BOD/2017/06 DOC 19
Meeting of the Board of Directors
June 6–7, 2017
Ottawa, Canada

LEARNING RESILIENCE: TESTING THE FEASIBILITY OF RISK FINANCE TO PROTECT EDUCATION SYSTEMS

For Decision

Please note: Board papers are deliberative in nature and, in accordance with the GPE Transparency Policy, are not public documents until the Board has considered them at the Board meeting.

1. STRATEGIC PURPOSE

1.1 This paper updates the Board on the findings of work commissioned by the Secretariat to explore the feasibility of risk financing for education. The Board is asked to consider a decision to test the feasibility of risk financing for education by requesting that the Secretariat develop a Shock-Responsive Education Systems (SRES) pilot program in a small number of partner countries, subject to additional resources being raised through targeted contributions.

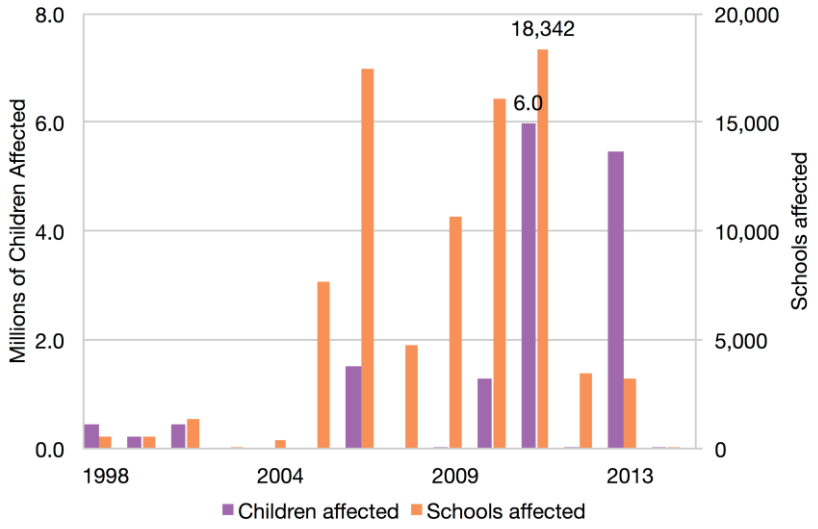
2. EXECUTIVE SUMMARY

2.1 The Global Partnership for Education (GPE) invests alongside developing country partners (DCPs) and development partners to strengthen education systems. Like all investments, these systems face risks from natural and man-made shocks. Earthquakes, violent storms, drought, and other perils destroy schools and other core social infrastructure. The costs of this direct damage are small compared the resulting social costs of interrupted education and lost learning because children cannot return to school. Between 2000 and 2016, natural and man-made risks affected an estimated 84.5 million children a year on average.

2.2 Recognizing these risks, the Board approved targeted financing to the Secretariat in the form of a grant from the Rockefeller Foundation in September 2016 to explore innovative financial approaches to protecting education systems. Following a competitive procurement and tendering process, the Secretariat commissioned a consortium ("consultancy team") with expertise in insurance (the Willis Group), development policy (the Overseas Development Institute), and humanitarian response (the START Network and Save the Children).

2.3 The reports prepared by the consultancy team indicate that education systems face large risks from natural and manmade disasters. Figure 2 below shows that in most years education systems have suffered large losses to schools, a core asset, threats to a large number of children in education, or both, based on an analysis of Post-Disaster Needs Assessments completed by governments and development partners in the wake of emergencies.[1]

Figure 2: Disasters Inflict Large Costs on Education Systems in Partner Countries

