed under the Cambodian Forestry Law. Also, the Cardamom Mountains sequester approximately 230 million metric tons of carbon per year making it important for Cambodia’s climate change mitigation efforts as part of its National Determined Contributions (NDC) under the United Nations Framework Convention on Climate Change (UNFCCC).

<sup>5</sup> Conservation International.

<sup>6</sup> Fish and other aquatic animals provide approximately 76% of Cambodians’ animal protein intake, and 37% of total protein intake per person (IFReDI, 2013. Food and Nutrition Security Vulnerability to Mainstream Hydropower Dam Development in Cambodia).



hydropower and transmission lines. Conversion of forests is evident on the eastern slopes of the Cardamom Mountains. The Tonle Sap floodplain also faces several threats, including population growth, uncontrolled developments in the outer floodplain and flooded forest for irrigation and rice cultivation, illegal fishing practices, low water levels due to extreme heat and drought, and pollution from agro-chemical run-off, human waste and industrial effluent. Such losses have wide-ranging impacts, including on the productivity of the agricultural and fisheries sectors, food security and nutrition, and on hydropower, tourism and infrastructure assets. Moreover, women and children, in particular, are severely affected when these natural assets are threatened, given their disproportionate access to finance, land, and natural resources.

**7. Recognizing the degradation challenge, the RGC has adopted several regulations and reforms to encourage the improved use and management of natural capital.** Key regulations include the Law on Environmental Protection and Natural Resources Management (1996), the Law on Forestry (2002), Law on Fisheries (2007) and the Protected Areas Law (2008) which provide the legal foundation for the management, conservation and development of natural assets under a protected areas system. Law on Tourism (2009), along with several additional related sub-decrees on Cambodia's forest and aquatic resources. In 2012, the RGC introduced a moratorium on new ELC grants and some ELCs were cancelled. A significant reform also took place in 2016,<sup>7</sup> wherein the institutional responsibility for the administration of all ELCs was transferred to the Ministry of Agriculture, Forestry and Fisheries (MAFF) and the administration of all forestry and fishery protection and conservation areas were transferred to the Ministry of Environment (MoE). This substantially increased the area of land under MoE to around 40 percent of the country, and includes most of the country's forests. An Environmental Code is being developed to further strengthen this regulatory framework and improve coordination among various sectors.

**8. To operationalize the above-mentioned regulations, the RGC has developed several strategies and action plans.** In particular, the current Rectangular Strategy, Phase III, and National Strategic Development Plan (NSDP), 2014-2018, place a high priority on the sustainable management and use of natural resources as the country continues to promote economic growth and poverty reduction. Together, they commit to ensuring: (i) green cover, forest and wildlife conservation, (ii) the sustainability of fisheries resources, and (iii) the sustainability of ecosystems. In addition, the Industrial Development Policy (IDP), 2015-2025, which serves as a guide for the promotion of Cambodia's industrial development to help maintain sustainable and inclusive high economic growth, calls for a focus on some priority sectors, including value-added products from natural resource processing, cultural handicrafts, and various supporting industries for the agriculture, tourism and textile sectors. More specifically, the National Strategic Plan for Green Growth (2010-2019) promotes investment in green jobs and technologies, more effective natural resources management, access to green finance, and green and blue sustainable economic development, including green tourism.

**9.** Additional relevant strategies include the National Forest Program (NFP) for 2010-2029, National Protected Area Strategic Management Plan (NPASMP) for 2017-2031, National REDD+ Strategy for 2017-2026, Strategic Planning Framework for Fisheries for 2015-2024, Tourism Development Strategic Plan for 2012-2020, Climate Change Strategic Action Plan for 2014-2023, Strategy for Environmental Geospatial Data and Information Management for 2018-2022, and Cambodia's NDC to the UNFCCC for 2015-2030. Together, they aim to ensure the sustainable conservation, development, management and use of the natural resources, as well as guide the management of national protected areas, encourage sustainable natural tourism development, improve the climate resilience of critical ecosystems, and contribute to global climate change mitigation. To continue building upon and updating these strategies and plans, the RGC is in the process of drafting several new strategic documents, including the next phase of the NSDP as well as a new

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<sup>7</sup> 2016 Sub-decree on the Transfer of Protected Forest, Forest Conservation and Production Forest Areas, and ELCs



National Environment Strategy and Action Plan (NESAP) for 2018-2023 and National Production Forestry Strategy for 2018-2032.<sup>8</sup>

**10. One of the recent initiatives of the RGC, supported by the World Bank, was the development of a Forest Investment Plan (FIP).** With support from the Climate Investment Funds, the RGC has developed a FIP that identifies key investments that will help the country to implement reforms for improved use and management of natural capital. Priority investments include: (i) development of climate smart landscapes through conservation corridors; (ii) development and implementation of a national forest monitoring system; and (iii) reforestation and production forests through public private partnerships.

**11. While these changes are positive and show a growing awareness by the RGC that urgent action is needed to combat the deterioration of its natural capital, several challenges remain.**

- The effective implementation of the National Forest Program, National Protected Area Strategic Management Plan, National REDD+ Strategy, and the achievement of its NDC commitments, require further efforts to address various legal, institutional, technological, financial, human resources, and information challenges.
- More comprehensive cost-benefit analyses are needed to assess potential investments in sustainable livelihoods, such as eco-tourism and sustainable production forestry, as well as investments in sustaining ecosystem services, such as slope stabilization infrastructure and reforestation to control erosion.
- In addition, implementation of a landscapes approach requires strengthening institutional capacities at the national and subnational levels, as well as improving information and decision-support systems such as spatial mapping of land uses and household information on knowledge, attitudes and practices regarding the use of forest resources.
- The devolution of responsibilities for different aspects of PAs management from central to provincial/local authorities means that central staff will need to focus on providing substantial support, capacity building and training to provincial/local authorities in areas such as participatory planning, PAs management, enforcement, and community support. There is limited collaboration between line Ministries with responsibility for natural resources or land management.
- Inadequate levels of government funding to effectively and efficiently safeguard biodiversity and strengthen conservation of protected areas that now cover almost one third of Cambodia.

