CLIMATE WINDOW: REQUEST RESPONSE

Expanding Disaster Risk Financing Coverage to Education Services in Lagos State

REQUEST SUBMISSION

Nigeria faces recurrent climate shocks, particularly coastal and urban flooding in Lagos State, which disrupt education services, damage infrastructure, and create a financial burden on households and government. Lagos has recently introduced parametric flood insurance as part of its broader climate resilience agenda; however, approximately 60% of schools in Lagos are non-state (private) and therefore fall outside state-run insurance and contingency mechanisms. This leaves the majority of schools, and children, without pre-arranged financial protection against flooding, prolonged school closures and learning loss.

This request provides an assessment of how Lagos' existing DRF mechanisms, especially parametric flood insurance, can be extended or adapted to protect the wider education system, including the non-state sector, and to explore options at both state and federal levels.

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Disclaimer

The findings, interpretations, and conclusions expressed here are entirely those of the authors and do not necessarily reflect those of the ERICC Helpdesk, ERICC partner organisations, the International Rescue Committee, or the UK government.

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EXECUTIVE SUMMARY

This report assesses the feasibility of expanding disaster risk financing (DRF) to support education system resilience and continuity of learning in Lagos state. It responds to growing flood risk that increasingly disrupts learning, damages school infrastructure, and threatens the financial viability of Lagos' large private school sector.

Recently, Lagos has taken an important step in disaster risk management through development of the Lagos Parametric Flood Insurance Programme. While this instrument is not designed to support the education sector, it offers a valuable template as well as key assets that can be leveraged to support a DRF mechanism for the education sector.

There are, however, a number of challenges to developing a DRF mechanism for the education sector. These include fragmented responsibilities and data collection practices within the education sector; poorly defined coordination between education authorities, emergency management agencies, and financial actors; the absence of a comprehensive, georeferenced school registry; limited loss data describing the costs of flood events on the education sector; and the lack of established mechanisms to channel funds to private schools.

This report identifies a number of design principles for advancing DRF for education in Lagos:

- A layered financing approach is essential, combining rapid-response continuity funding with insurance-backed recovery financing.
- Delivery systems matter more than technical design—the absence of mechanisms to identify schools and disburse funds quickly are the primary constraint.
- Inclusion of private and unregistered schools is critical to protecting all learners.
- Institutional ownership and coordination must be clarified, with education authorities playing a central role.

The report also assesses four potential levers for supporting education-focused DRF in Lagos. These are not competing alternatives but components of a single architecture that matures over time. The architecture includes an immediate no-cost action, a near-term operational foundation, its medium-term insurance extension, and an enrolment mechanism through which non-state schools participate. The table below summarises the options; the full assessment begins on page 23.

Overall, expanding DRF to education in Lagos is feasible but requires a shift from a purely financial or technical framing to one focused on institutional systems, data infrastructure, and service delivery. Strategic investments in these areas, alongside pilot financing mechanisms, can position Lagos as a global leader in protecting education from climate-related shocks.

Table 1: Proposed Levers for Education-Focused DRF in Lagos State

	Lever 1: Adapt Lagos Parametric Flood Insurance Programme	Lever 2: Education Continuity Fund	Lever 3: Insurance-Backed Education Continuity Fund	Lever 4: Pooled Non-State Mechanism
What it does	Amends the existing solution's contingency plan to include an education allocation for the 6 pre-defined response packages. No change to the insurance product itself.	Pre-capitalised fund providing rapid grants to enrolled schools within days of a qualifying flood. Finances 6 pre-defined response packages.	The Education Continuity Fund backed by a parametric insurance layer that replenishes the fund after severe events. Insurance serves as a fiscal backstop, not the primary response mechanism.	The enrolment and distribution mechanism through which private schools participate in the fund. Schools join via their association; a broker aggregates the portfolio; payouts reach schools directly via mobile money. This is not a separate mechanism, it is how private schools access Levers 2 and 3.
Speed of response	21 - 30 days	Days	Days	TBD
Covers non-state schools	Weakly - no existing payment channel to private schools, earmarking difficult to enforce	Yes, if distribution pathways built	Yes	Yes - this is its core purpose
Premium / capitalisation	No additional cost	Modest initial capitalisation	Premium financing required	Subsidy essential for low-cost schools

Prerequisites to operation	Agreement on amendments to the contingency plan, defining payment infrastructure	Requires institutional home, governance, payment infrastructure	Requires functioning fund + actuarial assessment + premium pathway	Requires network mapping; broker mandate; enrolment systems; scales over time
Recommendation	Pursue in parallel	Core recommendation	Natural maturation of Lever 2	Enrolment design feature

PURPOSE AND ANALYTICAL BOUNDARIES

This report has been prepared to support FCDO Nigeria in identifying potential mechanisms for expanding DRF coverage to education services in Lagos State. It establishes a base of information to guide decision-making and provides a bridge toward future technical design, structuring, and pilot development. It does not include actuarial modelling, pricing, product structuring, procurement design, or risk placement.

This report was the result of a desk-based scoping exercise, strengthened by interviews and a validation workshop with representatives from the National Emergency Management Agency, the Ministry of Finance, the Lagos Office of Education Quality Assurance, the Lagos Ministry of Basic and Secondary Education, private school associations, and private insurance companies involved in the Lagos Parametric Flood Programme.

LANDSCAPE AND GAPS ANALYSIS

Education and Climate Risk in Lagos

Education Sector Overview

Lagos hosts one of the largest and most complex education ecosystems in Sub-Saharan Africa, characterised by a large private sector, rapid growth in low-cost private schools, and persistent regulatory challenges. Understanding this landscape is critical for designing a new DRF instrument that supports the education sector.

The 2018-2019 Lagos State Annual School Census identified 1,687 public pre-primary, primary, and secondary schools serving 1,074,809 learners. However, the number of public schools has not kept pace with rapid population growth. As a result the private sector has filled the gap with a range of options from elite international schools to low-cost private schools serving extremely poor households.

