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Report No: PAD3386

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT/  
INTERNATIONAL DEVELOPMENT ASSOCIATION

PROJECT APPRAISAL DOCUMENT

ON A

PROPOSED GRANT

IN THE AMOUNT OF US\$10.8 MILLION  
TO INTERTRUST (SINGAPORE) LTD  
(ACTING AS TRUSTEE OF THE SEADRIF SUB-TRUST A)

AND A PROPOSED GRANT

IN THE AMOUNT OF US\$1.2 MILLION  
TO SEADRIF INSURANCE COMPANY PTE, LTD

FOR

SOUTHEAST ASIA DISASTER RISK INSURANCE FACILITY (SEADRIF): STRENGTHENING  
FINANCIAL RESILIENCE IN SOUTHEAST ASIA PROJECT

September 30, 2020

Finance, Competitiveness And Innovation Global Practice

East Asia And Pacific Region

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## CURRENCY EQUIVALENTS

(Exchange Rate Effective {June 30 , 2020})

Currency Unit =

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SGD 1 = US\$ 0.716

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US\$ 1 = SGD 1.397

## FISCAL YEAR

SEADRIF Trustee: January 1 - December 31

SEADRIF Insurance Company: January 1 - December 31

Regional Vice President: Victoria Kwakwa

Country Director: Samia Msadek

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## ABBREVIATIONS AND ACRONYMS

AAL	Average Annual Loss
ADB	Asian Development Bank
APG	Asia/Pacific Group on Money Laundering
ARC	African Risk Capacity Ltd
ASEAN	Association of South East Asian Nations
ASEAN+3	ASEAN countries, China, Japan, and the Republic of Korea
CCRIF	Caribbean Catastrophe Risk Insurance Facility
CCRIF SPC	Caribbean Catastrophe Risk Insurance Facility Segregated Portfolio Company
CAT Bonds	Catastrophe Bonds
CAT DDO	Catastrophe Deferred Draw-down Option
CoM	Council of Members
CPF	Country Partnership Frameworks
CQS	Consultant Qualification Selection
DA	Designated Account
DPL	Development Policy Financing
DRFI	Disaster Risk Financing and Insurance
EAP	East Asia and Pacific
EIRR	Economic Internal Rate of Return
ESMS	Environmental and Social Management System
E&S Focal Point	Environmental and Social Focal Point
FATF	Financial Action Task Force
FM	Financial Management
GDP	Gross Domestic Product
GRiF	Global Risk Financing Facility
GRS	Grievance Redress Service
IBRD	International Bank of Reconstruction and Development
ICR	Implementation Completion and Results Report
IC	Individual Consultants
IDA	International Development Association
IDB	Inter-American Development Bank
IMF	International Monetary Fund
IPF	Investment Project Financing
ISRs	Implementation Status and Results Reports
Limited	Ltd.
MAS	Monetary Authority of Singapore
M&E	Monitoring and Evaluation
MDTF	Multi-donor Trust Fund
MDB	Multilateral Development Bank
MOU	Memorandum of Understanding
NPV	Net Present Value
PCRAFI	Pacific Catastrophe Risk Assessment and Financing Initiative
PCRIC	Pacific Catastrophe Risk Insurance Company

PDO	Project Development Objective
POM	Project Operations Manual
PP	Procurement Plan
RTWG	Regional Technical Working Group
SEADRIF	Southeast Asia Disaster Risk Insurance Facility
SECO	State Secretariat for Economic Affairs
SORT	Systematic Operating Risk-Rating Tool
SOE	Statement of Expenditure
TA	Technical Assistance
TGA	the Grant Agreement with the SEADRIF Trustee
CGA	the Grant Agreement with the SEADRIF Insurance Company
The Committee	Committee of Sub-Trust A
The Company	SEADRIF Insurance Company
The Company's Board	SEADRIF Insurance Company's Board of Directors
The Trustee	SEADRIF Trust and Sub-Trust A Trustee
TOR	Terms of Reference
WB	World Bank
WBG	World Bank Group

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## DATASHEET

### BASIC INFORMATION

Country(ies)	Project Name	
Indonesia, Cambodia, Lao People's Democratic Republic, Myanmar, Philippines, Thailand, Vietnam	Southeast Asia Disaster Risk Insurance Facility (SEADRIF): Strengthening Financial Resilience in Southeast Asia	
Project ID	Financing Instrument	Environmental and Social Risk Classification
P170913	Investment Project Financing	Moderate

### Financing & Implementation Modalities

<input type="checkbox"/> Multiphase Programmatic Approach (MPA)	<input type="checkbox"/> Contingent Emergency Response Component (CERC)
<input type="checkbox"/> Series of Projects (SOP)	<input type="checkbox"/> Fragile State(s)
<input type="checkbox"/> Performance-Based Conditions (PBCs)	<input type="checkbox"/> Small State(s)
<input type="checkbox"/> Financial Intermediaries (FI)	<input type="checkbox"/> Fragile within a non-fragile Country
<input type="checkbox"/> Project-Based Guarantee	<input type="checkbox"/> Conflict
<input type="checkbox"/> Deferred Drawdown	<input type="checkbox"/> Responding to Natural or Man-made Disaster
<input type="checkbox"/> Alternate Procurement Arrangements (APA)	<input type="checkbox"/> Hands-on Enhanced Implementation Support (HEIS)

Expected Approval Date	Expected Closing Date
30-Sep-2020	28-Feb-2025

Bank/IFC Collaboration

No

### Proposed Development Objective(s)

The project development objective is to improve access to pre-arranged financing through market-based mechanisms for responding to disasters in Southeast Asian countries.



# The World Bank

Southeast Asia Disaster Risk Insurance Facility (SEADRIF): Strengthening Financial Resilience in Southeast Asia (P170913)

## Components

Component Name	Cost (US\$, millions)
Component 1. Capitalization of the SEADRIF Insurance Company	10.00
Component 2. Establishment and operationalization of the SEADRIF Company	1.20
Component 3. Establishment and operationalization of SEADRIF Trust/Sub-Trust(s), project management, monitoring and evaluation	0.80

## Organizations

Borrower:	SEADRIF Trustee SEADRIF Insurance Company
Implementing Agency:	SEADRIF Insurance Company SEADRIF Trustee

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

### SUMMARY

<b>Total Project Cost</b>	12.00
<b>Total Financing</b>	12.00
<b>of which IBRD/IDA</b>	0.00
<b>Financing Gap</b>	0.00

### DETAILS

#### Non-World Bank Group Financing

Trust Funds	12.00
Southeast Asia Disaster Risk Insurance Facility (SEADRIF) Pr	12.00

#### Expected Disbursements (in US\$, Millions)

WB Fiscal Year	2020	2021	2022	2023	2024	2025
<b>Annual</b>	0.00	10.10	0.50	0.50	0.50	0.40
<b>Cumulative</b>	0.00	10.10	10.60	11.10	11.60	12.00





**INSTITUTIONAL DATA**

**Practice Area (Lead)**

Finance, Competitiveness and Innovation

**Contributing Practice Areas**

Macroeconomics, Trade and Investment, Urban, Resilience and Land

**SYSTEMATIC OPERATIONS RISK-RATING TOOL (SORT)**

Risk Category	Rating
1. Political and Governance	● Substantial
2. Macroeconomic	● Substantial
3. Sector Strategies and Policies	● Moderate
4. Technical Design of Project or Program	● Substantial
5. Institutional Capacity for Implementation and Sustainability	● Substantial
6. Fiduciary	● Moderate
7. Environment and Social	● Moderate
8. Stakeholders	● Moderate
9. Other	● Substantial
10. Overall	● Substantial

**COMPLIANCE**

**Policy**

Does the project depart from the CPF in content or in other significant respects?

Yes  No

Does the project require any waivers of Bank policies?

Yes  No



**Environmental and Social Standards Relevance Given its Context at the Time of Appraisal**

E & S Standards	Relevance
Assessment and Management of Environmental and Social Risks and Impacts	Relevant
Stakeholder Engagement and Information Disclosure	Relevant
Labor and Working Conditions	Relevant
Resource Efficiency and Pollution Prevention and Management	Relevant
Community Health and Safety	Not Currently Relevant
Land Acquisition, Restrictions on Land Use and Involuntary Resettlement	Not Currently Relevant
Biodiversity Conservation and Sustainable Management of Living Natural Resources	Not Currently Relevant
Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities	Not Currently Relevant
Cultural Heritage	Not Currently Relevant
Financial Intermediaries	Relevant

**NOTE:** For further information regarding the World Bank’s due diligence assessment of the Project’s potential environmental and social risks and impacts, please refer to the Project’s Appraisal Environmental and Social Review Summary (ESRS).

**Legal Covenants**

Sections and Description

Institutional and Other Arrangements

The Recipient (Trustee) shall, at all times during the implementation of the Project, maintain qualified and experienced management and staff in adequate numbers, with terms of reference, satisfactory to the Bank for the purpose of carrying out Parts 1 and 3 of the Project. (Schedule 2, Section I.A.1 of the Grant Agreement with the SEADRIF Trustee (“TGA”).)

The Recipient (Trustee) shall, engage, not later than three (3) months after the Effective Date, an Environmental & Social Focal Point (E&S Focal Point) and monitoring and evaluation consultant(s), in adequate number, under terms of reference and with qualifications and experience acceptable to the Bank, to provide environmental and social support for the Project. (Schedule 2, Section I.E.2 of the TGA).



The Recipient (Insurance Company) shall, at all times during the implementation of the Project, maintain qualified and experienced management and staff, including inter alia, an insurance manager, in adequate numbers, with terms of reference, staffing and resources satisfactory to the Bank for the purpose of carrying out Part 2 of the Project. (Schedule 2, Section I.A.1 of the Grant Agreement with the Insurance Company (“CGA”).

The Recipient (Insurance Company) shall, at all times during the implementation of the Project, maintain a governance structure acceptable to the Bank. (Schedule 2, Section I.A.2 of the CGA).

The Recipient (Insurance Company) shall: maintain at all times during the implementation of the Project, its license for a general insurance company issued by MAS; and refrain from engaging in activities other than those covered by the license without the Bank’s prior written consent. (Schedule 2, Section I.A.3 of the CGA).

The Recipient (Insurance Company) shall, at all times during the implementation of the Project, promptly notify the Bank in the event there is any change to the appointments of its board of directors; or change in the Legislations, its objectives, organizational structure, governance or ownership of the Recipient, including changes to the share capital of the Recipient and to the Establishment Documents of the Recipient, if such change has or is reasonably likely to have a material adverse effect on the ability of the Recipient to carry out its obligations under the Project, or any interests of the Bank or the Beneficiary Countries. (Schedule 2, Section I.A.4 of the CGA).

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#### Sections and Description

##### SEADRIF Sub-Trust A Operations Manual and the Project Operations Manual (POM)

The Recipient (Trustee) shall, with the support of Technical Advisors, at all times during the implementation of the Project, carry out Parts 1 and 3 of the Project in accordance with the SEADRIF Sub-trust A Operations Manual and the Project Operations Manual (Schedule 2, Sections I.B.1 and I.B.2 of the TGA).

The Recipient (Insurance Company) shall, at all times during the implementation of the Project, carry out Part 2 of the Project in accordance with the POM, giving details of guidelines and procedures agreed with the Bank for the implementation, supervision, and monitoring and evaluation of the Project. (Schedule 2, Sections I.B.1 of the CGA).

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#### Sections and Description

##### Environmental and Social Standards

The Recipient (Trustee), with support of the E&S Focal Point, shall ensure that Part 3 of the Project is carried out in accordance with the Environmental and Social Standards and in accordance with the ESCP, in a manner acceptable to the Bank; (including staffing, funding , policies and procedures, and reporting); maintain, operate and publicise the availability of a grievance redress mechanism; and ensure that terms of reference for consultancies pay due attention to the Bank’s environmental and social requirements. (Schedule 2, Section I.C of the TGA).

The Recipient (Insurance Company) shall ensure that Part 2 of the Project is carried out in accordance with the Environmental and Social Standards and in accordance with the ESCP, in a manner acceptable to the Bank;



(including staffing, funding, policies and procedures, and reporting); maintain, operate and publicise the availability of a grievance redress mechanism; and ensure that terms of reference for consultancies pay due attention to the Bank’s environmental and social requirements. (Schedule 2, Section I.C of the CGA).

#### Sections and Description

##### Annual Work Plans and Budgets

The Recipient (Trustee) shall: (a) prepare and furnish to the Bank for its approval not later than one (1) month before the beginning of each calendar year during the implementation of the Project (or such later date as the Bank may agree), an Annual Work Plan and Budget (“AWPB”) containing all Project activities and Eligible Expenditures proposed to be included in the Project in the following calendar year, including a specification of the sources of financing for all Eligible Expenditures; and (b) ensure that the Project is implemented in accordance with the AWPB accepted by the Bank for the respective calendar year. (Schedule 2, Section I.F of the TGA).

The Recipient (insurance Company) shall: (i) furnish to the Bank for review and approval as soon as available, but in any case not later than one (1) month before the beginning of each calendar year during the implementation of the Project or such later date the Bank may agree, an AWPB; and (ii) thereafter ensure that the Project is carried out in accordance with such AWPB as agreed with the Bank. (Schedule 2, Section I.F of the CGA).

#### Sections and Description

##### Share Subscription Agreement and Use of Capitalization Funds

For purposes of carrying out Part 1 of the Project, the Recipients (Trustee and Insurance Company) shall enter into a Share Subscription Agreement under terms and conditions acceptable to the Bank. (Schedule 2, Section I.D of the CGA and of the TGA).

The Recipient (Insurance Company) shall, at all times during the implementation of the Project: (a) maintain the Insurance Contracts and the Reinsurance Contracts, under terms and conditions acceptable to the Bank, to ensure adequate and efficient Insurance Payouts to the Beneficiary Countries; (b) in the event the Capitalization Funds are used for investments, the Recipient shall invest the Capitalization Funds in accordance with the investment policy and process as agreed the Bank; and (c) in the event of winding-up or dissolution of the Recipient or any balance of the proceeds of the Grant remains with the Recipient as of the Closing Date, the Recipient shall agree with the SEADRIF Sub-trust A Committee through the SEADRIF Trustee and the Bank on the terms and conditions for the use of such remaining balance. (Schedule 2, Section I.E of the CGA).

#### Sections and Description

##### Other Undertakings

The Recipient (Trustee) shall:

(a) instruct the SEADRIF Insurance Company, at the request of the SEADRIF Sub-Trust A Committee, to: (i) only



underwrite an insurance policy for a Beneficiary Country upon confirmation from the SEADRIF Sub-Trust A Committee that the Contingency Plan prepared by the Beneficiary Country is satisfactory and acceptable to the Bank; and (ii) only issue a new insurance policy to said Beneficiary Country after the SEADRIF Sub-Trust A Committee confirms that said Beneficiary Country has met the requirements of the Contingency Plan; and (b) upon request by the Bank and/or the SEADRIF Sub-Trust A Committee and with support from the E&S Focal Point, (i) promptly arrange environmental, social and fiduciary audit(s) to be carried out by environmental and social, and financial auditor(s) to be engaged by the Recipient with terms of reference and qualification acceptable to the Bank, on the compliance of a Beneficiary Country with its Contingency Plan in the use of Insurance Payouts; and (ii) share the reports of the auditors with the Bank, the SEADRIF Sub-Trust A Committee and the SEADRIF Insurance Company. (Schedule 2, Section I.E of the TGA).