Relationship to CPF

**12. The project responds directly to the focus areas for development identified in the Systematic Country Diagnostics (SCD) and draft Country Partnership Framework (CPF) under preparation.** The World Bank Group prepared a Systematic Country Diagnostic (SCD) to help identify opportunities and challenges, as well as priority development areas for ensuring strong, inclusive and sustainable growth and shared prosperity in Cambodia going forward. Building on this, the CPF for FY18-22 includes three focus areas. The two focus areas to which the proposed project will directly respond are: i) promoting state efficiency and strengthening private sector development; and ii) strengthening resilience and the sustainable use of natural capital. The activities financed through this project align with other core country priorities including fostering human development, by improving household food and nutrition security and the availability, accessibility (affordability) of nutritious diets and improved knowledge and skills.

<sup>8</sup> A national production forestry strategy (2018-2032) is under development. It is anticipated to help guide the future development and sustainable management of production forests for their contribution to poverty alleviation, enhanced livelihoods and economic growth.



**13. The proposed project directly promotes the Bank’s Twin Goals and contributes to key longer-term objectives.** The project will contribute to the overall goal of decreasing rural poverty, enhancing private sector development and the competitiveness of rural and women-owned enterprises, and increasing the resilience of the agriculture, fisheries and tourism sectors as well as their supporting infrastructure investments. In this way, the Project would directly respond to the Bank’s overarching Twin Goals of eradicating extreme poverty and promoting shared prosperity.

### **C. Proposed Development Objective(s)**

**14. Fundamentally, the project seeks to promote transformation in the way natural resources are used and managed in Cambodia,** and in so doing will contribute to reversing degradation of forestry and fishery resources and increasing the economic returns from these resources in the Cardamom Mountain-Tonle Sap (CMTS) areas. The hypothesis underlying the project is that by increasing the value of natural resources for economic growth and for resilience, and making these values explicit, incentives are created for conserving the resources. The incentive for conserving the resources however, need to be complemented by a robust management.

**15. Accordingly, the project development objective is “to improve natural resources management and related value addition in selected landscapes”.**

#### Key Results (From PCN)

- 16.** The proposed PDO-level results indicators include:
- Land area under sustainable landscape management practices (ha) (CRI)
  - Index of value addition (composite index of natural resources (%) value addition) e.g. Share of fish catch under improved processing
  - Share of targeted communities using innovative technologies in landscape planning and monitoring (%)

### **D. Concept Description**

#### **Project Description and Theory of Change**

**17. The proposed project will support investments in a manner that is consistent with the landscape approach.** This means that investments contribute to common outcomes, are spatially connected across the landscape, and are designed to limit negative impacts on ecosystem integrity while at the same time maximizing development benefits. The investments supported by the project therefore include the development and enhancement of climate-resilient infrastructure and production systems; adoption of sustainable landscape management practices, information systems and decision support tools; and institutional strengthening at the national and subnational levels. Investments will also support the strengthening of the enabling environment for private sector to invest in natural resources.

**18.** The Project is organized into three components:

#### Component 1: Investments for Monitoring and Sustainable Landscape Planning

- 1.1 Natural Resource Management Monitoring, Data Collection and Decision Support Tools
- 1.2 Supporting preparation of selected Sustainable Landscape Management Plans (SLMP); related policies
- 1.3 Strengthening opportunities for private sector engagement

#### Component 2: Investments in Sustainable Landscapes

- 2.1 Enhancing Ecotourism (Corridor Siem Reap- Cardamom Mtns)
- 2.2 Supporting Value Addition in Tonle Sap Fisheries





2.3 Revitalizing Forests Landscapes in Cardamom Mountains

Component 3: Project Management, Monitoring and Evaluation

19. The project area is expected to consider proposed provinces of Pursat, Koh Kong, Battambang, Kampong Speu, Kampong Thom, Siem Reap, and Kampong Chhnang (Figure 2). The Project is proposed to span a period of 5 years, with the financing of US\$60 million from IDA.<sup>9</sup>

20. Two interrelated pathways have been developed to guide the project and are aligned with the outcomes of the project. As shown in Figure 3, Pathway 1 (Enhanced ecosystem services) contributes to reversing degradation of forestry and fishery resources, and Pathway 2 (Value addition) contributes to increasing economic returns from forestry and fisheries; both pathways contribute to enhancing resilience in the longer-term. Together these pathways comprise the theory of change underpinning the project. Project activities build on existing analytical work, supports the