The exact number of private schools in Lagos is estimated to be around 20,000.[1] As of 2023, 5,688 private schools were formally registered with the Lagos Office of Education Quality Assurance.[2] Fees

[1] UNESCO. (2021). Non-state Actors in Education: Who Chooses? Who Loses?

[2] Office of Education Quality Assurance, Lagos State, Nigeria. 2023 Annual Report.

associated with registration as well as strict requirements for school facilities, land ownership and teaching staff present significant barriers to registration for most low-cost private schools. Education authorities recognise that unregistered schools contribute to the government's mandate to provide 10 years of free, compulsory education for all children. As a result, authorities support private schools to register rather than shut them down. A recent effort has started the registration process for an additional 10,000 private schools.

The registration gap is a fundamental barrier to protecting education services and a technical constraint for DRF design. Unregistered schools are not captured in current data collection efforts, making them essentially invisible to education authorities. As a result, it is impossible to understand the scale and scope of flood risk faced by private schools, systematically build resilience among these schools, or rapidly address the impact of flooding after it occurs. The registration gap also poses a technical challenge for any DRF instrument. A DRF instrument will need to identify and describe individual schools and maintain that information over time. Also, the status of being unregistered could be a barrier for any instrument that relies on government agencies as an intermediary, insured party or contributor towards insurance premiums because unregistered schools are not recognised by the government. While these are significant challenges, excluding unregistered schools from a DRF product would systematically penalise the poorest households who are most likely to be enrolled in these schools. Importantly, education authorities interviewed for this report were supportive of including both state and private schools in any future DRF mechanism. Additionally, the FCDO PLANE programme has collaborated with the Federal Ministry of Education to develop a National Policy on Non-State Schools, which may facilitate more rapid registration moving forward.

Climate Risk and Education

Schools in Lagos face escalating risks from climate change that threaten both physical infrastructure and continuity of learning. Due to Lagos' low-lying coastal geography, high water table, and rapid urban expansion, the education sector is exposed to pluvial flooding, coastal inundation, and extreme rainfall events. Flooding commonly leads to temporary school closures, damage to infrastructure, furniture, and learning materials, unsafe routes to school, absenteeism and repair costs. Even when schools are not impacted directly, they may be used as shelters for displaced populations.

Climate projections suggest that heavy precipitation and sea-level rise will intensify these hazards, raising the likelihood of future school disruption. Interviews provided anecdotal evidence that this is already occurring. One individual interviewed for this report observed that in the past private schools in Lagos were typically closed for about one week per year due to flooding, but in recent years schools were closed for two weeks or more. Interviews also indicated that both private and public schools work to mitigate the impact of flooding by moving materials and equipment to higher ground, shifting classes to temporary learning spaces and employing distance learning approaches during school closures.

Despite the growing risk, there is no systematic data collection on the impact of flooding on the duration or frequency of school closures, damage to school infrastructure, recovery costs, attendance or enrolment. This is a foundational constraint for any DRF mechanism: without it, the scale of education disruption from flooding cannot be quantified, payout levels cannot be calibrated with confidence, and the case for education-linked DRF rests on inference rather than documented impact. Any mechanism will therefore need to generate this evidence through its own operation.

While both state and private schools are impacted by flooding, the distribution and severity of risk differ significantly between the two types of schools. In general, state schools benefit from more durable, purpose-built facilities, government ownership and maintenance of land and buildings,

access to public funds for repairs, and inclusion in state-led emergency response planning. These factors can mitigate damage and promote recovery after flood events.

Private schools face higher and more systemic flood risk. Private schools are not eligible for public infrastructure rehabilitation programmes, and interviews suggested that both registered and unregistered private schools are not included in state-led emergency response planning. Many private schools operate in rented buildings that are of lower quality than public schools. Private schools are also more likely to operate in informal settlements and high density neighbourhoods where flooding is more likely to occur.

Low-cost private schools operate on thin margins and low cash flow. Many collect fees as low as 8,000 naira per term and rely on monthly payments from students. Flooding creates acute business risks for low-cost private schools which can erode financial viability and lead to permanent closure. Interviews with private school associations reveal that when flooding occurs, private school providers cope by borrowing money from lenders, fundraising within the community, delaying staff salaries, or reducing staff in order to make repairs. If classes are interrupted for extended periods of time, schools may face reputational damage and reduced revenue if parents enrol children in other schools or refuse to pay fees while the school is closed. If schools delay salary payments, teachers and staff may look for other opportunities, further eroding the quality of learning. Interviews with private school associations suggest that closures lasting more than two weeks create significant financial stress.

Desirable Design Features

The education landscape points to five design features that any education DRF architecture should incorporate.

- **Data Generation:** Systematic collection of data on the impact of flooding on education can improve the basis risk and cost of a DRF instrument over time.
- **Inclusivity.** The vast majority of schools in Lagos are private. Approximately 70 per cent of the private schools are unregistered, and the lowest cost schools are least likely to be registered. To protect learning for all children, all schools must be able to access a DRF mechanism.
- **Speed.** The most damaging effects of flooding occur in the first few weeks. Any mechanism must include a financing layer that operates faster than insurance can deliver.
- **Predictability.** Schools need to know in advance what support they will receive, on what terms, and through what channel. A DRF mechanism must offer pre-agreed triggers, pre-defined responses, and pre-established payment channels so that when a flood occurs, the financing response is automatic rather than negotiated.
- **Low Transaction Burden.** Many private schools have minimal administrative capacity. A DRF mechanism that requires schools to submit claims, provide documentation, or navigate procurement processes will fail. The mechanism must minimise transaction burden on individual schools with data collection handled by aggregation structures and disbursements managed though automated digital payment systems.

Disaster Risk Financing: Examples from Lagos and Abroad

Lagos Parametric Flood Insurance: Structure and Operations

This section describes the Lagos Parametric Flood Insurance Programme, which provides lessons for the design of any future education focused DRF mechanism as well as key assets that could be leveraged.