Prior to making an Insurance Payout to a Beneficiary Country, (i) the Recipient (Insurance Company) shall have entered into an Insurance Contract with the Beneficiary Country, under terms and conditions acceptable to the Bank and as set forth in the SEADRIF Sub-trust A Operations Manual; and (ii) an Applicable Event shall have occurred. (Schedule 2, Section I.G.1 of the CGA).

The Recipient (Insurance Company) shall: (a) only enter into an Insurance Contract with a Beneficiary Country after the SEADRIF Sub-Trust A Committee has approved said Beneficiary Country’s Contingency Plan acceptable to the Bank; and (b) only issue a new insurance policy to said Beneficiary Country after the SEADRIF Sub-Trust A Committee confirms that said Beneficiary Country has met the requirements of the Contingency Plan. (Schedule 2, Section I.G.2 of the CGA).

**Conditions**

Type	Description
Effectiveness	<p>(a) The execution and delivery of the Grant Agreement with the Insurance Company and the Grant Agreement with the Trustee, in each case on behalf of the Recipient has been duly authorized by all necessary corporate actions. (Section 5.01(a) of the CGA and Section 5.01(a) of the TGA)</p> <p>(b) Cross effectiveness and readiness for disbursements under the Grant Agreement with the Insurance Company and the Grant Agreement with the Trustee. (Section 5.01(b) of the CGA and Section 5.01(b) of the TGA)</p> <p>(c) The SEADRIF Sub-Trust A Committee has approved the SEADRIF Sub-Trust A Operations Manual, acceptable to the Bank. (Section 5.01(c) of the TGA)</p> <p>(d) The Project Operations Manual, acceptable to the Bank, has been finalized for Project implementation. (Section 5.01(c) of the CGA and Section 5.01(d) of the TGA)</p>
Disbursement	No withdrawal under Category (1)(capitalization funds), until: (i) the Bank has given no



objection to the Company’s business plan that includes the amount of capital needed to provide the insurance product for the Beneficiary Countries; and (ii) the Trustee has entered into a Share Subscription Agreement with the SEADRIF Insurance Company under the terms and conditions acceptable to the Bank. (Schedule 2, Section IV.B.1(b) of the TGA)

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## I. STRATEGIC CONTEXT

### A. Regional Context

- 1. The Association of Southeast Asian Nations (ASEAN) countries, home to more than 650 million people with a combined Gross Domestic Product (GDP) of almost US\$3 trillion, are highly prone to disaster and climate events.** Floods, tropical storms, droughts, earthquakes, and tsunamis have left severe physical, economic, and human impacts in the region, with more than 400 million of lives affected over the past 30 years<sup>1</sup> and annual regional average expected losses equivalent to greater than 0.3 percent of regional GDP. Disaster events generated total damage and losses of over US\$136 billion since 1989, with the Thai floods in 2011 alone accounting for US\$45 billion.<sup>2</sup> Every 100 years, on average, the ASEAN region is estimated to face disaster losses totaling US\$17.9 billion, equivalent to an estimated 1.0 percent of the regional GDP.<sup>3</sup> See Annex 2 on Disaster Risks and Public Finances in ASEAN Countries. The losses are expected to increase for a variety of reasons, including growing urbanization, environmental degradation, and climate change.
- 2. ASEAN countries face different financing needs in the wake of disaster and climate shocks.** The countries are at different stages of economic development, have different socio-political structures, and differ by risk profiles, fiscal space, and level of access to financial markets, all of which generate different funding needs following disasters and climate shocks. Notwithstanding the differences, the countries share a common denominator: heavy reliance on government budget and lack of pre-arranged risk financing mechanisms such as insurance or contingent credit. Some governments may not be familiar with these mechanisms, and therefore do not integrate them into existing fiscal management frameworks and systems. This has caused different challenges in securing access to timely and cost-efficient financing for short term emergency response and maintenance of essential government services and longer-term recovery and reconstruction.
- 3. Smaller and disaster-prone economies in ASEAN comprising Cambodia, Lao PDR and Myanmar are exposed to potential short-term funding gap<sup>4</sup> for emergency response.** The governments in Cambodia, Lao PDR and Myanmar have allocated contingency budgets and reserve funds to be used for emergency response, but when faced with a catastrophic event, they still need to rely heavily on international donor assistance for responses, relief and recovery. For example, Lao PDR's contingency budget and state reserve funds can mobilize only US\$22 million in the case of a natural disaster, which compares to the estimated emergency response costs of a 1-in-10-year (10% probability) flood event of US\$36 million. The funding challenge is further exacerbated by constraints in raising liquidity at the outset of an event because of limited borrowing capacity, under-developed local insurance and capital markets, and limited access to international (re)insurance and capital markets. See Annex 3 on Disaster Risk Funding in Cambodia, Lao PDR and Myanmar.
- 4. Larger and disaster-prone economies such as Indonesia, the Philippines, and Vietnam face potential funding gaps for more severe but less frequent events.** Larger sized economies have a better capacity to raise liquidity than smaller economies, thanks to more developed local debt and insurance markets and better access to international

<sup>1</sup> EM-DAT data 2019

<sup>2</sup> EM-DAT data 2019

<sup>3</sup> World Bank 2012, Disaster Risk Finance and Insurance in ASEAN

<sup>4</sup> The difference between estimated emergency response costs of natural disasters and available budget resources



capital and reinsurance markets. However, they are still confronted with challenges in obtaining sufficient and quality liquidity and coverage due to limited fiscal space and the limited capacity of local insurance markets for catastrophe risks. Growing infrastructure asset bases at risk are a concern for these countries because of the increasing contingent liabilities stemming from these assets. Insurance can help reduce this contingent liability but is underutilized compared to more developed markets. See Annex 4 on ASEAN insurance protection gap.

5. **ASEAN countries may experience compound shocks from pandemics and natural disasters.** The Corona Virus Disease 2019 (COVID-19) outbreak has severely impacted ASEAN countries, with the full magnitude of the financial, fiscal, and social ramifications still unknown. As of 24 September 2020, ASEAN countries have recorded 632,978 cases along with 15,458 deaths<sup>5</sup>, while poor testing may underestimate the figures. In 2020, the real GDP growth rate in Southeast Asia is expected to plunge to the negative zone at -0.7 percent, a sharp decline from 4.7 percent of growth rates in 2019<sup>6</sup>. If a large-scale disaster happens, particularly during the response or recovery phase of COVID-19, it will put further strains on the countries' already limited fiscal space, vulnerable populations, as well as firms' finances.

## B. Sectoral and Institutional Context

6. **Confronted with narrow fiscal space, ASEAN disaster-prone economies seek to develop additional buffers to mitigate the impact of disaster and climate shocks.** These countries are in persistent budget deficits, ranging from 1 percent to 5 percent of GDP. The deficits were largely driven by increases in public spending in sectors such as infrastructure, health, and education, most of which are financed by growing public debts, while government revenue collections have not been commensurate with increases in spending. Countries that have public debt-to-GDP ratios reaching closer to their debt ceilings, such as Vietnam and the Philippines, or are already at high risk of debt distress such as Lao PDR<sup>7</sup> are likely to have less fiscal room to maneuver in case of external shocks. In the context of increased losses from disaster and climate events, these governments are exploring new shock-responsive financing mechanisms as cushions for the government budget against disaster and climate risks. Governments of the Philippines and Indonesia, for example, already developed and implemented a financial protection strategy against disaster and climate risks, while others including Lao PDR, Myanmar, Cambodia, Vietnam are in the process of developing such a strategy.
7. **The financial sector in ASEAN economies has made important contributions to the countries' development, however, it remains under-developed to shoulder part of the governments' fiscal costs due to disaster and climate shocks.** Capital market capitalization in smaller economies remains modest at less than 50 percent of GDP, while the ratio for larger sized economies ranges between 70 percent and 150 percent of GDP. Insurance sectors are still largely under-developed in smaller sized countries with penetration ratio at less than 0.1 percent of GDP, whilst higher penetration was seen in larger sized countries at around 1.2 percent of GDP. The insurance industry in Indonesia, Philippines, Thailand, and Vietnam have started providing insurance products for disaster and climate risks at the household levels (often with subsidies from the governments), however, these programs remain small-scaled. Limited insurance products have been provided by local (re)insurers to the governments due to a variety of reasons including insufficient domestic (re)insurance capacity, limited availability of products and affordability.

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<sup>5</sup> Johns Hopkins Coronavirus Resource Center. Data as of September 24, 2020 (19:30pm EST). <https://coronavirus.jhu.edu/region>

<sup>6</sup> IMF. World Economic Outlook (April 2020).

[https://www.imf.org/external/datamapper/NGDP\\_RPCH@WEO/OEMDC/ADVEC/WEOWORLD/SEQ](https://www.imf.org/external/datamapper/NGDP_RPCH@WEO/OEMDC/ADVEC/WEOWORLD/SEQ)

<sup>7</sup> IMF, Lao PDR, Staff Report for the 2017 Article IV Consultation, <https://www.imf.org/~media/Files/Publications/CR/2018/cr1884.ashx>





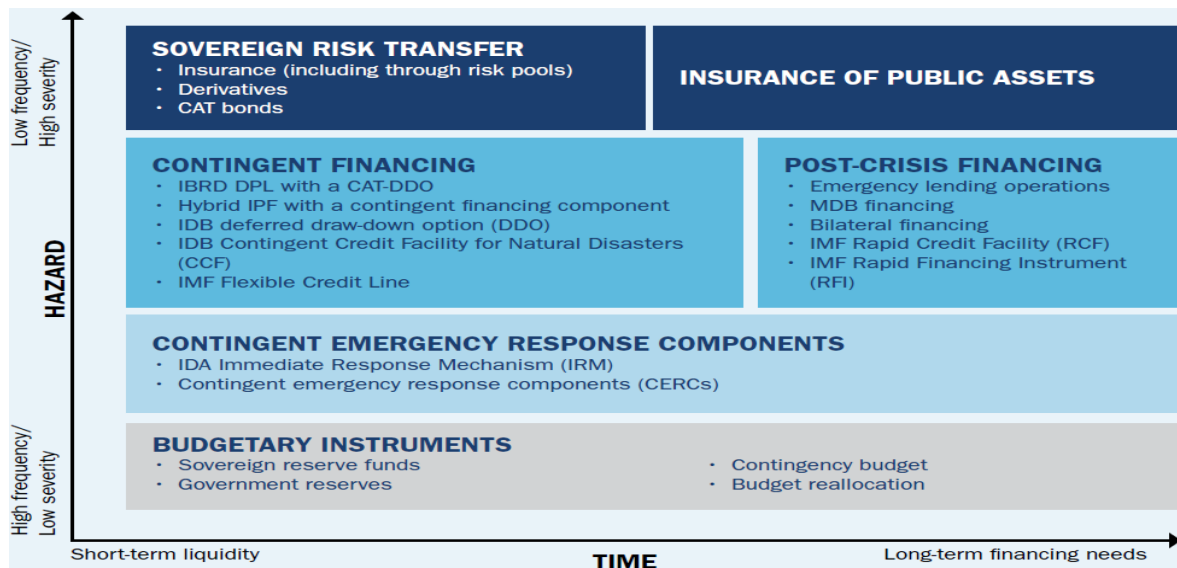
8. **Pre-arranged risk financing options are most efficient when combined with ex-post risk financing instruments through a risk layering strategy.** No single instrument can help the governments manage the fiscal impacts of all types of disaster events, and efficiency gains can be best achieved when the instruments work in complementarity to respond to post-disaster funding needs. See box 1 on Risk Layering Approach. As part of the suite of pre-arranged risk financing solutions available, various insurance options exist including (i) sovereign insurance coverage directly from the international reinsurance markets or (ii) insurance coverage purchased jointly with other sovereign or local governments or (iii) a catastrophe risk pool. Whereas options i) and ii) involve less transaction and administrative costs, they do not allow for pooling benefits that will result in lower premiums. Option iii) provides participating countries with additional premium savings due to economy of scale, risk diversification and the capacity to retain the first losses through joint reserves. However, this requires the governments to put in efforts to establish the institutional, legal and technical structures and vehicles to allow for such pooling mechanisms. Among ASEAN countries, the Philippines has used option i) for its central government and option ii) for its provinces, while other countries including Lao PDR and Myanmar opted for the pooling option (iii) with other countries potentially joining in the future.



**Box 1. Risk Layering Approach**

This approach prioritizes the most cost-effective solution for different layers of risk.

- *Low-risk layer.* Frequent low-impact events could be financed primarily through risk retention mechanisms in the form of a disaster fund, a dedicated budget line, a contingency budget or budget reallocations.
- *Medium-risk layer.* Medium-scale, less frequent events could be financed through contingent financing facilities that are typically provided by international financial institutions.
- *High-risk layer.* The financial risk for extreme events that occur infrequently could be transferred to the international capital and reinsurance market using insurance, catastrophe derivatives, or catastrophe bonds.



Source: World Bank, 2017. "Sovereign Climate and Disaster Risk Pooling: World Bank Technical Contribution to the G20"

Note: IBRD = International Bank for Reconstruction and Development; DPL = Development Policy Loan; CAT DDO = Catastrophe Deferred Drawdown Option; IPF = investment project financing; IDB = Inter-American Development Bank; IMF = International Monetary Fund; MDB = multilateral development bank; IDA = International Development Association.