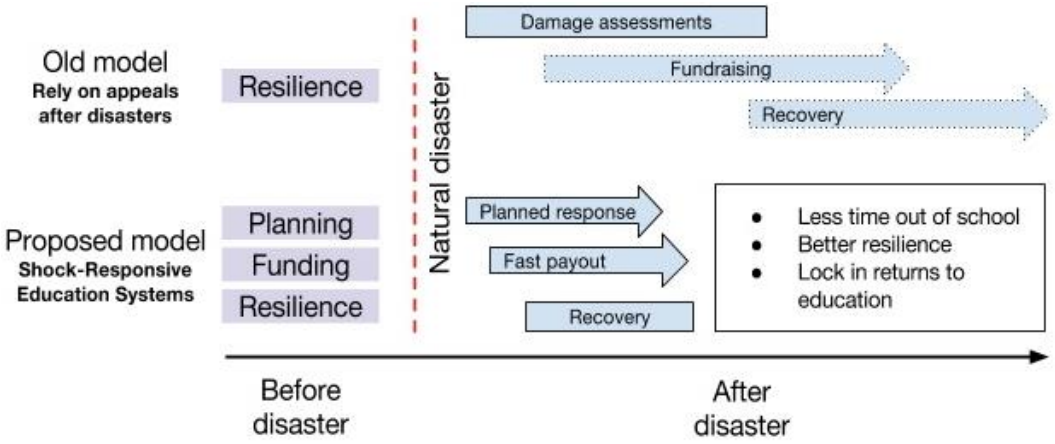


2.4 The consultancy team concluded that country partners would benefit dramatically from an expanded set of **risk finance** tools. Risk finance refers to contracts like insurance and contingent budgets. Like health insurance or car insurance, these provide predictable payments when shocks hit to support pre-agreed resilience plan, for example by quickly rebuilding schools, supporting emergency schooling, or replacing instructional materials.

2.5 This mobilizes money faster than relying on donor appeals, which often do not invest enough in education to support full, effective recovery (T\the education sector received just 2.1%– a fiftieth– of humanitarian aid in the last decade). This in turn can lower the time children spend out of school, and so lower the social costs of lost education, enrollment, and learning. As set out in the stylized figure below, this will help to create **Shock-Responsive Education Systems** that are more efficient because they protect investments in education by preventing predictable future losses.

[1] This understates risks to education: many assessments do not include education, and not all disasters trigger needs assessments.

Figure 1: Risk Finance to Support Education Recovery



2.6 The consultancy team set out a range of models for pilots. Established programs already exist to provide clear insurance contracts that pay out quickly and predictably to governments after hazards like violent storms and drought occur. These include CCRIF, in the Caribbean, ARC, in sub-Saharan Africa, and PCRAFI, in the Pacific. Collectively, CCRIF, ARC, and PCRAFI account for 63 of the 89 countries eligible for financing under GPE's financing and funding framework. These payments support emergency activities to prevent large losses after natural disasters, like severe storms. However, they do not yet include the education sector in their coverage.

2.7 This paper proposes the Board instruct the Secretariat to develop a pilot program in one to five countries to test out whether this approach is valuable and viable. The programs will be developed by the Secretariat alongside DCPs, with technical support from expert consultancies. This pilot will supplement GPE's existing work of building resilience into sector planning by putting in place insurance contracts and related mechanisms that provide reliable, fast funding when disasters strike.

2.8 The pilots will deliver actionable evidence on three fronts. First, they will explore whether the combination of forward planning for disasters and financing to deal with their effects increases the resilience of the education sector. Second, they will establish the scope of donor and DCP appetite to pay for risk finance alongside core services, and the extent to which paying for risk finance can be funded through domestic resources. Third, the pilots will explore whether the conditions that trigger risk finance contracts are an effective match for conditions on the ground, such that education can be integrated into existing risk finance programs.

2.9 Including coverage for the education sector in existing, non-profit programs minimizes transaction costs. As a result, total start-up costs for these pilots will be modest. Estimates presented in Section 9 call for **US$ 230,000 per country** for expert consultancy support to mainstream education into existing risk finance programs. Maintaining coverage will require annual premium payments of approximately US$ 3 million per year per country. The Secretariat will support DCPs in structuring support for premiums from sovereign donors and, where possible, national budgets.

2.10 If approved, the pilots will be supported by strictly additional targeted funding sourced by the Secretariat from interested foundations and bilateral donors and in compliance with paragraph 3.3 of the Contributions and Safeguards Policy. The Secretariat may help DCPs to source additional funding to support the costs of these contracts, but will not be a counterparty to the contracts.