Product Overview

The programme was developed over two years under the Insurance Development Forum (IDF) Tripartite framework, with technical co-leadership from AXA Climate and Swiss Re, flood risk modelling by JBA Risk Management, satellite monitoring by ICEYE, and contingency planning contributions from African Risk Capacity (ARC) and United Nations Development Program (UNDP). It was co-financed by the InsuResilience Solutions Fund (ISF), supported by the Federal Ministry for Economic Cooperation and Development (BMZ).

Lagos State, represented by the Ministry of Finance, is the insured entity. The product is a sovereign-level parametric instrument designed to provide macro-level financial protection that strengthens the capacity of Lagos State Emergency Management Agency (LASEMA) to respond to severe flood events affecting vulnerable populations. It is not a household insurance product, a social transfer, or an asset replacement facility. In its initial phase, the programme covers approximately four million people across seven Local Government Areas (LGAs) selected on the basis of flood risk and concentrations of poor households.

Regulatory approval was sought through the National Insurance Commission (NAICOM). Four local insurers—AXA Mansard, Cornerstone, Leadway, and Lasaco—collectively retain approximately 25 per cent of the risk, with Africa Re and international reinsurers providing the remainder. The programme is live as of March 2026, with an initial three year policy term. Premium financing is heavily donor-dependent with subsidy coverage of 90 per cent in year one declining to 70 per cent by year three, and the expectation that Lagos State will eventually assume full premium responsibility. Whether this transition materialises will be a critical test of sustainability.

Trigger Design

The programme employs a satellite-based flood footprint trigger, a significant departure from more established rainfall-based approaches. The design team assessed multiple trigger options including excess rainfall indices, river discharge measurements, and flood observation via satellite. Rainfall-based triggers were rejected on the grounds of unacceptable basis risk, though the rainfall analysis provided useful background for the flood footprint design: Lagos's flood risk is driven by a complex interaction of pluvial, fluvial, and coastal hazards, meaning that rainfall intensity is a poor predictor of actual flood extent. Heavy precipitation events occur frequently without producing severe flooding, while significant floods can result from coastal storm surge or upstream dam releases unrelated to local rainfall. Weather station data was also explored but proved inconsistent in quality and availability.

The selected trigger relies on flood footprint data from ICEYE, a private satellite operator using Synthetic Aperture Radar technology to detect standing water. The trigger is defined by flood at depths of 50 centimetres or more, overlaid on population-weighted calculation points. The 50-centimetre threshold was chosen on the basis of flood damage literature: at this depth, damage to non-engineered structures reaches approximately 50 per cent of maximum potential, and human safety is materially compromised. The design balanced technical performance (minimising basis risk) against cost. ICEYE monitoring fees amount to less than 5 per cent of premiums for 24/7 satellite monitoring with the best available technology.

Payout Structure

The payout function is linear: the size of the payment increases with the number of people located in areas flooded at 50 centimetres or more. If that number is below a pre-defined deductible, no payout is made. Above the deductible, a fixed dollar amount is added per affected person, up to a defined maximum. The payout function attaches at approximately a one-in-five year return period flood event and scales to a maximum payout of USD 7.5 million. The per-person payout figure is an

actuarial proxy used for the calculation. The payout is a lump sum paid to the government, which allocates it to emergency response activities based on a contingency plan. The payout is not a cash transfer to individuals. Interviews noted that this distinction proved difficult to communicate to stakeholders who sometimes assumed individual compensation would occur.

Governance and Fund Flows

For a payout to occur, the following steps must be in place: ICEYE detects and confirms the flood event; JBA translates the flood footprint into a payout figure; the insurer and reinsurer process the claim; and funds are transferred to the Lagos State Treasury, from which they are released to LASEMA for operational deployment. A dedicated account within LASEMA was created to receive and track funds, though this arrangement is untested in practice as of the time of this report.

Multiple agencies, the Ministry of Finance, the SDGs Office, and LASEMA, each had legitimate interests in programme ownership, generating persistent coordination challenges during development. The absence of a single, clearly accountable institutional owner was identified by interviewees as one of the most difficult design challenges. These dynamics carry direct implications for any effort to extend the architecture to education, which would introduce additional actors into a crowded governance space.

Eligibility, Beneficiaries, and Data Constraints

Constructing the exposure layer proved to be one of the programme's most significant challenges. Local data sources including the Lagos Bureau of Statistics, the state's social registry, and official population datasets from federal and state agencies were found to be incomplete, inconsistent, or unreliable. Official datasets covered only 70 to 75 per cent of the population with significant inaccuracies. The programme ultimately adopted the WorldPop global population dataset, disaggregated to a 100-by-100 metre grid, as the most credible and politically neutral data source available. The selection of which LGAs to cover rested substantially on administrative judgement rather than empirical targeting.

For this report, the most significant finding is that the programme contains no sector-specific eligibility dimension. Neither state nor private education providers are identified as eligible entities, beneficiaries, or even as a distinct category within the exposure model or contingency plan.

Intended Use of Payouts

The contingency plan sets out how payouts are to be used in qualifying events. At the maximum payout of USD 7.5 million, approximately 70 per cent of allocations are directed to food and non-food items for LASEMA relief camps with the remainder across health, construction, water, shelter, and agricultural inputs. The plan does not include any allocation for education: no provision for school clean-up, temporary learning spaces, materials replacement, or any other form of education continuity support.

Interviewees raised substantial concerns about enforceability. The plan was described as conceptually necessary but operationally fragile, with underdeveloped auditing and accountability mechanisms. Once funds enter the Lagos State Treasury, the ability to enforce earmarking for specific sectors is limited. For any future education-linked mechanism, this raises a critical design question: can education-specific disbursement be credibly ring-fenced?

Payout Timeline and Implications for Education

The payout timeline under best-case conditions is 21 to 30 days from the peak of a flood event. Parametric insurance therefore functions as reimbursement of a pre-financed response, providing government agencies with confidence that expenditures incurred during the immediate aftermath

will be covered. It does not replace first-day response funding. Faster payout timelines are technically feasible with appropriate product design. ARC has demonstrated the ability to transfer funds to governments within five days. The trade-off is between speed, cost, and basis risk: achieving faster payouts requires a higher level of preparedness and specific product design choices that must be built into the mechanism from the outset.