9. ASEAN+3<sup>8</sup> Finance Ministers and Central Bank Governors have supported the establishment of the Southeast Asia Disaster Risk Insurance Facility (SEADRIF) as a platform to work together for better financial resilience of the ASEAN region against disaster and climate shocks. The platform aims to provide technical and financial solutions as well as knowledge and capacity building services to strengthen financial resilience and reduce the financial protection gap in the region. Domestic capacity-building will also improve post-disaster budget processing and disaster risk

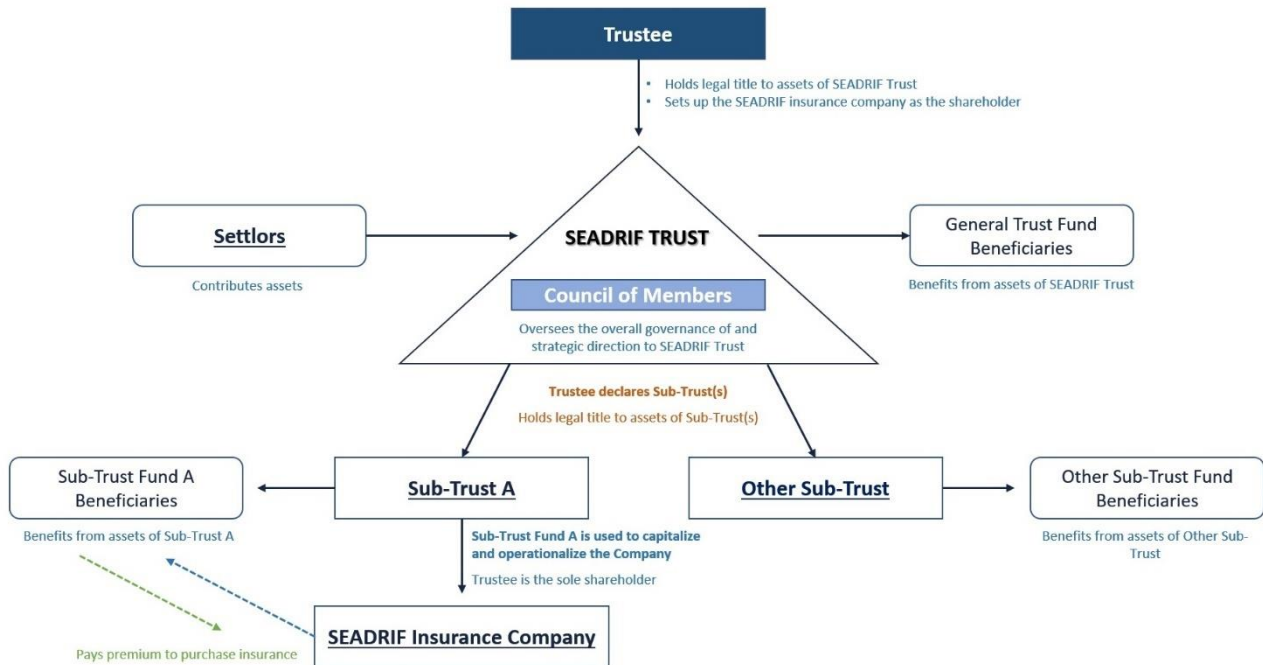
<sup>8</sup> Comprising ASEAN countries and China, Japan and the Republic of Korea



mitigation efforts. A Memorandum of Understanding (MOU) for the establishment of SEADRIF was signed by Cambodia, Indonesia, Lao PDR, Myanmar, Japan, and Singapore on December 14, 2018.<sup>9</sup> An additional MOU signatory was recorded in May 2019, with the Philippines officially joining as the 7<sup>th</sup> SEADRIF member country.

- 10. **Signatory countries to the SEADRIF MOU agreed to set up SEADRIF under a Trust structure, domiciled in the jurisdiction of Singapore.** The structure comprises (i) the SEADRIF Trust, a legal arrangement for SEADRIF open to all ASEAN+3 countries and governed by the Council of Members (CoM) that will provide overall strategic direction for SEADRIF, and (ii) SEADRIF Sub-Trust(s), an arrangement(s) for a sub-group(s) of SEADRIF member countries and development partners to develop and govern specific initiatives. Non-ASEAN+3 donors can become a member of a Sub-Trust under certain conditions as defined by the Committee of the respective Sub-Trust. Japan and Singapore became the first Settlers of the SEADRIF Trust by signing the Trust Deed in July 2019. As the Trustee of SEADRIF Trust and Sub-Trust(s), Intertrust (Singapore) Limited (Ltd.), was competitively selected by the countries from a pool of professional trust management companies licensed by the Monetary Authority of Singapore (MAS). See figure 1 on entity relationship diagram.

**Figure 1: Entity Relationship Diagram**



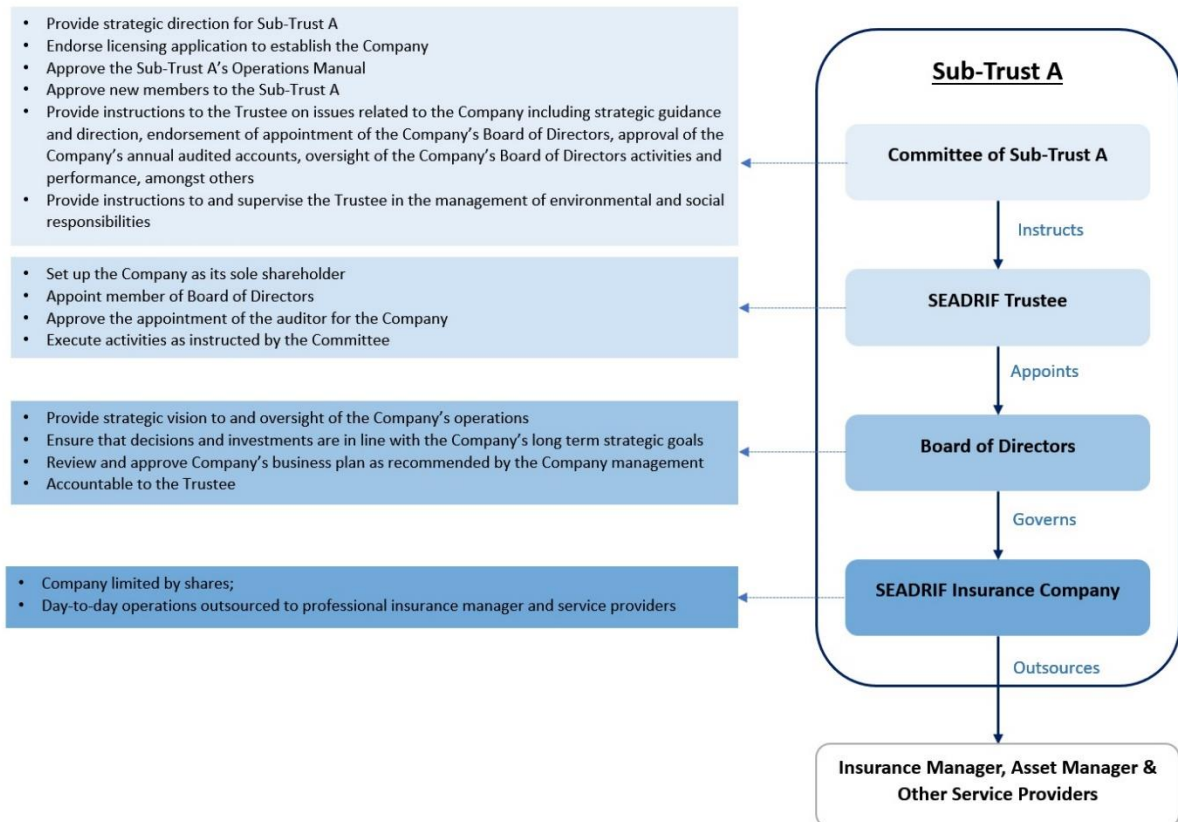
- 11. **The SEADRIF Insurance Company (the Company) was established under Sub-Trust A to provide disaster risk financing and insurance products to the participating countries,** with financial support from development partners. The Company’s initial capitalization is expected to be provided by the proposed grant in parallel with a grant provided

<sup>9</sup> Member countries refer to all MoU signatories. Participating countries refers to the member countries which are eligible to receive insurance coverage and other services by SEADRIF and technical assistance from the World Bank. The list of SEADRIF beneficiary countries currently includes Cambodia, Indonesia, Lao PDR, Myanmar, and The Philippines.



by Singapore in October 2019. The Company was incorporated by the selected Trustee as its legal owner and shareholder and licensed as a general insurance company (with some regulatory exemptions) by the MAS under the jurisdiction of Singapore. Singapore was chosen by the member countries as the host jurisdiction in light of (i) its transparent and strong legal and regulatory framework and (ii) its robust ecosystem for (re)insurance and competitive access to the financial sector, particularly (re)insurance markets. The choice of a general insurance company was to ensure that the Company would operate under the highest standards in Singapore including the revised risk-based capital framework which will provide better protection to the participating countries and the stakeholders involved and streamline regulatory compliance. The Company’s structure would involve two legal entities (the Trustee and the Company) and other stakeholders including the Committee of Sub-Trust A (the Committee) and the Company’s Board of Directors (the Company’s Board). See figure 2. The Company outsources its functions to third party service providers, most notably the insurance manager, asset manager, reinsurance broker, and calculation agent. The insurance manager provides insurance management services and supports the Company’s Board in coordinating the various functions serviced by third-party providers.

**Figure 2. Sub-Trust A and Company Structure**



12. **The Company is not subject to tax and is exempt from certain regulatory requirements under relevant laws and regulations in Singapore.** Tax exemption conditions include, amongst others, (i) the sovereign risk pooling entity is



not established or operated for the object of deriving a profit and its income and capital may only be applied towards its sole objective; (ii) its capital is provided only by governments, entities wholly owned by governments, and organizations that are not established or operated for the object of deriving a profit; (iii) a government (not being an insured government) or an entity or organization mentioned in (ii) does not enjoy any risk coverage or receive any benefit in any form (including dividends) from the sovereign risk pooling entity; (iv) benefits of any insurance provided by the sovereign risk pooling entity, as well as any distribution of the entity's property if it ceases operation, accrue only to the insured governments.

13. **The Company is expected to manage the first regional catastrophe risk pool for Lao PDR and Myanmar as its first product.** Lao PDR and Myanmar agreed in May 2018 to establish and join the first regional catastrophe risk pool under a dedicated SEADRIF sub-trust (Sub-Trust A), while Cambodia pended their decision subject to further feasibility studies. The proposed catastrophe risk pool is designed as a reinsurance-backed disaster liquidity facility. The countries join the pool through an upfront payment of contribution/premium and receive quick payouts upon eligible disaster events. These payouts and their triggers are predetermined according to clear and transparent pre-agreed rules. The pool will (i) retain some risk based on its joint reserves made of country premium contributions and donor contributions, and (ii) transfer excess risk to international reinsurance markets in order to ensure that all claims can be paid in full following a severe event (or a series of severe events). This regional catastrophe risk pool would be the first regional pool in Asia, building on similar initiatives in the Caribbean, Africa, and the Pacific.
14. **This first product offered by the Company will be a hybrid insurance product, providing payouts for small, medium and severe flood events.** The insurance product will consist of two complementary components covered by one single premium: (i) a parametric insurance component to provide a limited but immediate payout to insured countries following medium or severe flood events; and (ii) a finite insurance (with soft trigger) component to mitigate the risks of parametric insurance which arise from basis risk (e.g., mismatch between the actual loss and the modeled loss) and losses which are not sufficient to trigger a payout under the parametric component (below the deductible) and to cover for perils other than floods. The insurance policy offered by the Company has a 36-month duration as part of the product and project design. This policy duration is significant enough for evaluating the desired product cycle starting from issuing the insurance policy, making payouts for eligible events, using payouts for disaster response, accounting of payouts, reporting on the use of payouts to the Committee and the Trustee, and any required post-audit of the use of payouts. Premium will be made in one instalment upfront with a minimum of 50% to be used to purchase the parametric insurance component and the remainder used to purchase the finite insurance component.
15. **Payouts from the catastrophe risk pool will be used for post-disaster emergency response and recovery expenditures and monitored by SEADRIF.** In view of the beneficiary countries' existing financing arrangements for disaster risk response, recovery and reconstruction and given the size of potential insurance payout from the first catastrophe risk pool for Lao PDR and Myanmar, the payouts from this pool will be used by Myanmar and Lao PDR for goods, services and physical works for post-disaster emergency relief, response, recovery of critical infrastructure assets as well as maintenance of essential government services; and will not be used for new greenfield infrastructure investments or works. Lao PDR and Myanmar have committed to developing contingency plans to ensure timely, effective and transparent use of insurance payouts. The countries' contingency plans will follow the contingency planning guidelines developed by the Committee and approved by the Committee before the insurance policy is issued. These guidelines require the countries to strengthen their existing system and processes for the use of insurance proceeds as well as financial management and acquittal procedures. The World Bank will review these



guidelines and the contingency plans prepared by Lao PDR and Myanmar<sup>10</sup>. To strengthen SEADRIF's monitoring system, the following measures have been included in the SEADRIF's relevant documents: (i) specify an exclusion list that comprises activities which could pose significant or high environmental and social risks and impacts, consistent with the Bank's Environmental and Social Framework, (ii) require beneficiary countries to report back to the Committee and the Trustee, (iii) require the beneficiary countries to open designated accounts for insurance payouts to allow separate monitoring from the general budget account, (iv) allow the Trustee at the instruction of the Committee or the request from the WB to arrange audit of the countries' designated accounts for payouts in relation to the exclusion list specified in these contingency plans, (v) require beneficiary countries to implement pre-agreed contingency plans through the Sub-Trust A Operations Manual.

### **The Role of the World Bank**

16. The World Bank (WB) was requested to act as the **Lead Technical Partner** to SEADRIF to provide technical assistance (TA) to the participating countries and advise on proposed SEADRIF activities. SEADRIF member countries requested the WB's support to enhance technical quality of the proposed activities and facilitate technical collaboration with other partners of SEADRIF. The World Bank is **not a member of the governing bodies of SEADRIF**.
17. **The World Bank was requested by SEADRIF member countries to support the capitalization and operationalization of the Company.** The project supports the transfer of grants from the SEADRIF Multidonor Trust Fund (MDTF) (TF072820) administered by the World Bank to capitalize and operationalize the Company in order to implement the first catastrophe risk pool for Lao PDR and Myanmar. These expenses are allowed under the recipient executed portion of the MDTF. As other countries join the first catastrophe risk pool or new products are launched, future transfers could be considered, if additional funding becomes available.
18. **This project builds on existing in-country operations and dialogues in various engagements with units across the WB.** The project is linked to a series of Southeast Asia Disaster Risk Management projects in Cambodia, Lao PDR, and Myanmar (P160929, P160930, and P160931 respectively) that seek to strengthen the countries' physical and financial resilience including through premium financing to the SEADRIF catastrophe risk pool for Lao PDR, Myanmar, and potentially Cambodia. National and regional IDA credits of US\$5 million for Lao PDR and US\$20 million for Myanmar have been earmarked to cover the insurance premium payments due to SEADRIF until 2023. The project coordinates with and complements TA activities in the region such as the SEADRIF TA program (P164004) and the SECO Sovereign Disaster Risk Financing and Insurance Program Phase 2 (P163780).

### **C. Relevance to Higher Level Objectives**

19. **The proposed project contributes to the World Bank Group's (WBG) twin goals of ending extreme poverty and boosting shared prosperity.** In the aftermath of a severe disaster, developing countries experience major budget variability, often leading to reduced coverage and quality of the public services that the poor and vulnerable populations and critical operations of the economy largely depend on. By providing immediate liquidity following a disaster, SEADRIF will enable beneficiary governments to minimize disruptions to government budget and provision of critical public services, thereby strengthening emergency relief and recovery measures, preventing vulnerable populations from falling deeper or back into poverty, ensuring the continuity of economic and business activities and allowing for investments and planning to be pursued with a higher degree of confidence. SEADRIF's efforts to raise risk awareness and support insurance market development contributes to safeguarding development gains by

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<sup>10</sup> Supported under the ongoing Southeast Asia Disaster Risk Management projects in Lao PDR (P160930) and Myanmar (P160931)





facilitating risk-informed decision making and increasing financial certainty across the populations and economies.