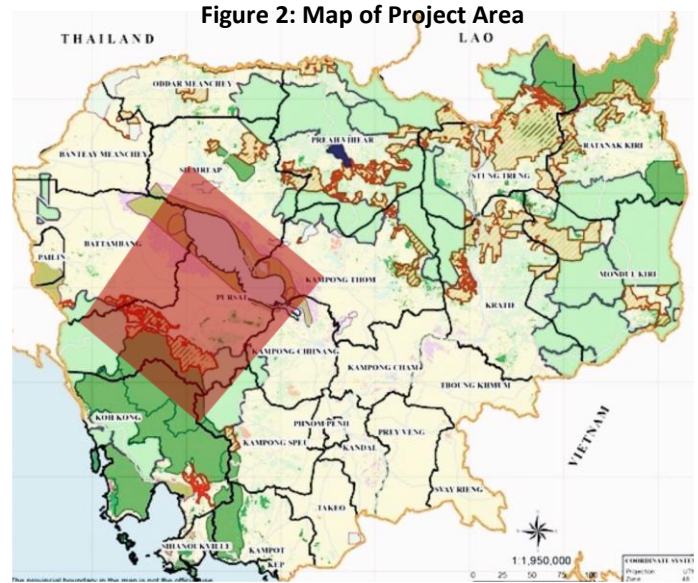
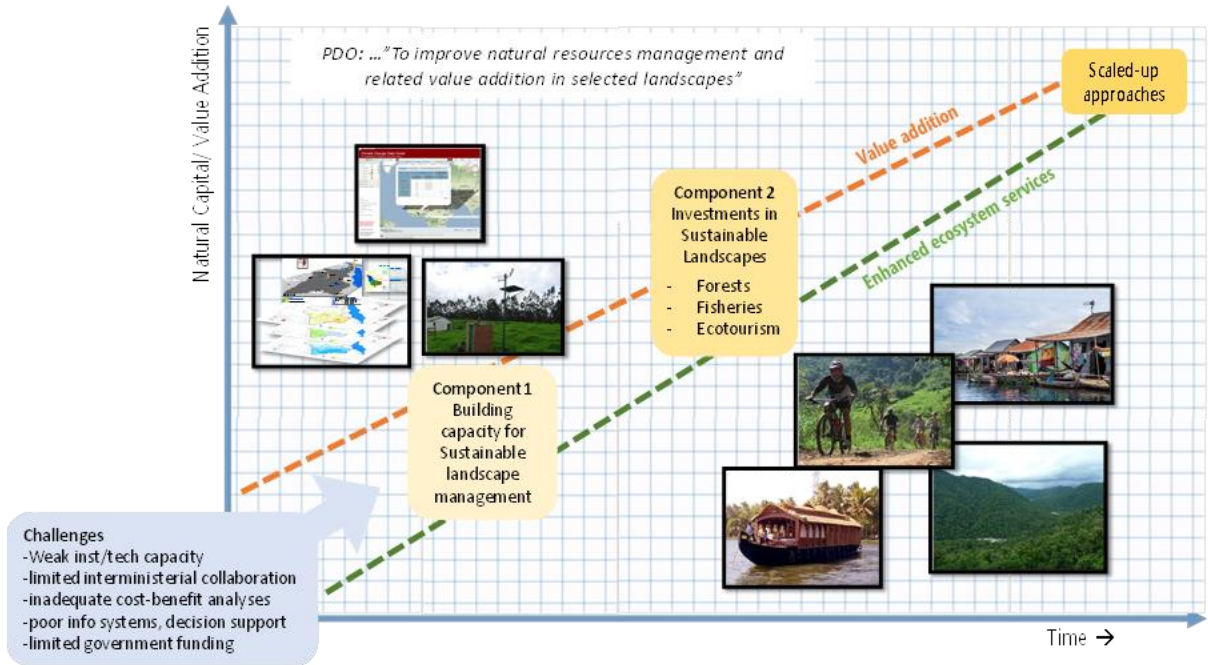


Figure 2: Map of Project Area

Figure 3: Theory of Change



enabling environment, and helps to identify strategic investments in the target landscapes.

<sup>9</sup> Counterpart funding from MONRE, MARD and provinces will be determined during project preparation.





*Analytical Underpinnings:* Biophysical models and economic approaches will be integrated into a spatial and visual decision support system for landscape planning. The project recognizes the importance of entrepreneurial development, and will focus on developing a strong enabling environment for natural resource-based entrepreneurial development in key areas in the CMTS landscape.

*Enabling Environment:* This includes the development of human capacity, provision of management tools, and development of models and plans. In Cambodia, there is need for strengthening coordination across government agencies of MAFF and MOE that have responsibilities for natural resources management. Private sector engagement models will be developed and supporting interventions undertaken to better enable private sector to participate in the forestry and fishery value chains and related enterprises.

*Strategic Investments:* With a strong enabling environment and enhanced analytical work, strategic investments will be needed for supporting the transformation on natural resources use and management. Investments in Pathway 1 will focus on restoring the landscape to build up natural resource assets, and enhance those services that are important for resilience and that underpin economic activity. Investments in Pathway 2 (Value addition), builds on the value chain analysis, and will focus on those investments that help strengthen forestry and fishery value chains and enterprises, such as development of medium-scale post-harvest processing infrastructure, and development of infrastructure to support ecotourism.

**21.** The decisions regarding “what” and “where to develop” investments will consider how these will create opportunities for private sector participation and entrepreneurial development, and will build on the entrepreneurial diagnostics and development of private sector engagement models. Likewise, investments will be aligned with community forestry plans, to maximize participation of communities. Natural-resource based enterprises like ecotourism create employment and income-earning opportunities for local communities, and generate resources (through fees and permits) that can be used to support management activities such as patrolling in the forest and on the Tonle Sap. Private sector participation in forestry and fishery value chains and related enterprises also creates incentives for their investing in the management of natural resources. The participation of the private sector will enhance the potential for continued economic growth.

**22.** The project will cooperate with and build on work being done or being designed by other initiatives – Conservation International, Food and Agricultural Organization (FAO), European Union (EU), and United Nations Development (UNDP) – within the targeted areas to ensure resources are allocated to activities that complement existing support and lead to a net positive impact on reducing degradation of natural capital and improving its management.