For education, these timing characteristics carry particular significance. Learning disruption begins on the first day of a flood, not three to four weeks after the peak. An insurance payout arriving weeks after the event cannot prevent the disruption, particularly for vulnerable students in low-cost private schools operating on thin margins. Its value would lie in financing medium-term recovery. An education focused DRF mechanism should address immediate needs through pre-positioned funds or contingency budgets with insurance supporting the costlier and slower work of system restoration.

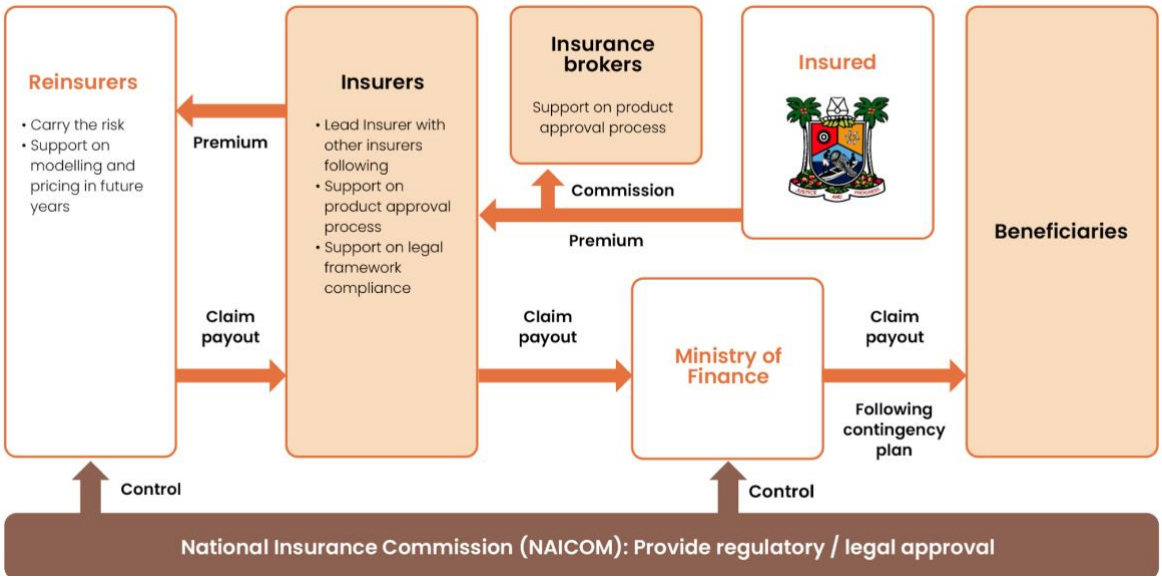

Figure 1: Lagos Parametric Flood Insurance Programme. Source: AXA Climate.

DRF Instruments from Other Contexts

As part of the landscape analysis, we examined DRF instruments from other contexts. We summarise lessons from these instruments below. Annex 2 provides additional information on individual instruments.

DRF Instruments Supporting Education in Other Contexts

There are few DRF programmes that specifically target the education sector, but the ones that do provide emerging lessons for the design of a new education focused DRF mechanism in Lagos:

- **Predefined triggers can rapidly mobilise funding**. There is a growing shift from humanitarian response toward pre-arranged systems that utilize triggers to release funding rapidly when shocks occur. This addresses a longstanding challenge where financing has depended on post-disaster appeals and discretionary budget reallocations.
- **Integrating DRF mechanisms within broader government systems promotes sustainability**. Embedding DRF within disaster management agencies, line ministries, and budget processes can improve local ownership and facilitate scaling. UNICEF's TTI programme also highlights the potential of engaging insurance markets to expand available risk transfer solutions.

- **Existing education-focused DRF mechanisms have important limitations for Lagos**. Evidence on the cost-effectiveness, scalability, and sustainability of education-focused DRF mechanisms is limited. Existing programmes focus on household-level or humanitarian responses rather than support to education systems or schools. Additionally, most programmes are designed for rural drought or cyclone risks, not urban flooding. A future DRF model for education in Lagos will require significant adaptation including novel approaches for channelling resources to schools, provisions for private schools, and triggers that are calibrated for urban flood exposure.

DRF Instruments Supporting Other Sectors from Other Contexts

DRF programmes that support other sectors are more numerous and more established. Lessons from these programmes point to design principles that can inform the scoping of an education focused DRF instrument.

- **Sector-specific products can be built on sovereign platforms but require dedicated disbursement pathways.** Several DRF models demonstrate that sovereign parametric products can serve specific sectors if the disbursement architecture is explicitly designed to route funds to the intended beneficiaries. For Lagos, a mechanism would need to specify how funds flow from the treasury to schools, who authorises disbursement, and how compliance is verified.
- **Aggregation is essential, but the aggregator must be credible and operationally capable.** Individual private school enrolment is not feasible in Lagos. Any aggregator must have visibility over the population to be covered, operational capacity to manage disbursement, and institutional credibility. Identifying such an aggregator is a precondition for design.
- **Contingency planning must be specific, enforceable, and owned by education authorities.** ARC's requirement that countries develop approved contingency plans before coverage is activated is central to its operational logic. The contrast with the Lagos flood programme is instructive: during interviews the programme's contingency plan was described as 'conceptually necessary but operationally fragile.' Any education focused DRF mechanism must include a pre-agreed response plan that is owned by education authorities and provides cost estimates, actions to be financed, implementing entities and a verification process.
- **Insurance alone cannot address education's most time-sensitive needs.** DRF models operate within a risk layering framework. For education in Lagos, the most time-sensitive needs such as school reopening, emergency clean-up and student tracking require a response speed that insurance cannot deliver. A pre-positioned contingent fund with early warning triggers could finance rapid responses, while insurance could support the costlier, slower work of system restoration.
- **Delivery infrastructure matters more than trigger sophistication.** The quality of pre-positioned delivery systems determines whether disaster financing translates into timely assistance. The binding constraints for education in Lagos are not in hazard modelling or trigger design but in the absence of institutional infrastructure to deliver funds to schools—particularly private schools—rapidly, transparently, and accountably. Building school registries, payment channels, and coordination mechanisms is a prerequisite for any education focused DRF model.
- **Start with demand and institutional commitment, not with modelling.** One interview with an insurance industry representative suggested that data and modelling are far less challenging than demand and institutional readiness. The critical questions are not actuarial but practical—what do schools and education systems need protection for most? What will whoever is paying the premium actually be willing to fund? How sensitive are school fees and education budgets to premium costs? If there is demand and institutional commitment, a

product can be designed and deployed rapidly; without them, no amount of modelling will produce a viable instrument. This suggests that feasibility testing for a new DRF model should prioritise stakeholder appetite and fiscal pathway analysis over trigger design.