2.11 GPE also supports education and enrollment in many countries that face risks from political unrest and man-made disasters. Risk finance tools for political risk are less developed and operate in a more concentrated market. Based on the consultancy team's analysis, the Secretariat concluded that these tools are less mature, too expensive, and ultimately remain too experimental to pilot for the education sector at this time.

2.12 The Secretariat expects that these risk finance tools will help to fulfill GPE's core mandate by better protecting education systems and investments in education by partners and donors against clear and present natural disaster risks. It matches financing for recovery to the resilience planning in education sector plans (ESPs) that the Secretariat already supports with partners. It delivers on a component of the Financing and Funding Framework approved by the Board in March, 2017. It is also consistent with a wider policy landscape supported by donors, implementing agencies, and DCPs that includes the **Sendai Framework for Disaster Risk Reduction**, the **Addis Ababa Action Agenda**, and the **Sustainable Development Goals**.

3. RECOMMENDED DECISION / REQUESTED INPUT

3.1 The Secretariat requests that the Board of Directors approve the following decision:

BOD/2017/06-XX—<u>Shock-Responsive Education Systems</u>: The Board of Directors:

1. Authorizes the Secretariat to develop a shock-responsive education systems pilot program as set out in BOD/2017/06 DOC 19 and to commence work to:
   a. Seek targeted financing in accordance with paragraph 3.3 of the Contributions and Safeguards Policy.
   b. Identify suitable and interested developing country partners to participate.

c. Identify and work with existing risk insurance programs and mechanisms that can facilitate the transactions.

2. Delegates authority to the Finance and Risk Committee (FRC) to approve the operational details of the pilot including determining when sufficient progress has been made so that contributions may be accepted from donors, approving individual country allocations, and, where necessary, approving the allocation of funds to external partners to cover premiums.
3. Mandates the Secretariat to continue to explore opportunities related to risk financing, and delegates responsibility to the FRC to provide approval to the Secretariat to pursue such opportunities based on their relevance and potential to advance GPE's core work.
4. Requests that the Secretariat update the FRC and Board on the status of this work on a regular basis.

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4. BACKGROUND

4.1 At the June 2016 Board meeting, the Board mandated the Strategic Finance Working Group (SFWG) to develop an ambitious, comprehensive financing and funding framework. The SFWG reviewed a list of possible mechanisms and endorsed the exploration of risk finance subject to additional financing being made available. The Secretariat approached Rockefeller Foundation for a grant to fund the work.

4.2 In September 2016, the Board approved targeted financing from the Rockefeller Foundation to the GPE Fund to explore the feasibility of risk financing for education in the amount of US$ 350,000, as outlined in BOD/2016/09 DOC 01 and requested the Secretariat update the GERF, the Board and the SFWG on the status of this work as it progressed.

4.3 The Secretariat undertook a competitive tendering process, adhering to World Bank procurement requirements. In December 2016 a contract was awarded to Willis Towers Watson to investigate the economic and social costs of disasters to education and identify tools that could be adapted to meet DCPs' natural disaster risk management needs. The Secretariat provided regular updates to the Coordinating Committee, and the consultants presented their initial findings to the Finance and Risk Committee (FRC) in April 2017.