### **Detailed Project Components**

#### **Component 1: Investments for Monitoring and Sustainable Landscape Planning (~\$ 7 million)**

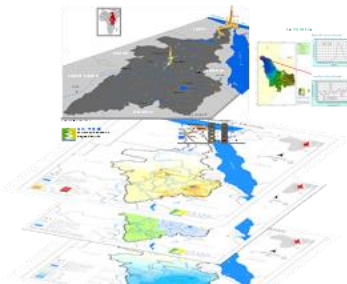
**23. Subcomponent 1.1: Natural Resource Management Monitoring, Data Collection and Decision Support Tools.** The overarching framework for landscape planning and management is included in the draft Environmental Code, and provides broad guidance on the requirements and procedures, and the roles and responsibilities of stakeholders in the use and management of natural resources in Cambodia. The objective of this subcomponent is to support the RGC in implementing the framework through:

- a. *Development of a web-based platform to support planning and decision-making.* A platform for integrating spatial information such as land use and land cover, land degradation, and land tenure maps and satellite and remote sensing imagery has recently been developed as part of an initiative supported by UNDP, and is housed



in the GIS department of MoE.<sup>10</sup> The web-based platform will build on this existing platform, and will focus on enhancing the decision-support capability of the platform through, *inter alia*, updating data layers, including functions for modeling and mapping ecosystem services capacity, ecosystem service flows to beneficiaries, scenarios development and tradeoff analysis.

- b. Developing approaches and providing tools for monitoring. This subcomponent will focus on enhancing the use of digital technology in landscape monitoring. Approaches such as geotagging of natural resources and resource flows, the use of drones for aerial surveillance, the use of satellite and remote sensing data for broader resolution surveillance, and real-time data inputting can significantly aid in the monitoring of natural capital in the Central Cardamom Mountains-Tonle Sap (CCM-TS) landscape. Approaches for analysis and interpretation of data collected via drones, remote sensing, geo-tagging, and other technologies will also be developed under this component and linked to the decision-support system described in the previous paragraph.
- c. Training and capacity development on the web-based platform and use of digital technology in landscape monitoring will be provided for government staff as part of this component. To ensure that capacity can be sustained, training materials will also be developed as a resource for MoE.



**24. Subcomponent 1.2: Supporting preparation of selected Sustainable Landscape Management Plans (SLMP) and related policies.**

The RGC’s new National Protected Area Strategic Management Plan (NPASMP) includes a strategic objective on the development of sustainable landscape management plans, which this subcomponent will support. Landscape plans include community protected area plans, community forest area plans, commercial activity management plans and river basin plans<sup>11</sup>. The objective of this subcomponent is to support the RGC in enhancing their capacity for sustainable landscape planning and the development of subsequent plans. As landscape planning is a relatively new practice for Cambodia, the project, under this subcomponent, will develop a select number of landscape plans, linked to investments described in Component 2, as a proof of concept of the landscape approach.

**25.** This subcomponent will draw on approaches and tools, data, information from subcomponent 1.1 and provide technical assistance as needed, for example for land use zoning and demarcation in the Cardamoms which is a prerequisite for the development of community forestry and community protected area plans (CPAs). Protected Areas Law in Cambodia requires several steps to be undertaken before a CPA can be established, including zoning of a PA landscape into four possible zones: core, conservation, sustainable use, and community development. CPAs can only be established in the sustainable use zone, so it is important that zoning be fully implemented.<sup>12</sup> Technical assistance will therefore be provided through this subcomponent to support MOE, communities in CCM, and civil society partners to establish CPAs in the CCM and to apply tools and approaches that help to reduce the time for preparation and technical complexity of CPAs, and enhance the quality of decision-making for CPAs. The improvements to the process for

<sup>10</sup> Reference UNDP project

<sup>11</sup> The draft Environmental Code provides guidance on the types of plans that can constitute landscape plans.

<sup>12</sup> Experience of establishing CPAs have found that the process is time consuming and technically challenging, taking as much as 2 to 3 years to establish a CPA; these challenges have limited the uptake of CPA as a management approach. UNDP Human Development Report 2018 (forthcoming).



establishing CPAs will be documented as a resource for MOE. The component will also focus on overall harmonization of the different management plans in the CCM-TS landscape. These investments support Cambodia's FIP.

**26. Subcomponent 1.3: Strengthening opportunities for private sector engagement.** Entrepreneurship is a fundamental driver of growth and development. Entrepreneurs unleash the process of “creative destruction”, which transforms low-income economies into dynamic, growing markets. In addition to the benefits of economic growth, jobs and income generation, entrepreneurs also promote resilience and inclusion. However, the overall contribution of micro, small and medium enterprises to the economic growth and development of Cambodia remains below potential. TA will therefore be provided to strengthen the enabling environment for small and medium enterprise growth. An important first step is the use of entrepreneurship diagnostic tools to understand the opportunities and constraints for entrepreneurship.

**27.** Under this subcomponent, diagnostic tools will be used for the identification of sector and firm level constraints to growth and opportunities for productivity gains, private investments and greater market access for (agro-) forest and fresh water fisheries products and services. An integrated framework for connectivity analysis will be used to determine the combinations of investment projects and policy reforms that have the most impact on private sector growth. This subcomponent will also support small and medium enterprise (SME) growth through providing practicable knowledge products, lessons from good practice models and proposals for innovative financing instruments. Added to that will be the promotion of climate-efficient solutions and clean technology development through reforms, guidelines and initiatives that enhance equipment and processes. Additional activities under this component may include: capacity building on global value chain participation; improving trade policies, logistics, and wider connectivity issues; strengthening service sector regulation; development of policies to support the development of links between foreign direct investment and SMEs; compliance with international process and product standards; and skills upgrading.