- **Donor premium support is necessary but transitional—sustainability requires a fiscal home.** Sustained government financial commitment has been the single most important determinant of programme viability. For education, the affordability question is compounded by the fact that premiums would need to cover both public and private schools. Any scoping of potential DRF mechanisms must identify which budget line and which ministry will sustain premiums over the long term.
- **Link insurance to sectoral reform not just to risk transfer.** The most effective DRF instruments embed risk transfer within a broader framework of governance improvement. In Lagos, participation in insurance could incentivise registration of private schools. This could simultaneously build the school registry data that the product requires, foster greater coordination with private schools, and promote inclusion of private schools in regular data collection efforts.

Education Sector Engagement with DRF Mechanisms in Lagos

State education authorities we spoke with were not aware of the Lagos Parametric Flood Insurance Programme. One interview suggested that the education sector cannot be a direct beneficiary under the current terms of the programme, though this requires additional investigation to confirm. Interviews did, however, identify the options for state schools to finance repairs after a flood.

State schools receive 250,000 naira per month for repairs as part of their monthly running budget. Schools can utilise these funds to make minor repairs on their own. If costs exceed this amount, then schools can request that the state make repairs. To do this, a school must work with the Office of Quality Assurance to document damages and submit a report to the Permanent Secretary for the Lagos State Ministry of Basic and Secondary Education. As part of this process the Office of Quality Assurance will make recommendations to the school about safety and learning continuity measures. The Lagos State Ministry of Basic and Secondary Education will evaluate assessments from impacted schools and can make funding available from emergency budget lines or SCRPS. Repairs to schools are overseen by SUBEB or SCRPS, not individual schools. Interviews indicated that the lengthy assessment, approval, and procurement process can lead to school closures lasting weeks or months. In the event of extensive damage to many schools, the Commissioner for Basic and Secondary Education can request additional funds from the Governor.

Representatives from private school associations were also unaware of the Lagos Parametric Flood Insurance Programme. One participant believed that some wealthy private schools might obtain flood insurance from the local insurance marketplace but said this would be extremely rare for most private schools. Representatives of private school associations had no knowledge of private schools or private school associations receiving support from state education authorities following flooding events.

Data Landscape and Constraints

DRF instruments require three categories of data: hazard data describing the frequency and severity of the peril; exposure data identifying what or who is at risk; and loss data linking hazard events to their consequences. The Lagos Parametric Flood Insurance Programme has tested these requirements and generated important findings about what is available, what is reliable, and what must be substituted. This section reviews each category as it relates to a potential education-focused mechanism and identifies the specific constraints that would need to be addressed for any of the DRF levers under consideration.

Hazard Data

Lagos faces a complex flood hazard with pluvial flooding from rainfall exceeding drainage capacity, fluvial flooding from the Ogun River, and coastal flooding from storm surge and tidal inundation. Compound events with multiple drivers can be substantially more severe than any single cause alone. Lagos floods multiple times per year, creating a fundamental design tension between affordability and relevance.

The Lagos Parametric Flood Insurance Programme's hazard data infrastructure—JBA's probabilistic flood model and ICEYE's satellite monitoring—is technically adaptable for education, since the underlying peril is identical regardless of whether the exposure is defined as people or schools. However, there are two important caveats for an education application. First, the JBA model is a global product that has not been calibrated to Lagos and may underestimate risk given the city's drainage infrastructure, informal settlement patterns, and land reclamation history. Second, ICEYE is less reliable for small, localised events or short-lived flash floods.

At the national level, NiMet produces an annual Seasonal Climate Prediction which NIHSA translates into location-specific flood outlooks. NEMA convenes multi-sectoral stakeholder meetings to review predictions and issue advisories. NEMA also operates a GIS laboratory on remote sensing which emergency management officials described as improving in reliability, with 40 years of historical data and a recently launched 'map room' that combines ground station readings with satellite data. However, these are macro-level tools that are not sufficiently granular or real-time to serve as parametric triggers.

The key question for the education sector is whether the trigger threshold and spatial resolution are appropriate for education-relevant events. The Lagos Parametric Flood Insurance Programme's trigger is calibrated for catastrophic citywide events, attaching at approximately a one-in-five year return period. Schools, however, can be rendered inoperable by localised flooding well below this threshold. A single neighbourhood flood may close multiple schools without registering as significant at the citywide level. Schools may also be disrupted indirectly: commandeered as emergency shelters, cut off by impassable access routes, or affected by loss of electricity and water supply. These indirect disruption pathways are not captured by a trigger based solely on flood depth at a given location.

Whether an education-linked trigger can capture these lower-severity, higher-frequency disruptions is a design challenge. Industry stakeholders suggested exploring supplementary trigger mechanisms, including school attendance registers (if digitised), operational activity proxies, or mobility data near school locations. One precedent was cited where a flood product with excessive basis risk was restructured around a government-reported population-affected model with secondary validation through independent reports and satellite data—an approach that separates the payout index from credibility validation. Sovereign risk pool stakeholders proposed a simpler approach: placing sensors near schools with satellite data providing the broader hazard picture.