5. FINDINGS: GPE AND DCPs INVEST IN EDUCATION SYSTEMS THAT ARE AT RISK

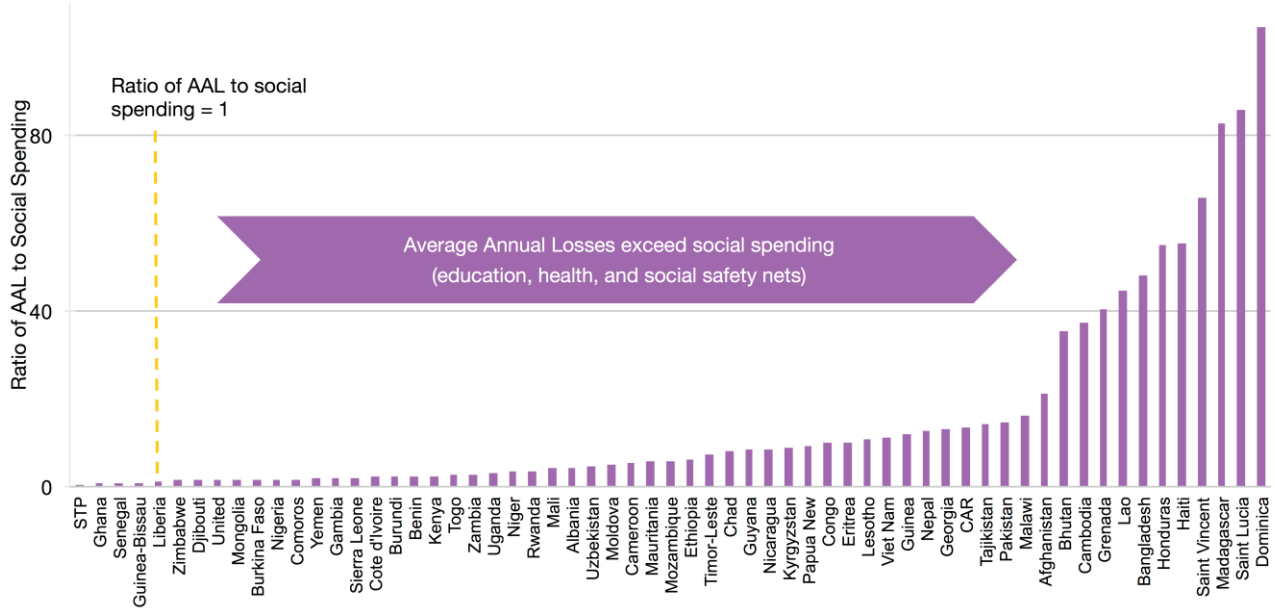
5.1 Education systems are at risk. An earthquake that destroys schools might permanently set back schooling. The 2015 earthquake in Nepal interrupted education for 25 percent of schoolchildren. A sudden drought or disease epidemic might force families to take children out of school, affecting both learning outcomes and reducing fees that schools earn, forcing systems to run a deficit. During the Ebola epidemic in Liberia, Sierra Leone, and Guinea, children in affected areas were not able to go to school for 8-10 months. Following the 2011 famine in Somalia, nine in ten school-age children did not return to school. A violent storm destroys instructional materials like textbooks. When Typhoon Haiyan made landfall in the Philippines in 2013, it damaged more than 60 percent of schools across four districts, and completely destroyed 30 percent of these.

5.2 Education systems face significant risks from man-made shocks like war and natural hazards ranging from drought to floods. In some cases, natural risks interact with political risks, creating so-called *complex emergencies*. All three of these types of risk can inflict significant damage to education systems. The education of nearly 75 million children was interrupted across 35 GPE developing country partners in 2015 alone.

5.3 Further analysis by the Secretariat of data compiled by the consultancy team confirms that GPE partner countries face large costs from natural disasters. Data from the United Nations examining the average annual costs of earthquakes, violent storms, and floods indicates that the 89 countries eligible for GPE financing face an average annual loss of over US$313 billion dollars a year (this is not the average loss every year, but the average loss over many years, given our expectations for the effects of natural disasters). This is a conservative estimate, because it does not include hazards like drought, and data does not cover every partner country.