## Component 2: Investments in Sustainable Landscapes (~50 million)

**28. Subcomponent 2.1 Enhancing Ecotourism in the Siem Reap-Cardamom Mountains Corridor (~\$20 million).** Cambodia has tremendous opportunities to improve the utilization of its natural resource base for a more diversified tourism product (beyond the world-renowned temples) and thereby improve length of stay and days spent by a more diverse set of visitors. Central to optimizing this potential is the creation of ecotourism corridors that link the main tourism gateways of Siem Reap and Phnom Penh (and possible Sihanoukville) to the natural asset base of the Tonle Sap and the Cardamom Mountains. The revenues from eco-tourism activities using simple market based mechanisms such as entrance fees, merchandising, concession fees and licensing and permits, can be directed toward supporting protected areas and other conservation efforts.<sup>13</sup> **The objective of this subcomponent is therefore to introduce and strengthen eco-tourism corridors linking existing visitor gateways with the Tonle Sap and Central Cardamom Mountains in accordance to the national eco-tourism policy (2018 draft).** *Proposed activities include:*

- i. *Improving access and support infrastructure:* Access to the Cardamom and Tonle Sap Landscapes need to be improved to allow for an increase in visitor numbers from the identified gateways. These improvements are aimed at increased, sustainable visitor volume and reduced seasonality due to all-weather access. By adding support infrastructure, visitors will be offered site-specific public domain facilities that enable an appreciation of

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<sup>13</sup> *Entrance fees.* Visitors can be charged to enter PAs. *Merchandising.* Sale of guidebooks, souvenirs, local crafts, etc. *Concession fees.* Companies ("concessionaires") providing services within PAs - such as lodging, nature activities or guiding - can be charged fees to operate such business concessions. *Licenses and permits.* Private firms operating within or outside PAs (e.g. tour operators, guides,) and individuals participating in specific visitor activities (e.g. boating, fishing or camping) can be charged for licenses or permits.



the destination. Combined with branded signage, this creates a sense of place and comprises the (free) public domain side of a destination.

- ii. Establishing Eco-Tourism Infrastructure: Once basic access is improved, visitors need to be offered an appropriate interpretation of the landscape values. This is where the balance between utilization and conservation is created, as an eco-tourism product for visitors, and through practical examples of improved resource use for resident communities. Proposed eco-tourism infrastructure developments include visitor products around (i) Tonle Sap—examples include interpretation center, floating (demo) village, lake cruise facilities, floating shelters/hide-out; and (ii) in the Central Cardamom Mountains—examples include an interactive center, Forest Canopy Walkway, viewpoints and shelter, demarcated trails (mountain biking/hiking), and safety infrastructure at waterfalls and cliff/overlook-sites.



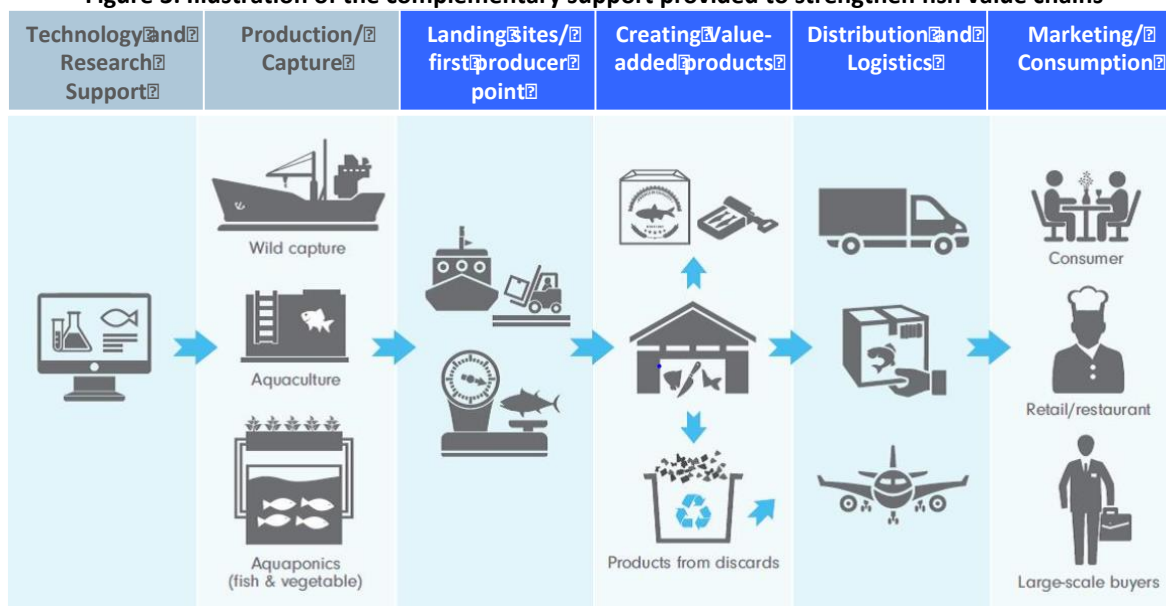
- iii. Support Eco-Tourism Ventures based on Multi-Stakeholder Partnerships. Through this activity the relevant authority, resident communities and private sector will be supported to establish **Multi-Stakeholder Partnerships** in the operation of (small) eco-tourism enterprises (where appropriate) in distinct zones such as forest eco-adventure; zip-line, wildlife viewing, rock-climbing, river crossing, canoeing & kayaking; accommodation as well as lake cruising (scheduled crossing & leisure cruises). The Multi-Stakeholder Partnership approach will ensure that tourism and conservation remain link on the operational level of tourism, that responsibilities for appropriate resource management are shared amongst public and community (residents) stakeholders and that benefits are ensured for those living with tourism resources. Where needed, specialist support will be brought in (e.g. NGOs) to explore the most beneficial eco-tourism partnership in line with international best practices

**29. Subcomponent 2.2: Promoting Value Addition in Tonle Sap Fisheries (~US \$20 million).** Every year, the Tonle Sap yields about 300,000 tons of fish, making it one of the world’s most productive freshwater ecosystems. However, the lake is under multiple threats — from overfishing to feed a fast-growing population, the cutting of the flooded forests that shelter young fish, hydroelectric dams upstream, and the dry seasons that are expected to grow hotter and longer with climate change. Added to this is the relative inefficiency of the fishery due to, inter alia, poor post-harvest processing which results in high rates of spoilage of catch, unused catch (trash fish), and low returns from the fishery enterprise. Continued growth of Tonle Sap fisheries therefore requires a sustainable growth approach which considers strengthening resilience to climate and development impacts, attention to appropriate models that expand and strengthen value chains with a focus on post-harvest activities, and private sector participation in these value chains.