20. **The project contributes to the WBG’s Maximizing Finance for Development** objective by crowding in the (re)insurance and capital markets through promoting public-private partnerships to bridge the financial protection gap, support long-term development and open new markets and opportunities for private solutions. The Company is expected to mobilize up to US\$25 million of risk capital from the industry in case 1-in-20 years events occur in both Lao PDR and Myanmar in one policy year under the first catastrophe risk pool. The Company is also expected to leverage the private sector expertise from insurance managers, asset managers, reinsurers, reinsurance brokers, legal and technology companies to help deliver solutions to and improve risk market infrastructure for participating countries.
21. **SEADRIF is consistent with the WB’s strategy to promote innovative products to spread and manage risks.** The background document “New World, New World Bank Group: Post Crisis Directions” prepared for the Development Committee Meeting of April 25, 2010 identifies as one of the five WBG strategic priorities “manage and prepare for crises”, and states that the WBG’s future work under this strategic priority will focus on “designing innovative finance and insurance products to spread and manage risk” (p.26, para. 61). It is also aligned with the World Bank Group Climate Change Action Plan and its priority on “Leave No One Behind”, particularly paragraph 110 which states that the World Bank Group will “scale up sovereign disaster risk insurance”. “Forward Look – A Vision for the World Bank Group in 2030” prepared by the WBG for the Development Committee Meeting of October 8, 2016, also focuses on the Global Crisis Response Platform which highlights the importance of regional risk pools and accessing insurance markets. Specifically, the note states that the WBG will provide analytical support to help countries develop “layers of risk financing, from transparent budget contingency planning to the establishment of dedicated reserves for disaster risk management, contingent lines of credit, and insurance-based mechanisms linked to the capital and (re)insurance markets”.
22. **The project is fully aligned with the World Bank Group’s East Asia Pacific Regional Strategy,**<sup>11</sup> presented to the Board in February 2016. The proposed project particularly links to the strategic priority of “Climate Change and Disaster Risk Management through resilient investments and Disaster Risk Financing and Insurance”. In particular, the project helps increase the disaster preparedness and climate resilience through better financial preparedness and enhance the government’s fiscal resilience to climate and disaster risks. In addition, SEADRIF was recognized in the 2019 East Asia and Pacific Regional Update as one of the innovative financing programs which help the region strengthen resilience.
23. **The project is also aligned with SEADRIF member countries’ WBG Country Partnership Frameworks (CPF)** where strengthening resilience, including financial resilience, against climate and disaster risks is an important pillar and contributes to the implementation of their national socio-economic development plans and disaster risk finance strategies. Enhancing the governments’ capacity to manage and access post-disaster financing is also an objective in both Lao PDR and Myanmar’s CPFs. SEADRIF will contribute to improving financial preparedness against disasters, an important objective in both Lao PDR and Myanmar’s multi-year plans.
24. **SEADRIF contributes to the WBG East Asia and Pacific region’s ongoing efforts to harness disruptive technology for better country outcomes.** The WB has supported the development of the SEADRIF Flood Risk Monitoring Tool, a public good to provide governments with rapid, reliable, and relevant information to make better risk-informed

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<sup>11</sup> World Bank. 2016. East Asia and the Pacific. Overview - strategy. Website accessed in March 2019.



decisions before, during and in the aftermath of flooding. The Tool leverages state-of-the-art space technology and advances in remote sensing to make the best risk information accessible to governments, and it also underpins the parametric insurance component of the first catastrophe risk pool for Lao PDR and Myanmar. The tool can provide the hazard assessment and risk profiles required to inform the design of market-based risk transfer solutions, near real-time flood monitoring - providing days after an event flood maps and number of people affected, rapid financial impact estimation for disaster response and reconstruction and inform longer-term fiscal planning through estimation of potential future economic impacts.

## II. PROJECT DESCRIPTION

### A. Project Development Objective

#### PDO Statement

The project development objective is to improve access to pre-arranged financing through market-based mechanisms for responding to disasters in Southeast Asian countries.

#### PDO Level Indicators

#### 25. The achievement of the PDO will be measured through the following key indicators:

- The Company has the capacity to make insurance payout within up to 30 business days of the occurrence of an insured event under the first catastrophe risk pool;
- The Company has the claims-paying capacity to sustain a 1-in-200 year insured loss in each financial year after allowance for its reinsurance protection<sup>12</sup>;

### B. Project Components

26. **The proposed project has three components** that have been identified in consultation with the Committee, Trustee and Company. The components aim to support the set-up, operationalization, and capitalization of the Company and support the implementation as well as monitoring and evaluation (M&E) of the project to achieve the desired development objectives.

#### Component 1. Capitalization of the SEADRIF Insurance Company (US\$10 million)

27. This component provides grant financing to the Trustee who would then subscribe shares to the Company as the sole shareholder. This financing would enable the Company to (a) satisfy the capital adequacy requirement under the Insurance (Valuation and Capital) Regulations 2004 issued by the MAS and (b) be adequately capitalized to sell its first product as the catastrophe risk pool for Lao PDR and Myanmar in line with the business plan agreed with the WB. The capitalization would also enable the Company, subject to agreement with the Trustee as the shareholder, the Committee as the governing body, to:

- (i) Make an insurance payout within up to 30 days of the occurrence of an insured event;
- (ii) Be able to retain and manage a portion of the risk while the excess risk is transferred to the reinsurance markets;

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<sup>12</sup> Subject to reinsurance market conditions





- (iii) Be able to earn income on investment of the capital;
- (iv) Pay part of reinsurance premiums or lower insurance premiums;

28. The capital provided to the Company will feature as a line item in the annual accounts. The Company will purchase reinsurance to ensure that timely and full payouts are made to countries within up to 30 days after the occurrence of an eligible event under the first catastrophe risk pool, up to at least a 1-in-200-year event subject to reinsurance market conditions. The provision of capital will allow the Company to retain a proportion of the insurance risk which will lead to lower reinsurance premiums, allowing the Company to offer increased coverage (or lower premiums) to insured countries. In exceptional circumstances, the Company can use the capital provided to pay part of reinsurance premiums or to lower insurance premiums or to make ex gratia payments to the insured countries, subject to regulatory compliance and prior agreement with the Trustee and the Committee following a fair, equitable and transparent process.
29. The risk retention level of the Company in any one year will be decided by the Board of Directors based on recommendations from the insurance manager regarding premium income, available capital, and solvency requirements prescribed by the regulator. In the event that the Company's capital position is depleted following insurance payouts, replenishment can be made via further calls for capital which can be by way of contribution from the countries, development partners or any other instruments subject to agreement by the Trustee and the Committee.
30. The Company will invest its capital and funds in accordance with the investment policy and process as agreed with the Trustee and the Committee. Any income earned from investments on the capital is to be reinvested in the Company. In exceptional cases, earnings from investments can be used for operational expenses subject to prior agreement with the Trustee and the Committee.
31. As the Company's business grows in the future, funding can be provided to support the Company to expand the provision of an existing product or new products to SEADRIF member countries, if additional funds become available. Provision of such future grants/funds would be subject to the World Bank's requirements for providing such additional financing.

**Component 2. Establishment and operationalization of the SEADRIF Insurance Company (US\$1,200,000)**

32. This component supports the setup and operationalization of the Company, including *inter alia* regulatory fees, risk modeling, (new) product development, communications, system development and other related professional fees/costs necessary for the set-up and operations of the Company.

**Component 3. Establishment and operationalization of SEADRIF Trust/Sub-Trust(s), project management, monitoring & evaluation (US\$800,000)**

33. This component supports the Trustee for (a) the establishment and operations of SEADRIF Trust and Sub-Trusts, fulfillment of the Trustee's role as the sole shareholder of the Company and (b) the project management, and monitoring and evaluation (M&E). M&E activity will focus on (i) use of grants provided by the WB for the project including project reporting; (ii) implementation arrangements for compliance with WB's Environmental and Social Framework including for the use of insurance payouts from the Company, including but not limited to monitoring the submission and receiving the beneficiary countries' reports and information on their use of payouts, [reviewing these



reports and information] with support from an environmental & social (E&S) Focal Point and reporting to the Committee, arranging audits of the beneficiary countries’ use of payouts upon instruction from the Committee and at the request of the WB; and (iii) other M&E of project activities.

**C. Project Cost**

34. **The total funding from the WB administered SEADRIF MDTF for this project is US\$12 million.** Singapore provided funding to the Trustee and the Company under separate terms that do not necessarily cover the same scope of this project. However, several expenditures for the same activities under this project may be co-financed by both the WB and Singapore. The indicative funding and activities are presented in Table 1.

**Table 1. Indicative Activities and Budgets**

Component	Recipient	Implementing Agency	Estimated Budget	Expenses
<b>Component 1</b> Capitalization of the SEADRIF Insurance Company	Trustee	Trustee	US\$10,000,000	Share subscription
<b>Component 2</b> Establishment and operationalization of the SEADRIF Insurance Company	Company	Company	US\$1,200,000	<i>Including but not limited to calculation agent <sup>13</sup> fees, product development, risk modeling, regulatory fees, communications, auditors’ fees, insurance manager fees, investment manager fees, legal fees, tax agent fees, Directors’ fees, and other operating expenses. These expenses may include retroactive financing and involve co-financing with other donors or sponsors.</i>
<b>Component 3</b> Establishment and operationalization of SEADRIF Trust/Sub-Trust(s), project management, M&E	Trustee	Trustee	US\$ 800,000	<i>E&amp;S Consultant for project E&amp;S preparation, E&amp;S Focal Point fees for ongoing E&amp;S implementation, M&amp;E consultant fees, operating costs for Trust/Sub-Trust operations and Trustee’s project preparation, management and implementation fees, insurance payout audit. These expenses may include retroactive financing and involve co-financing with other donors or sponsors.</i>
<b>Total</b>			<b>US\$12,000,000</b>	

<sup>13</sup> Calculation agent would serve the Company to determine insurance payouts under the SEADRIF insurance policies, on a continuous monitoring basis, and in the case of an eligible event (before, during, and after loss events).



#### **D. Project Beneficiaries**

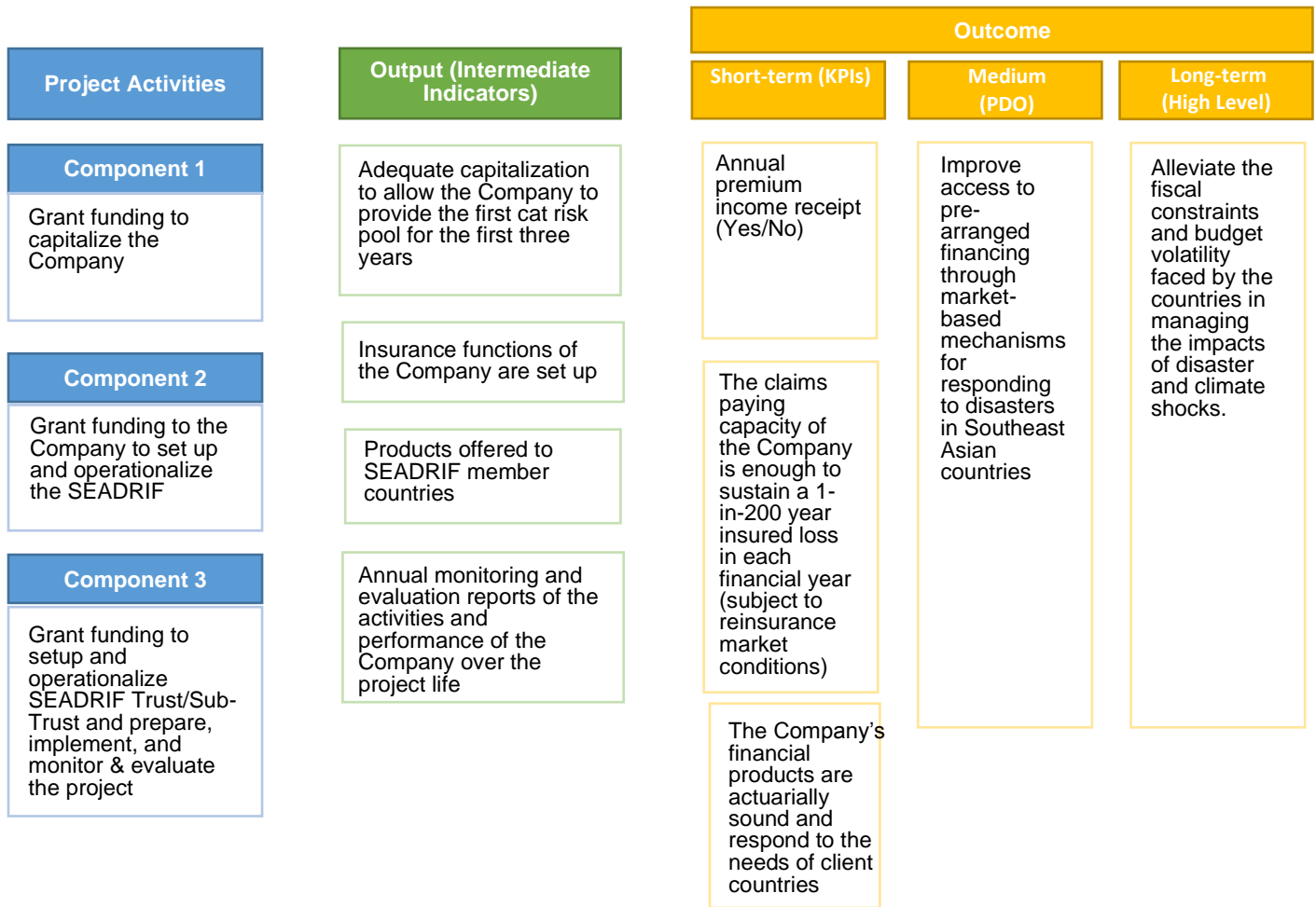
35. **The direct beneficiary of the proposed project will be the Company.** The proposed grant will ensure that the Company is sufficiently funded to conduct its business activities following its business plan, thereby contributing to the long-term financial resilience of Southeast Asia.
36. **The indirect beneficiaries of the project include all SEADRIF participating countries and their populations,** which will benefit from the disaster risk financing and insurance products provided by the Company. With the first catastrophe risk pool to be provided by the Company, Lao PDR and Myanmar will become the first indirect beneficiary countries. As the Company grows and more countries subscribe to the products provided by SEADRIF, more countries will become beneficiaries of this project. Within the beneficiary countries, the respective Ministries of Finance will receive the most immediate benefit. The ultimate beneficiaries will be the people who will benefit from governments' response to be financed out of the rapid payout from SEADRIF.
37. **Other indirect beneficiaries** include private insurance and reinsurance companies and brokers interested in developing their business in ASEAN. They will benefit from the risk market infrastructure developed under this program, including catastrophe risk models for participating countries.

#### **E. Results Chain**

38. **The theory of change** for this project is illustrated in figure 3 below.