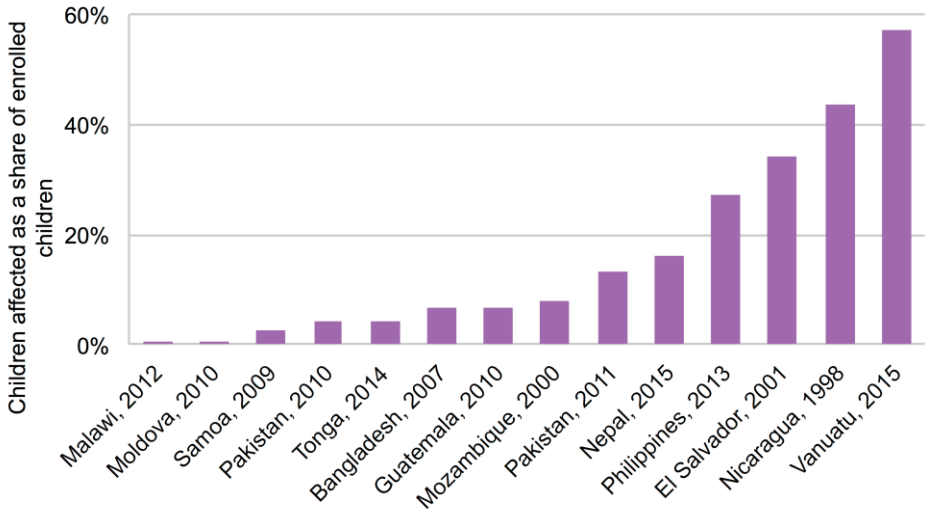
5.4 When these losses happen, they overwhelm the coping capacity of social sectors like education. Figure 2 below charts the ratio of Average Annual Loss (AAL) from natural disasters (not including drought) to total social spending, which includes education, health, and social safety nets. Almost all GPE partner countries face losses that are many times the amount they spend on social sectors. (At the dashed line, expected annual losses are just equal to social spending. To the right of it, AAL is greater than social spending.)

Figure 3: Natural Disasters Cost More than Social Spending in Nearly All GPE Countries



5.5 As a result, natural disasters also affect large numbers of school-age children. Figure 4 below combines information about the number of children affected by natural disasters with enrolment figures from UNESCO. It suggests that disasters affect very large shares of school-age children in GPE partner countries, implying large social losses to education systems.

Figure 4: Disasters Affect a Large Number of Enrolled Children



6. EDUCATION IS A LOW PRIORITY IN DISASTER RESPONSE

6.1 Despite robust evidence that natural disasters destroy education infrastructure, affect school-age children, and set back learning, just 2.1% of humanitarian funding in the last decade has been allocated to education. Disaster response from donors is well-intentioned, but focuses on acute and visible sectors, such as emergency healthcare. As a result, education is rarely prioritised in emergency appeals or the needs assessments that mobilise donor funding.

6.2 This is a missed opportunity. The work commissioned by the Secretariat confirms very high returns from reducing the number of children not in school (or the time they spend out school) after crises. The table below shows the size of the benefits of lower out-of-school children (OOSC) in three case study countries analysed by the consultants. Reducing the number of children out of school and reducing the length of time they spend out of school by only 5 percent - a twentieth - is associated with economic gains of approximately US$30 million in the Democratic Republic of Congo (DRC), US$200 million in Pakistan, and US$424 million in Syria.

	DRC (2009-2012)	Pakistan (2009-2012)	Syria (2011-2015)
Economic benefit from five percent reduction in children out of school	US$2.7-US$5.4 million	US$22-US$75 million	US$109-US$535 million
Economic benefit from five percent reduction in length of interrupted education	US$23.5 million	US$145 million	US$63 million
Estimated total benefits from five percent faster recovery	**US$28.5-US$ 31.4 million**	**US$173.4-US$ 226.4 million**	**US$210.8-US$ 636.8 million**

7. EXPANDING GPE'S TOOLKIT CAN PROTECT SHARED INVESTMENTS IN EDUCATION

7.1 The government of Chad's leadership, supported by GPE, provides a clear example of how mobilizing funding can protect systems. In 2015, an influx of refugees and returnees fleeing Boko Haram attacks in Nigeria strained the education system in the country's Lake Chad region. The government's education sector plan was developed based on population assumptions that did not include refugee and returnee children. The government of Chad demonstrated moral leadership by accommodating the increased demand, in part by accessing US$6.9 million of accelerated funding through GPE.