30. This subcomponent will support such a growth approach by investing in the strengthening of the post-harvest components of a few selected fishery value chains, and in activities that help to engage the private sector in these value chains. This focus on the post-harvest investments will complement an EU-funded project under development,<sup>14</sup> which will focus on strengthening the production of fisheries through substantive research on the fisheries in Tonle Sap, including on value chains, and a limited set of investments for strengthening fishery value chains (Figure 4).

Figure 3: Illustration of the complementary support provided to strengthen fish value chains



31. Fish as an important protein source in the diet of Cambodians. Recognizing this, the Project proposes a two-pronged approach viz (i) value addition for domestic markets with a focus on a few important fish species and products, and (ii) value addition in export-oriented markets with a focus on one or two fish products. Building on ongoing technical assistance and research from other development partners for aquaculture and fisheries around the Tonle Sap, the project will determine gaps and opportunities in value chains for aquaculture and capture fisheries.

- *Value addition for domestic markets.* Key investments for strengthening the respective value chains may include: post-harvest infrastructure including improved fish landing / fish depots; storage, processing and packaging facilities, including refrigeration and cold chain, and activities for improving the environmental quality and hygiene, fostering nutrition, and reducing spoilage and losses.
- *Value addition for export-oriented markets.* Key investments may include: Post-harvest infrastructure to strengthen value chains, and aimed to attract private sector businesses. Investments will also support improvements in environmental quality and hygiene, which are important factors in the export-oriented markets.

32. Subcomponent 2.3: Revitalizing Forests Landscapes in Cardamom Mountains. Forest management in Cambodia faces not only government financial and human resource constraints for adequate management performance and monitoring, but also strong market forces that provide disincentives for its sustainable management and productivity in the short-run. There is high pressure on forest resources due to illegal harvesting of trees for timber, charcoal and fuelwood, and limited development of value chains for NTFPs. The set of policies and regulations developed by the RGC

<sup>14</sup> EU supported projects: CAPFISH-Aquaculture (25 M€) and CaPFISH-Capture Fisheries (est. 87 M€).





provide an adequate framework for reducing the pressure on forests, developing NTFPs, and promoting restoration of these landscapes, but there is limited public sector fiscal resources for implementing the policies and regulations. There are small-scale initiatives by development partners such as Conservation International that are strategic, targeted at the right issues, and support the implementation of the RGC’s regulation and policies for natural capital management, but are limited in terms of impact because of their size. What is needed are sizeable investments that can create impacts at scale for natural capital management and development, and help connect some of the smaller initiatives in natural capital to increase their impact. *This subcomponent will support investments in strengthening value chains for selected forest products, and investments for landscape restoration.* The proposed investments will align closely with Cambodia’s FIP.

**33. Financing Landscape Investments (~ \$10m).** The objectives of the work on landscape investments are to (i) ensure that the resource base that underpins ecotourism (subcomponent 2.1) and NTFP value chains can be improved and sustained, and (ii) help restore some of the vital services that underpin other economic enterprises such as water flow regulation to support agriculture in areas downslope of the Cardamoms such as Pursat and Battambang provinces, and habit provision to support fisheries in the Tonle Sap (subcomponent 2.2). The investments made will also support the continued work of other development partners such as CI on community forests and NTFPs.

**34.** Potential areas for restoration have been identified along the eastern flanks of the Cardamom Mountains, and in the forests around the Tonle Sap, where activities, including agricultural encroachment, have led to conversion for forests to other land uses; see Figure 5. Landscape investments will be informed by an assessment of landscape restoration opportunities to identify the types and scale of landscape investments that are needed. Preliminary discussions during the mission, and examination of land cover maps indicate that investments may include development of green infrastructure in terrestrial and riparian areas, agroforestry, and structural measures for slope stabilization and improved drainage.

**35.** The work on landscape investments will integrate the RGC’s community forestry (CF) and community protected areas (CPAs) approaches for landscape management, and will invest in landscape restoration there. This will build on and complement work undertaken by Conservation International, and FAO’s Forest Landscape Restoration Management project.

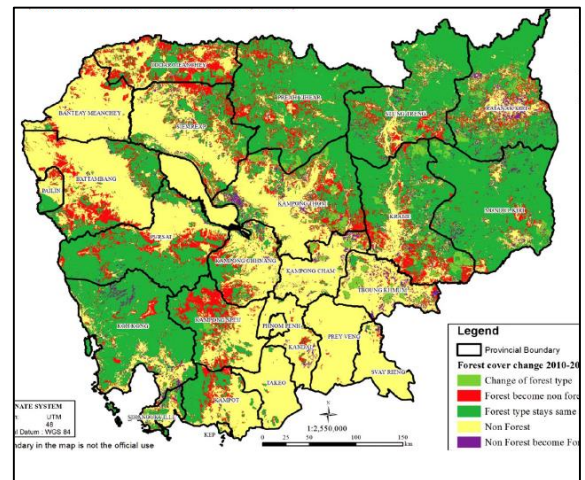


Land treatment for erosion reduction (progressive terraces) with natural regeneration



Gabion baskets for slope & river bank stabilization

Figure 5: Forest cover change from 2010 to 2014.