Figure 3. Theory of Change



F. Rationale for Bank Involvement and Role of Partners

39. **The WB is well suited for this role given its knowledge, expertise, convening power, and financial services.** The WB is one of the few organizations with specialized technical expertise to support countries in the development and implementation of risk financing solutions and to build institutional capacity and strengthen government ownership of disaster response. The WB has developed a suite of analytical, advisory and financial products to help governments develop pre-arranged financial solutions, ensure predictable and timely access to the needed resources, mitigate long-term fiscal impacts, and protect the poor and vulnerable. Governments rely on the WB's knowledge of member countries, its in-house expertise, and its reputation of impartiality with countries and the international capital and reinsurance markets. The WB has been working for more than a decade to assist member countries in establishing disaster risk financing mechanisms including regional risk pools in the Caribbean and Pacific, i.e. Caribbean Catastrophe Risk Insurance Facility (CCRIF) and the Pacific Catastrophe Risk Assessment and Financing Initiative (PCRAFI) and its Pacific Catastrophe Risk Insurance Company (PCRIC), which have evolved into full-service regional mechanisms through which the governments can transfer risk more efficiently to financial markets, and investments



can be made in public goods and political coordination, increase insurance penetration and “crowd in” the private insurance and capital markets.

40. **Various partners play important complementary roles in SEADRIF.** In addition to the WB acting as Lead Technical Partner, the ASEAN Secretariat has been appointed as the Secretariat of SEADRIF. SEADRIF member countries have requested the assistance and participation of regional organizations such as the Asian Development Bank. Bilateral partners such as Japan and Singapore have been instrumental in the development of SEADRIF, providing political leadership and financial assistance to the initiative from the start. Germany and the United Kingdom have expressed strong interest to provide support to SEADRIF, including through the Global Risk Financing Facility (GRiF).

### **G. Lessons Learned and Reflected in the Project Design**

41. **Lessons learned from recent experiences with the CCRIF (P161533), and the PCRAFI (P149670) have been accounted for in the proposed project design.** Establishing a strong and regular dialogue with the participating countries is crucial to ensure political support. Early consultation with key decision-makers helps to ensure understanding and ownership of important topics, while a continuous dialog across hierarchy levels helps ensure the project can withstand a potential change in political leadership. A further lesson pertains to the importance of expanding the institutional capacity in public financial management of natural disasters including integration and regularization of premium into budget mechanisms. In addition, strong and sustained donor support is key in providing the catastrophe risk pool with financial flexibility during the crucial first few years of operation. Lastly, contingency planning and an M&E framework should be designed to include the SEADRIF project results, notably outcomes, as well as integrate stakeholders’ assessments. Under both initiatives, beneficiary countries are required to report back to the Company on the use of insurance payouts, however there was no requirement on the countries to open dedicated accounts to receive the payouts under the PCRAFI and to perform audit or tracking of the use of payouts under both. The CCRIF has made a step further in 2019 to incorporate a condition in the insurance policy requiring insured governments to transfer the payouts to end beneficiaries and carry out state audit of the use of payouts. See Annex 5 on lessons learned from CCRIF and PCRAFI.
42. **The ability to finance their insurance premiums will represent a significant challenge for the participating countries.** As witnessed for both CCRIF and PCRAFI, the price and quality of financial products remain a crucial concern for developing countries. While SEADRIF member countries have demonstrated their willingness to develop a catastrophe risk insurance program, it is important to integrate premium financing into the regular budget planning of the governments. The quality of the insurance coverage (including timely payouts) is expected to play a vital role in forming the public perception on the affordability of SEADRIF. Catastrophe risk insurance coverage can be perceived as an unnecessary expense if payouts are not triggered after events deemed severe enough by the government and the public.
43. **The private sector has a keen interest in the development of country-specific risk models.** The models and standards that have been established can be used by local insurance companies to build their capacity in the provision of catastrophe risk insurance, as demonstrated in the Caribbean for CCRIF and in the Pacific Islands for PCRAFI. This would benefit both the public and private sector as local insurers would be in a better position to underwrite and price these perils more accurately, supporting the domestic insurance market development. It may also help reduce some of the post-disaster public financial burdens with increased uptake of insurance from private individuals in the future.



44. **Disaster Risk Finance and Insurance (DRFI) Programs have contributed to improved dialogue and cooperation between finance ministries and national disaster management offices.** The ex-ante nature of an integrated DRFI strategy has required that the ministries meet to discuss how the existing procedures can be improved; these interactions have in many cases improved their relationship. The collaboration needs to focus on the development of the post-disaster budget mobilization and execution of relief goods and other post-disaster needs.

### III. IMPLEMENTATION ARRANGEMENTS

#### A. Institutional and Implementation Arrangements

45. **The proposed project will be implemented over five years, with the Trustee and the Company as Recipients of grant funds separately.**
- i. **SEADRIF Trustee:** A licensed trust company (Intertrust (Singapore) Ltd.) has been appointed as the Trustee by the Settlers (Governments of Japan and Singapore) to hold the legal title of the SEADRIF Trust/Sub-Trust properties and perform the duties of a Trustee. The Trustee conducts its operations for this project in accordance with the Project Operations Manual (POM), which is subject to the Sub-Trust A Committee's approval as well as the WB's review and no objection. The Trustee's operations will also comply with the SEADRIF Trust and Sub-Trust A Operations Manuals which are subject to the CoM and the Committee's review and amendment respectively, as necessary and as acceptable to the WB.
  - ii. **SEADRIF Insurance Company:** The Company is domiciled in Singapore as a general insurance company to provide insurance products to Sub-Trust A beneficiary countries. The Company is regulated by the MAS and governed by a Board of Directors. The Company's Board is comprised of three seasoned Directors with decades of experience in the insurance industry, two of whom are Executive Directors and one female Director. The Company has no staff and outsources its functions to third party service providers including the insurance manager, asset manager, reinsurance broker, and calculation agent. The insurance manager supports the Company's Board by coordinating the various functions serviced by third-party providers. The Company conducts its operations in line with its constitution, standard operating protocols as well as the POM. The POM is subject to review and amendments by the Company's Board as necessary and also subject to the WB's review and no objection. To promote gender diversity and inclusion within the Company, the Bank will recommend that the Company maintain a minimum 30 percent of female representation on its Board of Directors.
46. **There will be two implementing agencies for this project.** See Table 1.
- (i) **SEADRIF Trustee** is the project implementing agency for component 1 and 3. The Trustee will receive grant funds from the WB to (a) capitalize the Company through a share subscription agreement, (b) set up and operationalize the Trust and Sub-Trust(s) and fulfill the Trustee's role as shareholder of the Company and (c) prepare an M&E plan and implement M&E activities including preparing M&E reports for the project together with the Company, such as managing the information and reports from the beneficiary countries on their use of payouts and arranging audit of the use of payouts by beneficiary countries as may be required by the Committee or the WB, amongst others.



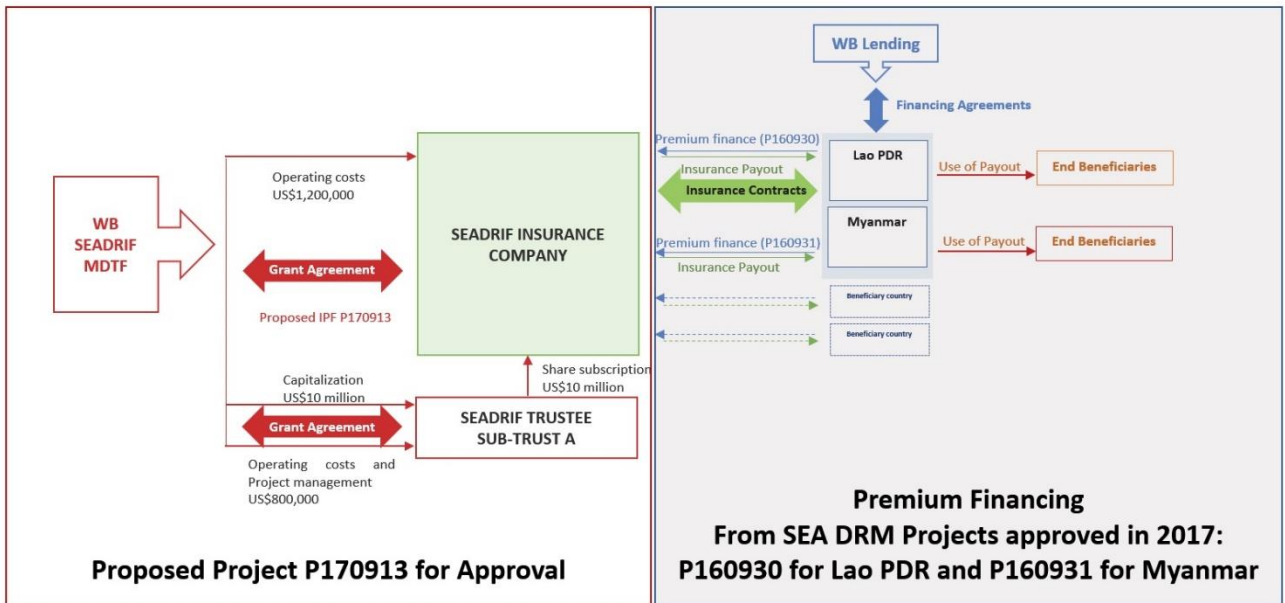
- (ii) **SEADRIF Insurance Company** is the implementing agency for component 2. The Company will receive grant funds from the WB to finance its set-up and operational expenses such as regulatory fees, risk modeling, calculation agent, (new) product development, communications, system development, asset management, audit, and other related professional fees/costs necessary for the Company’s set-up and on-going operations.

The Trustee and the Company will each enter into a grant agreement with the WB to receive funding for implementation.

47. **The flow of funds** is shown in Figure 4. The **Trustee** as the grant recipient will receive grant proceeds from the SEADRIF MDTF to implement components 1 and 3 of the Project. To obtain funds, the Trustee will submit withdrawal applications for advances and documentation of eligible expenditures for set up and operationalization of SEADRIF Trust/Sub-Trust under component 3 and Direct Payment application for capitalization of the Company under component 1. The **Company** will also be the recipient of the SEADRIF MDTF and implementing agency for component 2 of the Project. Funds will flow from the SEADRIF MDTF to the Designated Account to be opened by the Company for set-up and operational expenditures under component 2.

48. **Premium Financing.** Lao PDR and Myanmar use their IDA allocation as a source of financing premium contribution to the first cat risk pool under respective parallel projects (P160930 and P160931) in each country. The two countries can submit a withdrawal application requesting direct payment from the WB to the Company. See Figure 4.

**Figure 4. Flow of funds**



49. Project implementation will likely be impacted by COVID-19. Given the uncertainty of the pandemic, the WB team will explore ways to ensure effective implementation of project activities. It may include remote project monitoring and supervision arrangements including guidelines, tools and methods to allow safety, effectiveness, transparency and continuity in implementation support and supervision in case of recurrent and prolonged lockdown. See Annex





1 on implementation arrangements support plan.

#### **Disbursements arrangements.**

50. Disbursement for capitalizing the Company will be made after the WB has issued a no objection to the Company's business plan, financial/actuarial projections and risk financing strategies that indicate the amount of capital needed to provide the first product to participating countries, all subject to agreement with the Committee, and the Trustee has entered into a Share Subscription Agreement with the SEADRIF insurance Company under the terms and conditions acceptable to the Bank. The undisbursed amount of capital (if any) will be reallocated to another category.
51. MDTF proceeds will be disbursed following any of the three disbursement methods: Direct Payment, Advances to a Designated Account (DA) or Reimbursement. For Advance Disbursement, the project will open two DA in USD at one financial institution acceptable to the WB for the Trustee and the Company respectively. The DA ceiling will be of variable type and based on 6 months disbursement forecast.
52. Specific procedures and supporting documentation required for different types of expenditures including the use of customized Statement of Expenditure (SOE) are specified in the Disbursement Letter and the POM.
53. **Retroactive Financing.** The proposed project includes a provision for retroactive financing of up to 20 percent of the WB's grants for establishment and operation of the Trust, Sub-Trust A, the Trustee and the Company, i.e. up to US\$240,000 for the Company and US\$160,000 for the Trustee may be allowed for payments made within one year before the signing date of the Grant Agreement for eligible expenditures.
54. **Co-financing.** Expenditures for some activities under this project as proposed by the Trustee and the Company will be financed by both the WB and Singapore. For the Trustee, *joint co-financing* will be applied, i.e. the funds are disbursed in prior agreed proportions. For the Company, to the extent possible, the WB's funds will be disbursed first before the funds from Singapore are used. Additionally, the co-financing portion, including a list of the activities that will be co-financed, must be included in the project's annual work plan and budget and submitted to the Bank's TTL annually to obtain no objection.

#### **B. Results Monitoring and Evaluation Arrangements**

55. **The Trustee and Company will be responsible for monitoring and evaluation (M&E).** They will collect all necessary data and report on a semi-annual basis to the WB on the use of grant proceeds and project performance, including information on intermediate project results and progress toward higher-level outcomes. The Trustee and the Company will also provide its unaudited 6-monthly financial statements and externally audited annual financial statements to the WB. Under the WB policy, the Bank will complete periodic Implementation Status and Results Reports (ISRs) as well as an Implementation Completion and Results Report (ICR) within six months following the end of the project.
56. **The Trustee and the Company will implement M&E of the overall project as stipulated in Component 3.** The Project will finance the costs of M&E activities. A process will be developed to ensure that countries report to the Committee and the Trustee on how any payouts received were used.





### C. Sustainability

57. **The Company's financial and operational sustainability is important to the project's sustainability.** The Company's business and financial plan as well as lean operating structure have been designed to ensure that the Company has sufficient financial capacity to underwrite the risks and an efficient capital structure including seed capital provided by the donors in the start-up phase which can sustain its business in the long run. The provision of seed capital would allow the Company to increase its risk retention, lower reinsurance premiums, and hence increase coverage and/or lower insurance premiums of member countries. This would make the Company's product more cost-efficient and attractive to the participating countries.
58. **Project sustainability also relies on the client countries' commitments and ability to pay their insurance premium on a long-term basis.** During this project, premium financing has been committed by Lao PDR and Myanmar through respective lending operations in each country. Since this lending for premium financing is part of the government budget, this will be an important step to build clients' buy-in and then include a budget item for insurance premium financing in the annual budget plan beyond the project life cycle. This can be done through the WB's support to the countries to build DRFI strategies and sustainable risk financing mechanisms including insurance. Apart from cost-savings and efficiency gains, countries can also achieve more sustained solutions through a collective approach to international reinsurance and capital markets, regional collaborations and attracting stronger support from the development communities and partners. This is manifested through the signing of SEADRIF MOUs and signing of the Trust Deed where collaboration and support has been institutionalized.
59. **The project's sustainability will also be ensured through the implementation of associated TA activities,** aimed at enhancing the governments' capacity to develop and implement comprehensive DRFI instruments and policies. The TA will also be used to improve public financial management related to natural events, from budget mobilization to budget execution, and the development of domestic insurance markets where possible.
60. **SEADRIF member countries will review the activities of the Trust, the Sub-Trusts and the Company three years after the inception of the catastrophe risk pool to ensure its performance and sustainability.** Building on the lessons learned from similar initiatives, the evaluation will help the countries determine whether any change would be required with regards to the strategy and operations of the Company or whether the Company should be resolved. In all cases, support will be provided to the countries and the costs on the countries will be minimal because all set-up and operational costs shall be borne by the donors. In case of dissolution of the Trust, the Sub-Trusts and/or the Company as a result of the review, and any remaining property of the Trust, the Sub-Trusts, and the Company will be used for beneficiary countries based on the decisions of governing bodies.