7.2 GPE was able to mobilize funding to support Chad. But access to the accelerated financing came with key limitations. First, it was not additional funding as the funding was deducted from Chad's maximum country allocation (MCA) for its next education sector program implementation grant (ESPIG). Second, a plan for managing additional demands on the education system was not in place beforehand. Finally, it was the maximum funding possible (20 percent of the MCA in accordance with GPE policies) but was not enough to serve needs on the ground.[2]

[2] As a result, the additional refugee and returnee pupils are concentrated in only roughly 60 schools. The resulting high student to teacher ratio has been identified as a cause of low progression from primary school (64 percent enrolment) to secondary school (39 percent enrolment).

7.3 Unlike GPE's existing financial tools, **risk finance** tools include insurance, which enables countries to confront rarer and more expensive risks that would overwhelm existing grants or contingency budgets. National-scale insurance programs already exist to provide faster, predictable funding to key Ministries. The World Bank and other institutions have worked alongside partner governments to set up schemes in the Caribbean (CCRIF)[3], Pacific (PCRAFI)[4] and sub-Saharan Africa (ARC).[5] **These programs include 63 of the 89 countries eligible for GPE financing**. However, they do not explicitly include protection to the education sector and are not integrated with education sector plans.

7.4 To pilot these risk finance tools for the education sector, the Secretariat proposes to **identify** partner countries that are members of these existing sovereign insurance programs and which face large risks to their education sectors, **raise funding** for additional support for technical assistance and payments for insurance coverage, **build** resilience into existing education sector plans by combining risk finance with better planning to deal with future natural hazards, and conduct continuous monitoring and evaluation to **learn** from the pilots to improve the resilience of GPE's wider portfolio.

7.5 The pilots will explore the feasibility of financing both start-up and running costs of large-scale insurance programs for the education section from active donors and domestic resource mobilization from DCPs. Donor interest in smarter risk finance is growing quickly. The United Kingdom, Germany, and Japan are leading investors in risk finance solutions for development; amongst foundations, the Rockefeller Foundation remains a leading investor, including for the

[3] CCRIF SPC is an insurance program that covers 17 Caribbean countries. In exchange for small, regular premium payments from members, CCRIF agrees to pay out in response to clearly agreed risks like violent storms. That helps governments rebuild infrastructure and deliver emergency services quickly. It has paid out 22 times for the risks it covers—hurricanes, earthquakes, and heavy rains—for nearly US$70 million in total.

[4] The Pacific Catastrophe Risk Assessment and Financing Initiative (PCRAFI) graduated from a pilot program established with technical assistance from the World Bank and with donor support, primarily from Japan. Premiums from Pacific Island Countries' governments enable it to pay out in response to severe earthquakes or extreme weather events. In 2015, Tonga and Vanuatu both received payouts of roughly US$ 2 million (Vanuatu's 2014 budget was about US$ 130 million).

[5] The African Risk Capacity (ARC) collects premiums from its African member states to finance the underlying insurance contracts. In its first year, ARC insured Kenya, Mauritania, Niger, and Senegal for up to US$30 million per season. ARC requires countries that want to take out insurance against drought to develop a clear plan for how they will spend the money that is paid out if drought occurs

exploratory grant (US$350,000) that enabled GPE to commission initial analysis of opportunities for risk finance in education.

7.6 The pilot programs will focus on protecting education systems against **natural disasters**, including violent weather, earthquakes, landslides, and drought. Many partner countries face political risks relating to violence, or unexpected pressures on their education systems due the arrival of refugees (see points 7.2 and 7.3). However, the consultancy team's analysis indicates that insurance contracts for political risk are relatively expensive and limited in scope. The Secretariat will investigate the feasibility of expanding the programs to include some forms of political risk, subject to a review of the performance of the proposed pilot programs.

7.7 The pilots will also assist GPE's cooperation and coordination with the Education Cannot Wait (ECW) Fund. Best practices generated by the pilots will be shared with the ECW secretariat to support their development and use of innovative finance approaches to managing risk.

8. IMPLICATIONS FOR SECRETARIAT RESOURCES AND RISK ANALYSIS

8.1 To keep costs to a minimum and to continue to operate within GPE's existing governance structure, the Secretariat proposes to establish pilot programs by building education risk finance tools into existing regional insurance programs. Indicative options for consideration by the FRC are outlined in the table below.