Source: Forestry Administration, 2017

Notes: The areas shown in red are those areas where forest have been converted to non-forest

**36. Strengthening value chains for selected NTFPs (~\$10m).** The objectives of the work on strengthening value chains are to enhance the opportunities for inclusion of private sector in the value chains, and to increase the income-





earning opportunities for communities participating in the value chains. Two important considerations for forest value chains are the support of the private sector for helping to develop and sustain value chains, and the linking of value chains to strong markets including export or domestic tourism markets. There are a several NTFP value chain initiatives that are ongoing in the Cardamom Mountains, but these tend to be small-scale and have limited impact. For example, resin extraction, malva nuts for medicinal purposes, and agarwood. This work will seek to scale-up a selected number of these value chains, and thereby increase the potential impacts on economic development and job creation within Cambodia. NTFP value chains have strong opportunities for promoting conservation of natural resources, as they create economic incentives for developing the forest resources that underpin the value chains, and managing these resources sustainably.



Resin processing equipment



Resin harvesting and products



Malva and Agarwood products

**37.** Key activities of this subcomponent will include:

- *Value chain analyses to identify target NTFPs, specific areas of private sector support in the value chain, and capacity needed.* This analysis will build on existing available NTFP value chain studies from other key development partners (e.g. GERES, UNDP)
- *Financing medium scale infrastructure to support NTFP value chains.* Informed by value chain analysis, the mission identified potential to support development of post-harvest infrastructure for example medium-sized processing factories, could significantly enhance existing value chains.
- *Capacity development and training for forest communities and local government to effectively participate in the value chain.* An assessment of capacity development needs would be undertaken as party of the value chain analysis, to ensure strategic targeting and efficiency in the capacity development and training process.
- *Enabling/ strengthening market development and access.* The project will facilitate access to markets through developing the enabling environment for private sector to participate in the NTFP value chains.

**Component 3: Project Management Monitoring and Evaluation (~\$4 million).**

**38.** This component will provide incremental running costs, consultant and advisory services for overall project management, financial management, procurement, safeguards and monitoring and evaluation.

**SAFEGUARDS**

**A. Project location and salient physical characteristics relevant to the safeguard analysis (if known)**

The proposed project area includes Pursat, Kohkong, Battambang, Kampong Speu, Kampong Chhnang, Siem Reap and Kompong Thom provinces, which are located across Cardamom Mountain and Tonle Sap Lake (CMTS) areas.

Cardamom Mountain area: Cardamom Mountains are rich in primeval forest and intact ecosystems. In 2002, a transborder highway to Thailand was completed south of the Cardamoms, along the coast. The highway has fragmented habitats for large mammals such as elephants, big cats and monkeys. Tourism is relatively new to the Cardamom Mountains. International conservation organizations working in the area includes Wildlife Alliance, Conservation



International In 2016, the southern slopes of the Cardamom Mountains were designated as a new national park; Southern Cardamom National Park. It appears, however, that rampant illegal poaching is continuing nonetheless. In 2008, Wildlife Alliance launched a community-based ecotourism program in the village of Chi-Phat, marketed as the "gateway to the Cardamoms", with approximately 3,000 annual visitors generating more than \$US 150,000 for the local community.

Tonle Sap Lake area: Tonle Sap Lake is located at the heart of the Cambodian landscape. It is the largest freshwater lake and flood forest habitat in Southeast Asia and supports its largest water bird colony. It is home to around 150 fish species and a host of invertebrates, reptiles, and birds. About 3 million people depend on this lake and its floodplain for their daily food and livelihood. Because of its rich biodiversity and its socio-economic value to so many people, the Tonle Sap Lake area and its floodplain play a very important role in the lives of Cambodians.

**B. Borrower’s Institutional Capacity for Safeguard Policies**

This project is intentionally designed to be multi-sectoral in nature, and as such, will require the involvement of key sectoral ministries, with active participation from provinces. The implementing agencies will likely be MoE and MAFF. However, the specific implementation arrangements are at a preliminary stage and will continue to be discussed during project preparation. Although the implementing agencies (MAFF and MOE) experienced with the Bank-funded past projects such as LASED II (on-going) and BPMAP (late 2000s), however, the assigned environmental and social safeguards persons may be new to the Bank safeguards polices. Moreover BPAMP was quite a different project than the proposed project and only involved on the ground activities in one protected area with heavy input from international consultants and it’s not certain that this experience would be very relevant for the proposed project in regards to safeguards Therefore, the implementing agencies would need refreshing safeguards induction sessions and intensive hands-on support to fulfil the safeguard policies, procedure and requirements.

**C. Environmental and Social Safeguards Specialists on the Team**

Bunlong Leng, Environmental Specialist  
Martin Henry Lenihan, Social Specialist

**D. Policies that might apply**

Safeguard Policies	Triggered?	Explanation (Optional)
Environmental Assessment OP/BP 4.01	Yes	The project will likely trigger OP 4.01 (Environment Assessment) technical assistance on NRM and small-scale investment activities. As the adverse environmental and social impacts are expected to be site-specific, reversible and readily mitigatable through the sub-project management; the project will likely be in category B. The potential impacts and mitigation measures can be discussed with the implementing agencies at an early stage of project preparation. Although the Project location (s) are not yet identified, mitigation measures would be required



for the following potential environmental impacts which may arise because of typical sub-projects:

- Increased pollution in or degradation of soil and water from the expansion of intensive farming, livestock, aquaculture and/or production forestry, including from the use of pesticides and fertilizer.
- Impacts associated with small-scale construction works, including changes in the ecological flow of rivers and tributaries and in the quantity and quality of fish populations resulting from the installation of potential flood control infrastructure or irrigation.
- Increased pollution from the improper disposal of construction materials and/or hazardous substances.
- Community infrastructure investments and other project activities may impact unknown physical or intangible cultural heritage.
- The project will conduct a regional environmental and social assessment (RESA) to provide guidance, and recommendations for preparing the project- environmental and social management framework (ESMF). The RESA will take into account cumulative impacts (regional and project-based) of on-going and planned development projects, opportunities and constraints for environmental management from a regional perspective. Furthermore, RESA will provide recommendations for the ESMF preparation. The ESMF will aim to minimize, prevent and reduce possible temporary and site-specific impacts on the environment and people. The ESMF provides the roadmap for screening for adverse environmental and social risks of sub-projects, and for preparing site-specific ESMP/ESIA during implementation.
- It will also be necessary to conduct a preliminary social assessment/analysis of the participation of women, young people, and other excluded groups (the disabled), forestry, fisheries and agriculture/rural livelihoods activities. The assessment/analysis will also examine how inclusive decision making processes are at the community level, as well as land tenure arrangements that are relevant to project activities. The results of this assessment/analysis will be incorporated into the ESMF.



Performance Standards for Private Sector Activities OP/BP 4.03	No	This policy is not triggered as the project activities will not be implemented by any private sector
Natural Habitats OP/BP 4.04	Yes	<p>The policy is triggered at this stage because the project will involve essential ecosystems with rich biodiversity.</p> <p>As the locations of eco-tourism infrastructure are not identified at project appraisal, environmental and social screening during the project implementation will exclude investments that might cause adverse impacts on natural habitats and other environmentally sensitive areas such as remaining forest or national parks for natural resource conservation and eco-tourism. The subproject-instrument (e.g. ESMP) will also include mitigation measures to avoid and protect any known natural habitats during implementation phase.</p>
Forests OP/BP 4.36	Yes	<p>The Policy on Forests is triggered as Component 2 will invest in forest resources and services in community protected areas, and eco-tourism business activities. The project will be required to ensure that appropriate measures are taken to protect the remaining forest cover by limiting interventions to land that is already under the usages of land and natural assets and preventing any encroachment in adjacent forest and community protected areas. Adherence to the policy will ensure that the development of an eco-tourism business plan is in compliance with the forest policy objectives.</p>
Pest Management OP 4.09	No	<p>While the project would have a strong focus on production of aquaculture and capture fisheries, for example under components 2.1 and 2.2, it is not expected to lead to increase usage of pesticide as experienced, for example, under the LASED Project. Furthermore, MAFF and MOE have the policies to promote the adoption of sound practices of aquaculture and capture fisheries.</p>
Physical Cultural Resources OP/BP 4.11	Yes	<p>At this stage, the policy is triggered as a “precautionary” measure. Preliminary assessment has not brought to light any feature of Physical Cultural Resources such as archeological religious, historical or cultural importance in the buffer zone of selected landscapes. As the project investments can in buffer zones or degraded forest areas and involve limited earth work for small-scale infrastructure, a “chance</p>



		finds” procedure will be included in ESMP and/ECOP in the ESMF and construction.
Indigenous Peoples OP/BP 4.10	TBD	The presence of ethnic minority communities that meet the criteria of the World Bank's policy on indigenous people will be screened for during the preparation stage of the project. If such communities are present, then an Ethnic Minority Planning Framework will be prepared prior to appraisal.
Involuntary Resettlement OP/BP 4.12	Yes	The project will support activities to scale up community protected areas under component 2.1 that may result in restriction of access to natural resources. Also, the project will finance access and interpretation facilities for the Tonle Sap that may require minor amounts of land acquisition. Therefore, a resettlement policy framework (incorporating an access restriction process framework) will be prepared prior to appraisal.
Safety of Dams OP/BP 4.37	No	The project would not involve or connect to any activity in any known small dam (irrigation) or dam site.
Projects on International Waterways OP/BP 7.50	No	The project would not involve or connect to any activity in any known international waterways.
Projects in Disputed Areas OP/BP 7.60	No	The project would not involve any activity in any known disputed area.

**E. Safeguard Preparation Plan**

Tentative target date for preparing the Appraisal Stage PID/ISDS

Sep 26, 2018

Time frame for launching and completing the safeguard-related studies that may be needed. The specific studies and their timing should be specified in the Appraisal Stage PID/ISDS

Safeguards-related studies (e.g. RESA), public consultations and safeguards instruments (e.g. ESMF, RPF and process framework) will be completed prior to the appraisal date.

**CONTACT POINT**

**World Bank**

Anjali Acharya, Maurice Andres Rawlins  
Senior Environmental Specialist



**Borrower/Client/Recipient**

Ministry of Economy and Finance  
Aun Porn Monirith  
Minister of Economy and Finance  
admin@mef.gov.kh

**Implementing Agencies**

Ministry of Environment (Cambodia)  
Say Samal  
Minister of Environment  
info@moe.gov.kh

**FOR MORE INFORMATION CONTACT**

The World Bank  
1818 H Street, NW  
Washington, D.C. 20433  
Telephone: (202) 473-1000  
Web: <http://www.worldbank.org/projects>

**APPROVAL**

Task Team Leader(s):	Anjali Acharya, Maurice Andres Rawlins
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**Approved By**

Safeguards Advisor:	Peter Leonard	16-Oct-2018
Practice Manager/Manager:	Christophe Crepin	16-Oct-2018
Country Director:	Inguna Dobraja	26-Oct-2018