## IV. PROJECT APPRAISAL SUMMARY

### A. Technical, Economic and Financial Analysis (if applicable)

61. **The project will encourage the participating countries to develop pre-arranged disaster risk financing instruments to ensure timely, transparent, and efficient use of funds following disasters, and provide the countries with benefits associated with risk pooling.** A preliminary actuarial analysis was conducted to calculate the economic internal rate of return (EIRR) and net present value (NPV) of pooling flood risk of Lao PDR and Myanmar, as these two countries will be first participants in the catastrophe risk pool. Following consultation with the countries, it is



assumed that the indicative premiums for three years of insurance coverage are US\$5 million for Lao PDR and US\$10 million for Myanmar. Premium savings are estimated over 20 percent due to catastrophe risk pooling, risk retention of first losses through joint reserves, and economies of scale in operational costs, compared to the expected insurance premium if countries were to access the international reinsurance markets individually. The analysis covers the first three years of the project, with countries purchasing three years of coverage at the outset of the project. When disaster risk insurance is provided through the proposed regional catastrophe risk pool, the EIRR is estimated at 15 percent on average, varying from –34 percent if no insured event occurs during the three-year period (with a probability of 53 percent over three years) to 102 percent or more if at least one severe disaster (with a probability of 14 percent over three years for each country) occurs during the three-year period. With a 12 percent discount rate and a US\$15 million premium contribution for both countries, this is equivalent to NPV of US\$0.3 million on average, ranging from –US\$8.8 million to US\$11.7 million.

62. **The insurance policies offered to the countries will be priced to ensure that the Company is able to cover its operational expenses and average expected claims and therefore make underwriting profits on an average basis.** In years with low claims, the Company is expected to generate significant underwriting profits, while reinsurance will be purchased to protect the Company’s capital from losses in extreme years. Investment earnings on SEADRIF’s capital will also further improve profitability. It is assumed that initially all underwriting profits will be kept as retained earnings to grow the capital base, allowing the Company to grow and retain more risk. If the experience of the Company is as expected, the Board of Directors may decide on how to use such retained earnings, for example by growing the capital (as assumed) and/or offering a premium reduction to the participating countries.
63. **Based on the expected premiums paid by countries, potential payouts from the parametric component could be greater than US\$14 million for Myanmar and US\$9 million for Lao PDR in each of the three years of coverage, representing more than double the premium paid for three years of coverage.** If a country were to suffer a severe disaster event in each of the three years then the total payout over the three years would be approximately eight times the premium paid at the outset, depending on how much of the total premium is allocated to the parametric component.
64. **In addition, countries would have access to up to US\$5 million (Myanmar) and US\$1.5 million (Lao PDR) from the soft trigger component over three years.** If a country suffers a disaster event which does not trigger a payout from the parametric component, they would still be eligible for a payout from the soft trigger component of up to 50 percent of the total premium paid at the outset. Should a country not suffer a disaster event during the three-year policy period, the Company may issue a no-claims bonus on future premiums up to the total payout from the soft-trigger component.
65. **A 4-year indicative business plan has been developed by the Company.** This indicative business plan is tentative and will be revised and validated by the Company’ Board once the final details of the insurance policies to be issued to Lao PDR and Myanmar are known. A final business plan will have to be submitted by the Company to the WB for review and approval before the grants are transferred. The Company will prepare a detailed annual business plan and budget for the project, which shall include the analysis of the business needs of the Company, for each subsequent fiscal year of project implementation. Such a business plan and budget will be submitted to the WB for review and approval as soon as available following a deadline to be set by the WB.
66. **The Company’s provision of innovative risk financing products would contribute to the development of the insurance sector in the region.** The project will stimulate innovations in the financial sector by supporting the



development of new products (e.g. for more frequent less severe events which are not ordinarily commercially viable), which contributes to the availability of better, adequately priced products and services, and ultimately to improved penetration of the catastrophe risk insurance sector. In the long term, the products and analytical tools such as the flood risk model developed by the Company could be used by domestic insurers in combination with risk modeling and analytical support. Having the risk modeling and analytical capabilities could support the extensions to other types of policies such as public asset insurance, agriculture insurance, and development of new financial instruments to complement the sovereign insurance coverage. Also, through more effective protection of policyholders and awareness-raising, the project would lay the foundation for enhanced/raised confidence and interest of the population in the insurance sector.

67. **The project would contribute to enhanced fiscal risk management and post-disaster public financial management.** Through participation in this project, governments would integrate insurance as one of the pre-arranged financing solutions into their budget planning and fiscal risk management frameworks. This helps them address the contingent liability faced as the responder of last resort. The ability to quantify potential losses from disasters as well as the cost associated with public interventions for recovery and reconstruction activities can help a government ascertain its contingent liabilities. The project not only provides rapid financing to support the budget but also helps countries develop contingency plans and strengthen their post-disaster budget execution systems.
68. **Liquidity for immediate response and recovery in the aftermath of disasters is a key concern in governments in the sub-regions with fiscal constraints.** If the individual risks of countries are pooled at the regional or national levels, aggregating risk into larger, more diversified portfolios, the participants will benefit from cost savings and access to international markets. These diversification benefits are reflected in reduced insurance premiums, allowing SEADRIF to offer the governments a cost-effective instrument for financing disaster losses when compared to other financial instruments.
69. **Through its products, services, and convening power, SEADRIF contributes to an increased awareness of disaster risk management among governments in the region.** Through their involvement with SEADRIF, finance, economy and planning, disaster management, environment, and meteorological officials in the sub-regions will gain a common understanding of the role that disaster risk finance can play in broader disaster risk management strategies, and also benefit from greater interaction on these matters.

## **B. Fiduciary**

70. **Project Implementation.** Under the project arrangements, implementation including procurement and financial management would be carried out separately by two implementing institutions set up under the project: (i) The Trustee; and (ii) the Company. Both implementing entities will implement relevant fiduciary aspects and manage activities under the project separately.

### **(i) Financial Management**

71. **Financial management (FM) arrangements.** The FM arrangements will be established in accordance with World Bank Policy on Investment Project Financing. The implementing agencies will both prepare (or adapt their existing) FM policies and procedures manuals for the project as part of POM. These policies and procedures will include adequate internal control arrangements over financial management, including the co-financing arrangements described in



paragraph 34 and proper segregation of duties over cash management. The project will prepare and send to the Bank unaudited Interim Financial Reports every six months, within 45 days after the end of each semester prepared on a cash basis in the agreed IFR format. Based on the annual changes in the co-financing ratio noted in the project's annual work plan and budget, the IFR template of the Trustee will be adjusted to reflect the actual expenditure calculation. The audited financial statements for the project as a whole will be submitted to the Bank within six months after the end of each financial year and will include the (i) Statement of Sources and Uses of Funds for the project, including uses of funds by project activity, and (ii) Designated Account Reconciliation Statement for the reporting period. The Statement of Sources and Uses of Funds should show the current reporting period compared with the annual project budget and cumulative figures from the commencement of the project compared with the total project budget.<sup>14</sup>

72. . The project will recruit an external auditor per the proposed Terms of Reference which comprises agreed upon procedures rather than an audit. The agreed upon procedures as described in the Terms of Reference must be deemed acceptable to the Bank as an alternative to the standard audit requirement. The Company maintains its books and records in compliance with Singapore Financial Reporting Standards and will be subject to statutory audits under Singapore law and regulations. A copy of the statutory audit reports will be provided to the Bank.
73. **FM risk is rated as moderate.** FM capacity and risk assessments have been completed for both the Trustee and the Company. It was noted that they have recruited third party agents, Intertrust (Singapore) Ltd. and Willis Towers Watson Management (Singapore (Pte) Ltd respectively, to manage project implementation, including the FM related functions. While both these firms are currently not fully familiar with the Bank's financial management policies and procedures, they have strong financial management capacity in terms of well-qualified finance staff, well-established systems of internal control and accounting IT systems and are therefore deemed to have the requisite capacity to comply with the Bank's FM requirements. In the first few years of the project, there will be a relatively small number of transactions.

#### **(ii) Procurement**

74. **Procurement arrangements.** Procurement for the project, financed in whole or in part (i.e. co-financing provided by other co-financiers such as mentioned under paragraph 34) by the Bank will be carried out in accordance with the World Bank Procurement Regulations for IPF Borrowers' (hereinafter referred to as 'Procurement Regulations') dated July 1, 2016, revised in November 2017 and August 2018; and the provisions stipulated in the Procurement Plan and Grant Agreements. The Project will be subject to the World Bank's Anti-Corruption Guidelines, dated October 15, 2006 revised in January 2011 and July 1, 2016. Bank standard procurement documents would be used for all procurement financed with Bank proceeds. Additionally, the WB's planning and tracking system, Systematic Tracking of Exchanges in Procurement (STEP), will be used to plan, prepare, record, update and track all procurement transactions for the project.
75. **Procurement risk for the project is rated Moderate.** Capacity and risk assessment carried out by the Bank noted that third party agents, namely Intertrust (Singapore) Ltd. and Willis Towers Watson Management (Singapore) Pte Ltd (WTW) have been recruited as the Trustee and the insurance manager respectively, to manage project implementation, including procurement on behalf of the Trustee and the Company. Both firms have adequate

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<sup>14</sup> The format of the audited financial statements, supplemental schedules, notes to the financial statements and management assertion will be described in detail in the POM.



experiences with international procurement and are knowledgeable about the Bank’s procurement procedures. They have adequate staff to manage the few procurement activities under the project. Currently, there are only four small value and simple procurement packages identified under the project consisting of firm contracts each valued less than US\$300,000 and individual consultants contract estimated at less than US\$50,000 each.

- 76. **Risk mitigation measures.** According to the oversight arrangements, procurement plans for the Trustee and the Company will be respectively reviewed and approved by the Committee and the Company’s Board before the Bank’s review and no objection. Similarly, documents for the procurement process and contract awards will be reviewed and approved by the same bodies. The Committee and the Company’s Board will also receive all procurement complaints and ensure that they are satisfactorily resolved before the affected contracts are awarded. Contracts would, however, be implemented by the Trustee and the Company with the support of the third-party management firms. For the Trust/Sub-Trust A, the Trustee will implement contracts and review invoices, and as appropriate, seek approval from the Committee to make payments. The Company’s Board will receive support from the insurance manager to implement contracts and review and approve invoices before any payments are made by the insurance manager. The key risk mitigation measures include the development of simplified step by step procurement procedures showing how each type of procurement is conducted, roles and responsibilities, record keeping and documentation procedures, procurement audit requirements, standard business times, governance arrangements and general administrative procedures for procurement actions.
- 77. **Procurement Plan and Approach.** The draft Procurement Plan prepared for the Project has been reviewed by the Bank and deemed adequate. Given the small value involved, both Individual Consultants’ (IC) recruitment and Firm selection using consultant qualification selection (CQS) method would be made approaching the national market. Templates for IC recruitment and CQS selection, as well as contract formats, have been developed and agreed with the Bank. The PP will be entered in STEP once the project is approved and the agreement signed. The PP will be updated as needed to (a) reflect project implementation, (b) accommodate changes that should be made, and (c) add new packages as needed for the project. The plan, any updates, or modifications shall be subject to WB’s prior review and no objection. The WB will carry out procurement post reviews to cover all the five contracts. The detailed PP is available in a separate project document.

**C. Legal Operational Policies**

	Triggered?
Projects on International Waterways OP 7.50	No
Projects in Disputed Areas OP 7.60	No

**D. Environmental and Social**

78. **The proposed project is anticipated with overall environmental and social benefits,** including securing access to timely and cost-efficient financing for short term emergency response to disasters and climate events, in a context of increasing frequency and magnitude of floods, tropical storms, droughts, earthquakes and tsunamis, causing severe physical, economic and human impacts in the Southeast Asia region.

79. **The Trustee and the Company, as grant recipients of the Project, will be subject to the requirements under the**



**WB’s Environmental and Social Framework (ESF).** The ESF requirements are applied to the Project and the use of the insurance payouts by the beneficiary countries for the first catastrophe pool for Lao PDR and Myanmar. The insurance payouts from the Company are expected to cover country-specific goods, services and physical works needed for emergency response, recovery and maintenance of essential public services, excluding activities that could cause substantial or high environmental and social risks and impacts.

80. **The Trustee and the Company have developed an Environmental and Social Management System (ESMS) following the letter and spirit of the World Bank Environmental and Social Standard 9 (ESS9).** The ESMS aims to manage potential environmental and social risks and impacts arising from SEADRIF operations for the Project and the use of insurance payouts by the beneficiary countries. In line with the ESF, the ESMS details (i) applicable SEADRIF’s environmental and social policy; (ii) procedures for the identification, assessment, and management of the environmental and social risks and impacts of project activities; (iii) organizational capacity and competency within the Trustee and the Company; (iv) processes for monitoring environmental and social performance of the Project and for auditing the use of insurance payout by beneficiary countries, as may be required by the Committee and the WB; (v) procedures for updating the ESMS; and (vi) external communications mechanism, including a Stakeholder Engagement strategy and a Grievance Mechanism.
81. **The ESMS includes an exclusion list, which does not allow the insurance payout to be used for the activities involved with substantial or high environmental and social risks and impacts, consistent with the WB’s ESF.** The beneficiary countries will apply relevant national laws and regulations to manage the activities funded by the payout from the proposed catastrophe risk pool. The Sub-Trust A Operations Manual includes a process for auditing the beneficiary countries’ use of insurance payouts in accordance with the ESMS and the beneficiary country’s Contingency Plan.
82. **The ESMS includes provisions on stakeholder engagement and grievance mechanism.** This ESMS was disclosed on June 30 2020 at the SEADRIF’s website and on July 14, 2020 at the WB’s website for public information and feedback. The ESMS puts in place a mechanism to receive, respond to, and document requests for information or concerns to allow a timely response. This includes making contact information (e-mail address) of SEADRIF publicly available and accessible. The project’s Grievance Mechanism, included in the ESMS, establishes that the grievances raised from stakeholders in relation to the Project will be managed by the Trustee’s hired Environmental and Social Focal Point. In addition, grievances in relation to the use of payouts will be handled by each beneficiary country, with the support of the respective countries’ E&S counterparts, in accordance with the national regulations and system. The Committee will be responsible for reviewing the grievance redress of the beneficiary countries.

## **V. GRIEVANCE REDRESS SERVICES**

Communities and individuals who believe that they are adversely affected by the project may submit complaints to existing project-level grievance redress mechanisms or the WB’s Grievance Redress Service (GRS). The GRS ensures that complaints received are promptly reviewed in order to address project-related concerns. Project affected communities and individuals may submit their complaint to the WB’s independent Inspection Panel which determines whether harm occurred, or could occur, as a result of WB non-compliance with its policies and procedures. Complaints





may be submitted at any time after concerns have been brought directly to the WB's attention, and Bank Management has been given an opportunity to respond. For information on how to submit complaints to the WB's corporate Grievance Redress Service (GRS), please visit <http://www.worldbank.org/en/projects-operations/products-and-services/grievance-redress-service>. For information on how to submit complaints to the World Bank Inspection Panel, please visit [www.inspectionpanel.org](http://www.inspectionpanel.org).