Exposure Data and the School Registry Gap

Exposure data proved the most problematic data category in the Lagos Parametric Flood Insurance Programme, and interviews confirmed this would likely extend to education. The programme adopted the WorldPop global population dataset, disaggregated to a 100-by-100 metre grid, as its primary exposure layer. It was selected not for precision but as the most credible source available after local datasets proved inadequate. Lagos State databases covered only 70 to 75 per cent of the population with significant inaccuracies, and figures conflicted between federal, state, and ministry sources. The social registry was incomplete and outdated. Because the data could not distinguish vulnerable from non-vulnerable populations, the selection of covered LGAs rested substantially on administrative judgement.

For an education product, the exposure challenge is more severe. The Lagos Parametric Flood Insurance Programme needed only to know where people live; an education instrument needs to know where schools are located, how many pupils attend them, whether they are private or public, and ideally their physical condition and registration status. No single, complete, georeferenced database exists that could serve as an exposure layer for a parametric product. State education officials indicated that GPS coordinates for all public schools are held by SUBEB and the Ministry of Basic and Secondary Education. The Office of Quality Assurance collects addresses of private schools as part of the registration process but not GPS. Accuracy and update frequency could not be verified for either dataset.

This is the single most significant data constraint for education-linked DRF in Lagos. The problem has several dimensions. *Coverage*: the majority of schools are private, and a significant proportion are unregistered. Any registry based solely on approved schools would exclude the institutions serving the most vulnerable populations. *Accuracy*: school data is fragmented across SUBEB, the Ministry of Basic and Secondary Education, and the Office of Education Quality Assurance with no integrated database and no established mechanism for data sharing. *Recency*: private schools in Lagos open and close frequently, so a registry would need ongoing maintenance. *Political sensitivity*: government institutions were described as protective of education data, and any dataset quantifying the private sector touches upon contested questions of registration and regulatory oversight.

Several potential approaches to addressing this gap emerged from interviews. A pre-registration layer that collects basic information could be added to the Office of Quality Assurance's private school registration process. If participation in the DRF mechanism were contingent on pre-registration then this would incentivise unregistered schools to begin the registration process. This would increase education authorities' knowledge of the private sector and build the data necessary for a DRF instrument. One state education official expressed support for this approach and indicated that it would be possible to combine private school registration data with public school data to create a single comprehensive school database. However, messaging for this approach must be sensitive to the fact that the requirements for registration remain impossible for many private schools to meet. Alternatively, private school networks could serve as aggregation units, building coverage from their members. Third-party data such as school feeding programme data or demographic modelling could also be used as a proxy.

Loss Data and the Evidence Gap

Loss data—historical records linking flood events to their consequences—is needed to calibrate payout levels and give the insurance market confidence in pricing. The Lagos Parametric Flood Insurance Programme found loss data to be essentially non-existent in usable form. Historical flood loss records were unreliable, government emergency spending records were incomplete, and no systematic dataset linked specific events to their impacts. The design team resorted to reviewing news reports and using international humanitarian benchmarks to ground the per-person payout rate.

For education, the loss data gap is almost total. No systematic record exists documenting how floods have affected public or private schools. The Office of Quality Assurance assesses damages through inspections but does not keep a systematic record of the findings. No dataset tracks causes of school closure, duration of closure, repair costs, or the impact on attendance or dropout following floods.

This gap has two practical consequences for DRF design. First, it makes it difficult to calibrate payout levels with confidence. How much does it cost to reopen a flood-affected school in Lagos? The answer varies enormously by school type, size, and location, and no empirical data exists from which to derive even a rough average. The existing parametric programme faced the same problem and addressed

it through international humanitarian benchmarks and improvised calibration, an approach that could be replicated for education using structured interviews with school operators to estimate indicative costs.

Second, the loss evidence gap means the case for education DRF rests on inference rather than documented impact. Floods are widely understood to disrupt schools in Lagos, but the scale and consequences have not been measured. Building the evidence base through retrospective case studies or structured recall interviews with school operators would both strengthen the policy case and provide the calibration data any financial product would eventually require. Practical indicators that could serve as loss proxies include: days of closure, flood depth or severity in the school's area, photographic evidence of damage, and attendance disruption. These are not technically demanding to collect, but no institutional mechanism currently exists to do so.

Industry interviewees identified the loss evidence gap as the most challenging constraint for product design, but proposed aggregation as the primary mitigation strategy. Rather than insuring individual schools, which would require granular loss data, insuring an aggregating entity that distributes funds according to need diversifies basis risk across a portfolio of schools. Across a large enough portfolio, positive and negative basis risk tend to average out, reducing the impact of imprecise calibration on any individual school.

Despite the absence of loss data, industry stakeholders argued that the data requirements for launching a product are commonly overestimated. A first-generation education product could be designed using reasonable assumptions for an estimated reopening cost per school and then refined as real experience accumulates. One stakeholder proposed an outcome-based approach: define the desired response package (e.g. temporary learning spaces, teacher salary bridge, materials replacement) and cost that as the payout basis, accepting imprecision initially but generating data through implementation. However, stakeholders cautioned that a crude instrument requires strong expectation management. If a product is known to be imprecise, transparency about its limitations is essential to avoid backlash if payouts do not match perceived losses or when premiums increase after recalibration.

Institutional Data Infrastructure

The data gaps described above reflect underlying weaknesses in institutional data infrastructure rather than technical limitations alone. Lagos State does not have a unified system for collecting, maintaining, and sharing data across government agencies. The Lagos Parametric Flood Insurance Programme encountered this at every stage. For education, at least four distinct bodies hold partial and sometimes overlapping data: the Ministry of Basic and Secondary Education, SUBEB, Office of Education Quality Assurance, and the various non-state coordination bodies. No single entity has comprehensive visibility over the sector, and there is no established mechanism for data sharing between agencies, let alone between education authorities and the emergency management, finance, and insurance stakeholders involved in DRF.