	Description	Potential pilots identified by consultancy team	Considerations
Option 1	**One** country	Madagascar, Senegal, Mali, Burkina Faso	• Focused work program • Lower build time to establish pilot • Focuses Secretariat and donor/partner resources • Highly dependent on a single trial • Little diversity and limited learning • Risk of excluding interested partners and donors
Option 2	**One to three** countries	Madagascar, Senegal, Mali, Burkina Faso, Niger, The Gambia, Somalia	• Greater spread of geographies • Regional grouping lowers transaction costs per country • Focuses Secretariat and donor/partner resources

			• Overhead costs of managing support from multiple donors
Option 3	**Three to five** countries	Madagascar, Senegal, Mali, Burkina Faso, Niger, The Gambia, Malawi, Kenya, Ethiopia, Mozambique	• Additional feedback from larger scale piloting • Diverse economies and geographies means more lessons learnt • Larger economies, so tests feasibility at scale • Large time and resource commitment by Secretariat • Lower capacity to deliver additional innovative finance programs • Higher fundraising effort required

8.2 Operationalizing the proposed pilot will require initial investments in policy support to DCPs and technical support to ensure fair prices for the resulting contracts. The Secretariat estimates **indicative start-up costs** of US$230,000 per pilot country based on cost centers set out below. The Secretariat will source funding to structure these transactions and pay premiums in accordance with the contributions and safeguards policy, and expects enthusiastic support from a range of foundations and bilateral donors. The small-scale pilots proposed here do not require the Secretariat to recruit additional staff. The Secretariat has sufficient in-house capacity, which would be complemented with consultancy support paid for by targeted financing.

Cost basis Indicative cost centers, rates *per* pilot country					
	Expert consultancy: vulnerability modelling	Cross-support: World Bank Disaster Risk Financing and Insurance Program (DRFIP)	Administrative support: GPE Country Support Team (CST)	Premium fundraising support: GPE Partnerships & External Relations Team (PERT)	Stakeholder dialogue
Unit	Day	Day	Day	Day	Mission
Unit cost US$	1,000	1,000	500	500	15,000
Quantity	100	45	30	20	4
Sub-total	100,000	45,000	15,000	10,000	60,000
Total	**US$ 230,000 per pilot country**				

8.3 In addition to the indicative start-up costs, risk finance contracts require annual or semi-annual premium payments to the national-scale insurance programs identified by the consultancy team. Based on a range of estimates provided in the analytical work the Secretariat commissioned, the median premium payment per year for five years of cover is US$3 million. Coverage against more expensive or more frequent risks will be higher; coverage against less expensive or less frequent risks will be lower. On this basis, total premium requirements per country are on the scale of US$15 million for option 1 (one country), US$15 million - US$45 million for option 2 (one to three countries), and US$45 million - US$75 million for option 3 (three to five countries).

8.4 Over the longer term, the Secretariat will work to ensure these programs are sustainable, including through sharing costs with DCPs. Some countries in existing programs, such as the Cook Islands in the Pacific's PCRAFI scheme, already pay the full costs of their national catastrophe insurance contracts without any donor support.

9. PARTNERSHIP PERSPECTIVES AND NEXT STEPS

9.1 Informal discussions with partner countries regarding the possibility of supporting resilience in sector planning with risk finance instruments have been uniformly positive. The Secretariat will foreground its plan to propose pilot programs to the Board during the DCP meetings in Ghana in May 2017.

9.2 Subject to Board approval, the Secretariat will begin targeted outreach to country partners and national authorities identified in the consultancy reports, leveraging existing networks and capacity. Simultaneously, the Secretariat will raise support for Shock-Resistant Education Systems pilots amongst donor partners and private foundations.

9.3 The Secretariat will report back to the FRC in October 2017 on progress with securing the necessary resources from donors, interest from developing country partners, and technical partners.

10. PLEASE CONTACT Theodore Talbot (ttalbot@globalpartnership.org) for further information.

11. REFERENCES

- BOD/2017/03 DOC 04 Contributions and Safeguards Policy Rev. 1