**VI. KEY RISKS**

The Overall Risk Rating for the Project is assessed as Substantial.

Risk	Risk Rating	Assessment and Mitigation Measures
<b>Political and Governance</b>	Substantial	<p>Singapore, the host jurisdiction of SEADRIF, offers a strong institutional and legal environment for the establishment of SEADRIF Trust and the Company.</p> <p>The Financial Action Task Force (FATF) and Asia/Pacific Group on Money Laundering (APG) assessed Singapore's financial system, concluding that Singapore has a strong legal and institutional framework to fight money laundering and terrorist financing with respect to 40+9 recommendations of the FATF.</p> <p>The SEADRIF's governance structure builds on similar proven structures like CCRIF and PCRAFI. The WB team will assist SEADRIF member countries in the establishment of the Company and especially its governance structure. The governance structure is critical to ensure strong ownership of the ASEAN Countries and the financial sustainability of the Company. The WB will not be part of the governance structure apart from being a Lead Technical Partner.</p> <p>There is also strong political support from the countries involved through their governments' commitments to SEADRIF and from regional organizations such as ASEAN Secretariat and development partners.</p>
<b>Macroeconomic</b>	Substantial	<p>Singapore provides a relatively stable macroeconomic environment and ecosystem for the operations of the Company. However, as with any other financial institutions, the Company may be exposed to uncertainties and volatilities in the global financial markets which may have an impact on the analysis conducted for the Company. The project will monitor this risk closely and provide any adjustments as necessary.</p>



<b>Technical Design of Project</b>	Substantial	<p>The SEADRIF Program is technically and operationally complex, with a large number of stakeholders, including regional technical specialist agencies, regional coordination bodies such as ASEAN Secretariat and the Ministries of Finance within each participating country who have limited experience in interacting with the private financial markets.</p> <p>The WB will provide substantial support to the technical design and preparatory work in the establishment of SEADRIF while providing TA activities to build regional and national capacity, building on similar precedent initiatives such as the CCRIF and the PCRAFI.</p>
<b>Institutional Capacity for Implementation</b>	Substantial	<p>The Trustee and the Company will be the implementing entities. The Trustee was selected through a competitive and open process by the countries among the professional trust management companies licensed in Singapore. Functions of the Company will be outsourced to professional service providers. The WB, as the financier and the Lead Technical Partner, will continue to provide technical support to the Trustee and the Company. The WB will also continue to provide TA to SEADRIF member countries.</p>
<b>Sustainability</b>	Substantial	<p>Countries may not prioritize spending on insurance premiums, particularly where governments are faced with budget deficits. However, the project will work with the governments to demonstrate the costs and benefits of insurance in relation to other risk financing solutions.</p> <p>The WB will support the Trustee and the Company to develop a sustainable financial plan. The project, and especially the Company, is designed to be financially sustainable in the long run. This will ensure that the Company has sufficient capacity to underwrite the risks and efficient capital structure including initial capital provided by the development partners to sustain the business over time.</p> <p>SEADRIF member countries will review the activities of the Trust, the Sub-Trusts and the Company three years after the establishment of the Company to ensure its performance and sustainability. They may determine the dissolution of the Trust, the Sub-Trusts and/or the Company as a result of the review, and under such a circumstance, any remaining property of the Trust, the Sub-Trusts, and the Company will be used for the SEADRIF beneficiary countries based on the decisions of each governing body.</p>
<b>Other - Reputational Risk Payouts from an insured event are not used for</b>	Substantial	<p>As part of the establishment of SEADRIF, the Committee decided to request the beneficiary countries to develop contingency plans that require prior approval from the Committee. The following measures</p>





<b>disaster related activities, creating a reputation risk for the WB and the donor partners.</b>		have been included in the relevant SEADRIF documents: (i) specify an exclusion list that comprises activities which could pose significant or high environmental and social risks and impacts, consistent with the Bank's ESF, (ii) require beneficiary countries to report back to the Trustee and the Committee on the use of insurance payout, (iii) require the beneficiary countries to open designated accounts for insurance payouts to allow separate monitoring from the general budget account, (iv) require the Trustee to arrange ES auditing for the countries' segregated accounts and exclusion list included in the beneficiary countries' Contingency Plans at the instruction of the Committee or the request from the WB.
<b>Overall</b>	Substantial	



**VII. RESULTS FRAMEWORK AND MONITORING**

**Results Framework**

**COUNTRY: East Asia and Pacific**

**Southeast Asia Disaster Risk Insurance Facility (SEADRIF): Strengthening Financial Resilience in Southeast Asia**

**Project Development Objectives(s)**

The project development objective is to improve access to pre-arranged financing through market-based mechanisms for responding to disasters in Southeast Asian countries.

**Project Development Objective Indicators**

Indicator Name	PBC	Baseline	End Target
<b>Capacity to make full insurance payout within up to 30 days of the occurrence of an insured event</b>			
Capacity to make insurance payout within up to 30 days of the occurrence of an insured event under the first cat risk pool (Yes/No)		No	Yes
<b>Claims paying capacity to sustain a 1-in-200 year insured loss in each financial year</b>			
Claims paying capacity to sustain a 1-in-200 year insured loss in each financial year after allowance for the Company's reinsurance protection (Yes/No)		No	Yes
<b>Products offered by the Company are actuarially sound and adequately account for the underlying risk</b>			
Products provided by the Company to the participating countries are actuarially sound and adequately account for the underlying risks and operating expenses. (Yes/No)		No	Yes



**Intermediate Results Indicators by Components**

Indicator Name	PBC	Baseline	End Target
<b>Adequate Capitalization of the Company</b>			
Adequate capitalization to allow the Company to provide the first catastrophe risk pool for the first three years (Amount(USD))		0.00	10,000,000.00
<b>Completed Setup and Operations of SEADRIF Insurance Company</b>			
Relevant functions of the Company are set up and operational (Yes/No)		No	Yes
<b>Products offered to SEADRIF member countries</b>			
The Company issues the first product to Lao PDR and Myanmar (Yes/No)		No	Yes
<b>Monitoring and Evaluation</b>			
Annual monitoring and evaluation reports (Yes/No)		No	Yes

**Monitoring & Evaluation Plan: PDO Indicators**

Indicator Name	Definition/Description	Frequency	Datasource	Methodology for Data Collection	Responsibility for Data Collection
Capacity to make insurance payout within up to 30 days of the occurrence of an insured event under the first cat risk pool	SEADRIF Insurance Company has capacity to make timely payouts for quick disaster recovery.	Yearly	The Company's disclosure	Discussion with the Company to confirm the payout issue and with the	The Company



				insured country to confirm that the payout was received within up to 30 days after the insured event	
Claims paying capacity to sustain a 1-in-200 year insured loss in each financial year after allowance for the Company's reinsurance protection	Actuarial analysis of claims-paying capacity including through the Company's capital and reinsurance arrangement.	Yearly	Qualitative data collected and analyzed by the Company	The Company's actuarial analysis based on their accounting, risk profiling, and reinsurance information	The Company
Products provided by the Company to the participating countries are actuarially sound and adequately account for the underlying risks and operating expenses.	Products provided by the Company to the participating countries are actuarially sound and adequately account for the underlying risks and operating expenses.	Yearly	The Company's products' data	The Company's quantitative analysis	The Company

**Monitoring & Evaluation Plan: Intermediate Results Indicators**

Indicator Name	Definition/Description	Frequency	Datasource	Methodology for Data Collection	Responsibility for Data Collection
Adequate capitalization to allow the Company to provide the first catastrophe risk pool for the first three years	Amount of capitalization released from the project to SEADRIF Insurance Company to support the issuance of insurance policies for Lao	Yearly	SEADRIF Insurance Company Annual Accounts	SEADRIF Insurance Company Annual Accounts and Business Plan	The Company



	PDR and Myanmar				
Relevant functions of the Company are set up and operational	Set-up and operations of the Company in providing insurance services to beneficiary countries and improve the affordability and quality of the insurance products	Yearly	The Company	The Company's annual accounts and issuance of policies	The Company
The Company issues the first product to Lao PDR and Myanmar	Company issues the first insurance product to Lao PDR and Myanmar	Yearly	Catastrophe risk insurance contracts between the Company and Lao PDR and Myanmar	Analyze insurance contracts between the Company and Lao PDR and Myanmar	The Company
Annual monitoring and evaluation reports	Annual monitoring and evaluation reports of project activities and performance of the Company over the project life	Yearly	The project's M&E plan and reports prepared by the Trustee and the Company.	Reviewing the project M&E plan and reports prepared by the Trustee and the Company.	The Trustee and the Company



**The World Bank**

Southeast Asia Disaster Risk Insurance Facility (SEADRIF): Strengthening Financial Resilience in Southeast Asia  
(P170913)

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**ANNEX 1: Implementation Arrangements and Support Plan**

**Strategy and Approach for Implementation Support**

1. The World Bank’s implementation support is based on the nature of the proposed Project and its risk profile. As the overall risk rating for the Project is assessed as Substantial, the implementation support will focus initially on ensuring that the implementing agencies have adequate capacity to implement the Project and stakeholder engagement mechanisms are adequately implemented including through further technical support.
2. The task team will include specialists with the required expertise, drawn from within the institution. World Bank safeguards specialists will provide close support and guidance to the implementing agencies during implementation. Specialists with highly technical expertise may be recruited externally, as necessary.
3. Supervision missions can be conducted on a bi-annual basis and may include remote monitoring and supervision in case of recurrent and prolonged lockdown due to COVID-19. The implementation support strategy will be revisited regularly, taking into account implementation progress and continuous risk assessment.

**Implementation Support Plan**

4. The main focus areas of expected implementation support activities are summarized in Table 1. The required skills for the implementation support effort are illustrated in Table 2.

**Table 1. Main focal areas of implementation support activities**

<i>Time</i>	<i>Focus</i>	<i>Skills Needed</i>	<i>Resource Estimate (staff weeks/year - SW)</i>
First twelve months	Technical review of documents	Legal Specialist Actuarial Specialist Financial/Insurance Specialist	2 SWs 3 SWs 4 SWs
12-52 months	Project Management Operational Support FM supervision Procurement Safeguards Communication/Information Evaluation	Task Team Leader Operations Specialist FM Specialists Procurement Specialist Safeguard Specialist Short-term Consultant Short-term Consultant	8 SWs 6 SWs 3 SWs 2 SWs 8 SWs SWs 5 SWs



**Table 2. Required skills**

<i>Key Skills Needed</i>	<i>Number of Staff Weeks</i>	<i>Number of Trips</i>
Task Team Leader	• 8 weeks per year (Year 1)	• 3 in Year 1
Social Specialist	• 4 weeks per year	As required
Environmental Specialist	• 4 weeks per year	As required
Actuarial Specialist	• 3 weeks per year	As required
Financial/Insurance Specialist	• 4 weeks per year	As required
Legal specialist	• 2 weeks per year	As required
Financial Management Specialist	• 3 weeks per year	As required
Operations Specialist	• 6 weeks per year	As required





**ANNEX 2: Disaster Risk and Public Finances in ASEAN Countries**

**Table A2.1. ASEAN regional and country socioeconomic characteristics**

Country	Land Area (sq. Km)	Population (2019)	Public Debt (% of GDP)	Capital Markets Capitalization as % of GDP (Q3 2018)	Urban Population 2019 %	GDP (2017 US\$ million)	Agricultural GDP (%)	Industry GDP (%)	Service GDP (%)
Brunei Darussalam	5,270	437,799	2.4		80.37	12,128	1.09	59.72	40.85
Cambodia	176,520	16,411,988	52.1		22.07	22,158	23.38	30.88	39.67
Indonesia	1,811,570	268,722,947	29.8	70	56.14	1,015,539	13.14	39.37	43.63
Lao PDR	230,800	7,033,506	58.5		45.60	16,853	16.20	30.91	41.53
Malaysia	328,550	32,331,827		235	77.42	314,710	8.78	38.79	51.01
Myanmar	653,520	54,193,806	38.5		37.38	67,069	23.33	36.29	40.37
Philippines	298,170	107,630,631	41.8	148	44.64	313,595	9.66	30.45	59.89
Singapore	700	5,845,415		325	100.0	323,907	0.03	23.21	70.44
Thailand	510,890	69,270,029	34	190	53.66	455,303	8.65	35.05	56.29
Vietnam	310,070	97,150,918	61.5	75	35.88	223,780	15.34	33.40	41.26
ASEAN	4,326,060	659,028,866			55.32	2,765,042	11.96	35.81	48.49

Source: ADB, CEIC, World Bank, Worldometers.

**Table A2.2. ASEAN Public Finances**

Country	Government Gross Debt (2019, % of GDP)	Government Expenditure (2019, % of GDP)	Government Revenue (2019, % of GDP)	Government Primary Balance (2019, % of GDP)	Government Overall Balance (2019, % of GDP)
Brunei Darussalam	-	-	-	-	-
Cambodia	30.0	25.0	23.2	-1.5	-1.8
Indonesia	28.0	17.4	12.4	-3.2	-5.0
Lao PDR	59.9	20.3	14.1	-3.6	-6.2
Malaysia	52.5	23.5	19.3	-1.7	-4.2
Myanmar	41.2	22.3	17.6	-2.8	-4.6
Philippines	35.7	23.1	19.7	-1.4	-3.3
Singapore	112.9*	21.3	17.8	-	-3.4
Thailand	42.4	23.7	20.3	-3.0	-3.4
Vietnam	54.1	23.3	18.1	-3.6	-5.1

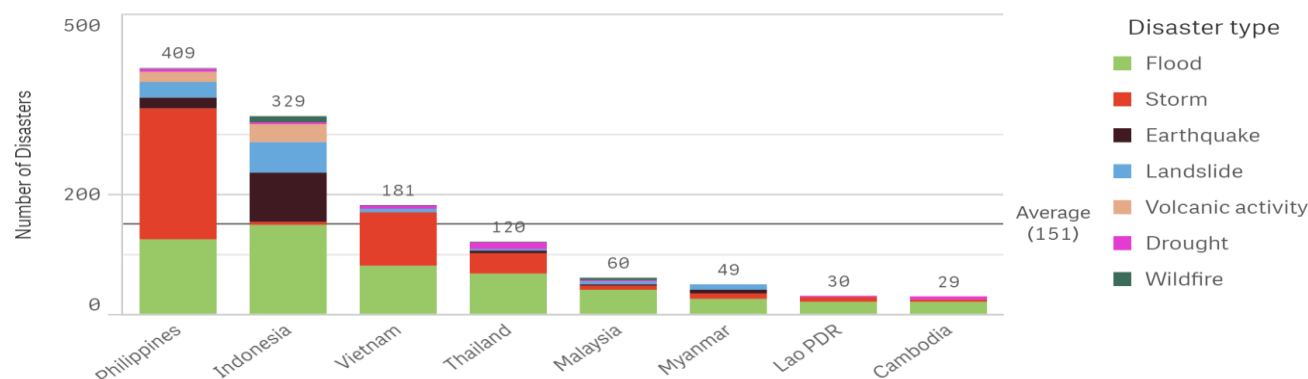


Source: IMF Fiscal Monitor April 2020 & WB EAP Economic Update April 2020

\* Singapore’s debt is fully backed by asset investments and was issued to stimulate the local bond market. The country maintains the highest possible triple-A rating from all rating agencies.