This fragmentation was consistently identified across interviews as the most fundamental constraint. Industry stakeholders emphasised that any education DRF product would require a single institutional owner with authority over both the exposure data and the contingency plan. Sovereign risk pool stakeholders framed it as a governance problem: the data needed to launch a product is less demanding than commonly assumed, but the institutional arrangements needed to produce, maintain, and use that data are far more demanding than typically appreciated. DRF consultants described a broader national landscape where disaster finance remains weak, anticipatory action is missing, and the private sector is under-utilised. Education is structurally invisible in current disaster finance, not excluded by policy, but absent from the institutional and budgetary arrangements that determine who receives support. Emergency management officials confirmed that disaster budgets

are not categorically allocated by sector: funds can in principle be used for education, but education competes with all other needs through post-event discretionary decisions. Building DRF for education therefore requires constructing new institutional relationships and data flows, not simply adding education to existing systems.

Entry Points for DRF for Education

Despite the gaps identified above, several potential entry points exist within Lagos State's governance and financing architecture through which DRF mechanisms could be integrated into the education sector.

Education Sector Planning

The annual budget process for Lagos State involves several stages of planning, consultation, and legislative review. The process is led by the Lagos State Ministry of Economic Planning and Budget in coordination with the Ministry of Finance, line ministries, departments and agencies, and the Lagos State House of Assembly. The fiscal year runs from January to December, but preparation begins six to nine months in advance. Any DRF programme seeking premium support from state education authorities should aim to be included in the annual budget.

The existing processes used to assess and approve school repairs following disasters is slow but does provide a functional pathway through which disaster recovery financing could potentially be routed. Any DRF mechanism designed to support public schools would likely need to align with these existing processes for infrastructure rehabilitation and financial authorisation.

The Office of Quality Assurance maintains relationships with both public and private schools through registration and inspection processes. It may be politically challenging to relax the registration requirements that prevent many private schools from registering, but it should be possible to identify and maintain a complete list of all private schools in Lagos. Such a list could support a DRF mechanism, promote greater understanding of the private sector by education authorities, and support future registration and inspection efforts.

The Education Management Information System includes the location, enrolment, and basic infrastructure of public schools. Private school data is collected through a parallel process, the Statewide Enumeration of Private Schools (SWEPS), managed by the Office of Education Quality Assurance, which feeds into the EMIS database. Interviews indicated that designers of a new DRF mechanism could access this data with authorisation from the Ministry of Basic and Secondary Education. This data would allow for understanding the exposure of public schools to flood risks.

Non-State Education Coordination Mechanisms

Private school associations could play a critical role in facilitating the participation of non-state schools in DRF mechanisms. Because associations aggregate large numbers of schools, they could potentially serve as intermediaries for data collection, risk pooling, communication, and financial distribution. This would reduce the transaction burden associated with engaging thousands of individual schools and could enable DRF instruments to operate at scale. In addition, association networks may provide an avenue for extending risk management information and disaster preparedness guidance to private school operators, many of whom currently have limited engagement with government disaster planning processes.

Existing collaborations between private school associations and the Office of Education Quality Assurance also provide an opportunity for a DRF mechanism to build on. For example, in 2025 the SEED Foundation and the Office of Education Quality Assurance organised a workshop with the aim

of addressing barriers to private school registration. The workshop connected private school proprietors, education authorities and financial institutions and provided training on financial literacy, registration requirements and opportunities to access credit[3].

Fiscal and Budgetary Processes

The financial architecture of any education-linked DRF mechanism, including who pays the premium, who holds the policy, and how funds reach schools after a triggering event, is as important as the technical trigger design. The Lagos Parametric Flood Programme offers a working model of how sovereign risk transfer is financed and how payouts are routed through government systems. However, adapting this architecture for education introduces distinct challenges around the non-state education sector, the speed requirements of education continuity, and the absence of established payment channels between government and the majority of Lagos's schools.

Premium Financing: Who Pays, and How

The Lagos Parametric Flood Insurance Programme operates on a premium subsidy model. The InsuResilience Solutions Fund provides approximately 90 per cent of the premium in the initial year, with Lagos State contributing approximately 10 per cent. The subsidy is designed to phase down over three years, during which Lagos State aims to establish an internal disaster fund to finance the premium sustainably. An education-linked product would face the same affordability challenge. Parametric products typically price above traditional indemnity insurance on a rate-on-line basis, particularly for complex perils such as flood where basis risk must be managed conservatively.

Government budget allocation. The most direct pathway would be for Lagos State to finance the education DRF premium from its education or emergency management budget. State education officials indicated that education capital budgets are held by SUBEB and the Ministry of Basic and Secondary Education, with a budget line for emergencies at these agencies and additional emergency financing potentially accessible through the Ministry of Finance. However, no interviewee identified any existing budget line that could absorb an insurance premium, and the current system is already described as insufficient for post-event repairs. Emergency management officials confirmed that Lagos has annual budget allocations for LASEMA covering emergency response, relief, and rehabilitation, but described these as insufficient for even basic response needs. At the national level, NEMA receives a percentage of the federal Ecological Fund, described as flexible and usable for disaster response, but there is no precedent for using these funds to finance insurance premiums.

Donor or development partner premium support. External premium subsidy is the most likely pathway for a pilot or first-generation product. The ISF model demonstrates that subsidy levels of up to 90 per cent are feasible in the initial phase. However, the global environment for premium subsidy is shifting: grant financing and premium subsidies are decreasing, and the UK government in particular is moving away from subsidy-heavy models. Sovereign risk pool stakeholders framed the issue directly: if there is no domestic fiscal home for the premium, the product cannot survive beyond a pilot phase. The subsidy can bridge the period while data, institutional systems, and political commitment develop, but it must be explicitly transitional.

School-level or network-level contributions. Non-state education stakeholders described insurance uptake among low-cost private schools as extremely low because of cost. Low-cost schools collect fees as low as 8,000 naira per student per term, operate on extremely thin margins, and many rely on monthly fee payments—meaning even a small additional cost can create financial stress. Industry stakeholders suggested that a small contribution could be bundled into school association membership fees to improve pooling and avoid distorted incentives from fully universal

[3] https://seedfoundation.ng/seed-lagos-oeqa-partner-to-empower-private-schools-toward-full-approval/

subsidy. However, they flagged that bundling insurance into school fees raises conduct risk (regulatory concerns about fairness, suitability, and disclosure) and recommended validation with Nigeria's insurance regulator before implementation. One school association leader reported that the Lagos State government announced in late 2025 that insurance for non-state schools would be compulsory; schools were described as interested but the premium remained the binding constraint.