**Figure A2.3. Disaster Events per Country 1989-2019**

Number of Disaster per Country (1989 - 2018)



Storm includes Tropical Cyclone. Earthquake includes Tsunami

Source: EM-DAT

**Table A2.4. Disaster Impacts in ASEAN Countries by Perils 1989-2019**

Peril	Total damage (USD)	Total affected (people)	Total deaths (people)
Flood	63,518,068,000	134,840,115	17,281
Storm	34,944,049,920	178,467,909	178,011
Earthquake	15,638,567,000	15,121,740	194,600
Drought	11,501,472,000	65,233,571	691
Wildfire	10,633,000,000	3,447,442	321
Volcanic activity	414,846,000	2,355,091	1,672
Landslide	194,326,000	1,040,210	4,623
Extreme temperature	-	1,000,000	77
Mass movement (dry)	-	-	100
<b>Grand Total</b>	<b>136,844,328,920</b>	<b>401,506,078</b>	<b>397,376</b>

Source: EM-DAT

**Table A2.5. Disaster Impact by Country 1989-2019**

Country	Total damage (USD)	Total affected (people)	Total deaths (people)
Thailand	51,420,262,000	99,395,894	12,226
Indonesia	30,538,410,000	22,847,310	191,350
Philippines (the)	23,858,628,920	178,996,834	37,757
Vietnam	21,786,374,000	61,505,000	13,462
Myanmar	4,844,713,000	6,962,995	139,810



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Malaysia	2,274,002,000	3,103,940	725
Cambodia	1,559,110,000	22,537,795	1,685
Lao PDR	560,829,000	6,156,310	361
Brunei Darussalam	<b>2,000,000</b>	-	-
<b>Grand Total</b>	<b>136,844,328,920</b>	<b>401,506,078</b>	<b>397,376</b>

Source: EM-DAT



### ANNEX 3: Disaster Risk Funding in Cambodia, Lao PDR, and Myanmar

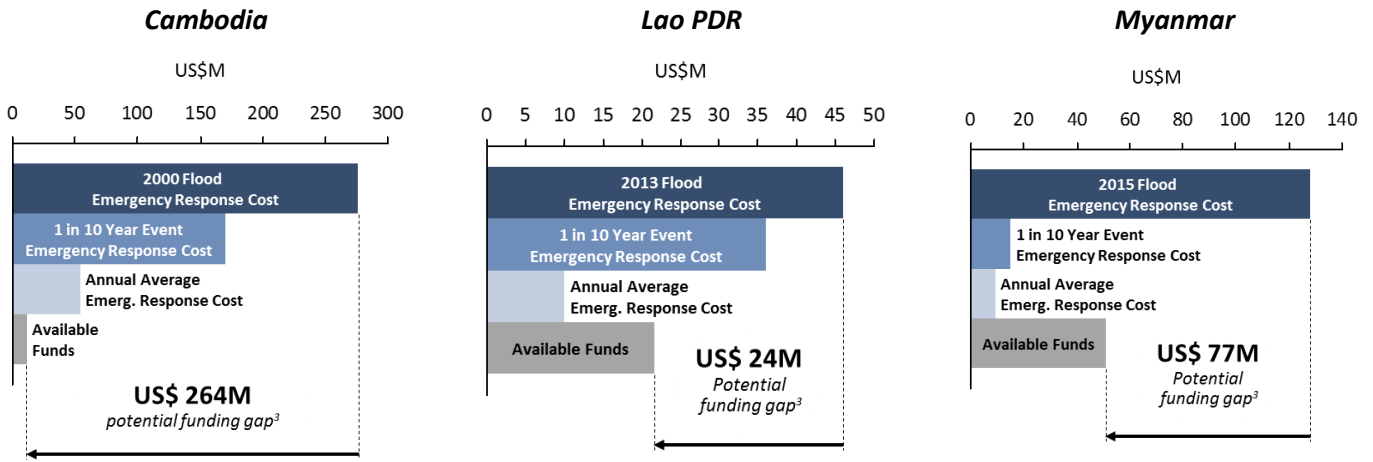
1. **Cambodia, Lao PDR, and Myanmar are exposed to multiple hazards, including floods, typhoons, cyclones, earthquake, landslides, and droughts.** Since 2013, all three countries have experienced large flood events, resulting in billions of US dollars in damages/losses. The most recent 2015 Myanmar floods, alone, displaced 1.6 million people and caused an estimated US\$1.5 billion in total losses and damages.<sup>15</sup>
2. **Preliminary analysis of historical data indicates that each of these countries' governments faces significant emergency response costs to floods.** For example, every year in Cambodia, the government could face average costs for emergency response of US\$54 million, with a 10% probability (a 10-year event) that the annual cost of emergency response could exceed US\$170 million.<sup>16</sup> However, the estimated emergency response costs for the devastating 2000 flood were even higher at US\$276 million.
3. **The emergency response cost of floods, when compared to currently available resources, results in a significant short-term funding gap.** The governments in all three countries have allocated contingency budgets to be used for emergency response, but all remain exposed to catastrophic events, relying heavily on international donor assistance for responses, relief, and recovery. For example, in Lao PDR, the government has developed a contingency budget and state reserve fund of US\$49 million; however, only US\$22 million is likely available for disasters, as the reserves are for both disaster and non-disaster emergency response. When these resources are compared to the estimated emergency response costs for the 2013 Lao PDR flood (US\$46 million) or the estimated emergency response cost of a 10-year flood (US\$36 million), it is clear that a substantial funding gap exists. Myanmar and Cambodia face similar funding shortfalls (see figure A2.1 below). A comprehensive disaster risk finance strategy or policy would help the governments systematically manage the financial impact of natural disasters and improve their rapid response financing capacities post-disaster.

<sup>15</sup> Estimates by the Asian Development Bank include total loss and damage (above emergency response costs)

<sup>16</sup> These assessments of emergency response cost are based on historical data of the total number of people affected by floods since 1966 as reported in the EMDAT database. It assumes that (a) all affected people receive emergency relief; (ii) the total emergency response cost is US\$80 per person (this is an initial estimate and can be changed). While history is a good starting point for understanding the future, this may not always be true, so the emergency response costs estimated here should be interpreted with some caution.



Figure A2.1: Estimated Emergency Response Cost compared to Available Funds<sup>17</sup>



<sup>17</sup> Cambodia: Estimated emergency response costs for the 2000 flood are US\$276M (based on 3.5M people affected), while emergency response costs for a 10-year event and annual average response costs are US\$170M and US\$54M, respectively; Cambodia has a US\$115M Contingency Budget plus some in-kind reserves available, however only 10% is likely available for emergency response, based on discussions with government stakeholders. Lao PDR: Est. emergency response costs for the 2013 flood are US\$46M (based on 0.6M people affected), while emergency response costs for a 10-year event and annual average response costs are US\$36M and US\$10M, respectively; Lao PDR has a US\$12M Contingency Budget plus US\$37M State Reserve Fund available in principle, however, this is not reserved solely for disasters (only 26% was released in FY 2014-15). Myanmar: Est. emergency response costs for the 2015 flood are US\$128M (based on 1.6M people affected), while emergency response costs for a 10-year event and annual average response costs are US\$15M and US\$9M, respectively; Myanmar has a US\$85M Contingency Budget plus US\$17M Disaster Management Fund available, however only 50% is likely available for emergency response.



ANNEX 4: Insurance Protection Gap in ASEAN Countries

- 1. ASEAN member states face a significant natural catastrophe protection gap.** Globally, natural catastrophes are the cause of a considerable protection gap, despite a slow but continuous reduction over the last 30 years. According to Munich Re, the gap has decreased from 78 percent in the 1980s to 70 percent today. However, these reductions were primarily driven by high- and upper middle-income countries, with the protection gap in other countries remained stubbornly high. In ASEAN countries including Indonesia, Malaysia, the Philippines, Thailand and Vietnam, the protection gap continues to exceed 90 percent for all three major perils (storms, floods and earthquakes).<sup>18</sup> Others estimates of the protection gap in the Asia-Pacific region and developing Asia, such as Cambodia, Lao PDR, and Myanmar, range between 92-95 percent.<sup>19 20</sup>
- 2. The rate of insurance penetration in a market is directly associated with prevalent protection gap.** Insurance penetration focuses on comparing the premium volume written to a country’s GDP. This figure helps gauge the maturity of the insurance market and enables comparisons to be made across different markets. Figure A4.1 and A4.2 highlight the large difference in insurance market penetration two groups of ASEAN countries (lower middle income and higher middle income) compared to the global average.

Table A4.1: Insurance Penetration Rates in % of GDP – ASEAN Countries

	Penetration Rate - Life	Penetration Rate - Health	Penetration Rate - P&C <sup>21</sup>
<i>Brunei</i>	0.50%	0.02%	0.41%
<i>Cambodia**</i>	0.08%	0.08%	0.27%
<i>Indonesia</i>	1.22%	0.10%	0.41%
<i>Laos</i>	0.02%	n/a	0.5%
<i>Malaysia</i>	2.83%	0.19%	1.25%
<i>Myanmar**</i>	0.07%	n/a	0.02%
<i>Philippines**</i>	1.29%	n/a	0.55%
<i>Singapore</i>	5.92%	0.93%	0.77%
<i>Thailand**</i>	3.91%	0.29%	1.19%
<i>Vietnam</i>	1.12%	0.21%	0.60%
<i>Global av.**</i>	3.3%		2.8% (inc. Health)

Insurance guide. All 2016. \*\*2017 Figures

Source: Various Axco Reports and JP Morgan ASEAN

<sup>18</sup> The Geneva Association (2018)

<sup>19</sup> UNESCAP (2018)

<sup>20</sup> Monetary Authority of Singapore (2017)

<sup>21</sup> Property & Casualty



**Table A4.2: Availability of Insurance Products - Cambodia, Lao PDR, and Myanmar**

	<b>Life</b>	<b>Non-Life</b>	<b>Health</b>	<b>Microinsurance</b>	<b>Bancassurance</b>
<i>Brunei</i>	Limited – Focus on Takaful	Yes	Very Small	No	Limited
<i>Cambodia</i>	Yes	Yes	Yes	Available	Yes
<i>Indonesia</i>	Yes – some takaful	Yes	Yes	Yes	Yes
<i>Laos</i>	Very Small	Yes	Very Small	Yes	No
<i>Malaysia</i>	Yes – Inc Takaful	Yes	Yes	Limited	Large
<i>Myanmar</i>	Small	Yes	No	No (only microfinance)	No
<i>Philippines</i>	Yes	Yes	Limited – mainly state-run	Large	Large
<i>Singapore</i>	Large	Yes	Yes	No	Large
<i>Thailand</i>	Yes	Yes	Yes – universal basic healthcare	Yes	Large
<i>Vietnam</i>	Yes	Yes	Yes – large state health insurance	Limited	Limited



## ANNEX 5: Lessons Learned from CCRIF and PCRAFI

1. Lessons learned from recent experiences with the Caribbean Catastrophe Risk Insurance Project (P161533), and the Pacific Catastrophe Risk Insurance Project (P149670) have been accounted for in the proposed project design.

### Constant Communication and Consultation

2. **Early consultation with key decision-makers helps to ensure understanding and ownership within the government.** Considering the case of the SEADRIF catastrophe risk pool, government officials need to be provided with a clear understanding of crucial themes such as the structure of the facility, the risk modeling and payment triggers that underpin the products as well as their role in providing and maintaining disaster and exposure-related data.
3. **Constant communication and regular consultations with experts and stakeholders are critical in ensuring SEADRIF continues beyond project closing.** Political considerations among participating countries can significantly limit the long-term prospects for SEADRIF. It is imperative to not only build political with the key decision-makers but convince lower-ranking public servants as well. Additionally, the government's technical experts on disaster and financial risk management need to be consulted. Establishing a continued dialog across different hierarchy levels is vital to building a solid support base within the participating countries. Support for SEADRIF among public institutions must be able to survive changes in political leadership to ensure long-term success beyond project closing.

### Institutional Capacity

4. **Institutional capacity in the public financial management of natural disasters needs to be expanded.** SEADRIF will only result in sustained improvements to financial resilience if the participating countries are equipped to manage post-disaster budget mobilization and execution, reduce the time it takes to purchase emergency relief goods and documenting the acquittal process on how the funds were spent. Additionally, the financial products offered by SEADRIF need to be embedded within an integrated DRFI strategy which should include other financial resources such as national reserves or contingent credit to address all risk levels faced by the government.

### Affordability and quality of products

5. **Balancing affordability and product quality is crucial to the success of SEADRIF.** A sustained improvement in financial resilience can only be achieved if the participating countries will be able to afford the products offered by SEADRIF. The price and quality of financial products remain a crucial concern for developing countries. SEADRIF will be required to strive for low prices while nonetheless ensuring the products achieve the outcomes expected by the participating countries. The long-term viability of SEADRIF will be questioned if countries face excessive annually recurring costs or if products repeatedly do not provide the anticipated payouts.





6. **Verify the long-term sustainability of key design features related to financial products.** Probabilistic catastrophe risk models and other actuarial calculations should be tracked and verified for their long-term accuracy and sustainability, ensuring that the underlying models are as closely aligned actual developments.

#### **Strong donor support**

7. **Generous donor support is critical to building up SEADRIF's reserves at an accelerated pace while financing initial operating expenditures and paying claims within its risk retention.** Ensuring the project enjoys sustained and strong donor support will significantly improve SEADRIF's financial sustainability. The generous initial capitalization of the catastrophe risk pool will allow for SEADRIF to potentially sustain claims exceeding the modeled Average Annual Loss (AAL) without suffering a severe financial setback. It will also allow SEADRIF to retain a higher share of the risks, lowering premium costs for the participating countries, incentivizing their participation in the program.

#### **Local knowledge and private sector expertise**

8. **Engage individuals and organizations with private sector experience related to the anticipated geographic and product expansion.** SEADRIF needs to build up the expertise on the potential legal implications of operating across different regulations, the selection of service providers, interpreting policy terms and conditions, product pricing, and client relations.
9. **Local insurance companies can utilize the catastrophe models developed for SEADRIF, which will improve market development.** The international private sector expertise engaged for the development of SEADRIF's probabilistic and actuarial models can benefit the domestic insurance market by building local capacity in the provision of insurance against natural disasters. More accurate pricing of the risks thanks to improved data accuracy and availability will allow for insurers to expand their product offering, improving the long-term financial resilience of the country.

#### **Improving Monitoring and Evaluation**

10. **Monitoring and evaluation (M&E) systems should be designed to capture project results better.** Contingency planning and a M&E framework should be designed to include the SEADRIF project results, notably outcomes, as well as integrate stakeholders assessments. Under these two initiatives, beneficiary countries are required to report back to the Company on the use of insurance payouts, however there was no requirement on the countries to open dedicated accounts to receive the payouts under the PCRAFI and to perform audit or tracking of the use of payouts under both. The CCRIF has made a step further in 2019 to incorporate a condition in the insurance policy requiring insured governments to transfer the payouts to end beneficiaries and carry out state audit of the use of payouts.



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