Blended financing. The most realistic near-term model is a blended approach: donor subsidy covering the majority of the premium in early years, a Lagos State budget contribution demonstrating fiscal commitment, and a modest co-payment from participating schools or networks to establish the principle of contribution. Industry stakeholders proposed a five-year pathway in which the product becomes more tailored, and the premium reduces as data and loss experience improve. The structural route to reducing premiums over time, emphasised by sovereign risk pool stakeholders, is integrating DRF with adaptation investments—improved drainage, resilient school construction, urban planning. Without risk reduction, climate-driven premium increases will erode affordability. Insurance alone cannot solve the affordability challenge.

Several additional models for premium financing merit exploration. The ARC Replica model, in which education-focused organisations purchase parallel coverage triggering alongside a sovereign policy, with payouts channelled through non-governmental pathways, offers a route through which development partners or NGOs could finance coverage for non-state schools without requiring government to pay premiums for the private sector directly. Humanity Insured offers an alternative placement and premium structuring model that may be relevant for the non-state school segment. The intention of the blended approach is expressly not for government to assume the full premium burden for non-state schools, but to combine multiple financing sources—donor subsidy, state contribution, school or network co-payment, and potentially Replica-style development partner coverage—in proportions that reflect fiscal reality and evolve over time.

Policy Holding: Who Is the Insured Entity

The Lagos Parametric Flood Insurance Programme is structured as a sovereign policy held by Lagos State through the Ministry of Finance. For an education product, the question of who holds the policy is connected to who has the institutional authority, data visibility, and operational capacity to deploy funds for education purposes. Possibilities include:

Lagos Ministry of Finance. This replicates the existing model and has several advantages: a proven procurement and regulatory pathway, alignment with sovereign risk transfer mechanisms including ARC (Nigeria is already a member state with treaty-based regulatory and tax exemptions), and access to sovereign risk pooling at lower cost. Sovereign risk pool stakeholders stated that the most cost-effective structure is for the government to aggregate the risk and for a sovereign pool to transfer it. The principal disadvantage is that funds entering the treasury are subject to general government allocation processes, creating risk of diversion to non-education priorities. The Lagos Parametric Flood Insurance Programme addressed this partially by having LASEMA create a dedicated account to track fund flows, but industry stakeholders described the concern about funds not reaching intended recipients as a real concern.

Ministry of Basic and Secondary Education. State education officials identified the Ministry of Basic and Secondary Education as the most logical institutional home for any education DRF mechanism. This approach would place the policy within the education sector, strengthening the link between the contingency plan and education-specific response actions. However, the Ministry does not have insurance procurement expertise or experience managing a risk transfer product.

A dedicated education continuity fund. Industry stakeholders proposed creating an education-specific fund that is itself insured. Insurance payouts could top up a standing fund rather than flowing through the general Treasury. This was described as preferable if the Ministry of Education already has, or can establish, an emergency fund: the insurance product would function as a backstop to replenish the fund after drawdowns. This would require establishing a new fiscal instrument, but it would create a dedicated, ring-fenced financing channel for education disaster response—something that does not currently exist.

Government as policyholder for non-state schools. Sovereign risk pool stakeholders proposed a portfolio policy covering non-state schools as a public good. In this scenario, the government would aggregate the risk across the non-state sector, place it with a sovereign risk pool or the insurance market, and use participation as an incentive for school registration. This addresses the aggregation problem (individual school-level insurance is not feasible at the scale of 20,000 schools), creates a formalisation pathway, and leverages sovereign pooling cost advantages. However, it requires political commitment to treating non-state education as a public responsibility and raises questions about how payout funds would reach private school operators who currently have no formal financial relationship with the government.

Payout Routing: How Funds Reach Schools

The distribution of funds after a triggering event was identified across interviews as the single most important operational design question and the one most likely to determine whether an education DRF mechanism achieves its purpose or fails in practice.

The existing payout pathway and its timing. As described previously, the payout sequence for the Lagos Parametric Flood Insurance Programme takes an estimated 21 to 30 days under best-case conditions. Faster payout timelines are technically feasible with appropriate product design. ARC has demonstrated the ability to transfer funds to governments within five days. The trade-off is between speed, cost, and basis risk: achieving faster payouts requires a higher level of preparedness and specific product design choices that must be built into the mechanism from the outset. Parametric insurance therefore functions primarily as reimbursement and budget stabilisation, enabling the government to pre-finance response with greater confidence, rather than as a mechanism for putting cash in hands on day one.

For education, this timing constraint is particularly acute. State education officials described current support timelines for state schools as taking weeks to several months, with prioritisation based on severity and available funding. Non-state education stakeholders consistently described the need for support within days. Delays beyond one to two weeks were described as leading to pupil disengagement and dropout, teacher departure due to income insecurity, accumulation of rent arrears, and significant learning losses. This creates a fundamental mismatch: insurance pays in 21 to 30 days at best, but the most time-sensitive education needs must be addressed within the first one to two weeks.

Cut-through clauses and direct payment. Industry stakeholders proposed a specific structuring solution: cut-through clauses, which contractually separate the policyholder from the payment recipient. The policy can be held at the macro level (Ministry of Finance, Ministry of Education, or a state entity), but the insurer pays directly to schools, school networks, or a designated fund—without the payout passing through the policyholder's accounts. The advantage is speed and traceability: funds do not enter Treasury general accounts, reducing diversion risk. However, industry stakeholders cautioned that cut-through arrangements can become politically contested. Resistance to a structure where a body administers a programme but does not control the cash flows may indicate rent-seeking or misaligned incentives.

Direct-to-school digital payment. Sovereign risk pool stakeholders recommended the simplest possible model: funding going directly to schools via mobile money, avoiding intermediary handling entirely. Their argument was that relying on local organisations or networks to distribute funds introduces delay, discretion, and risk of capture. This requires participating schools to have registered mobile money accounts—a condition not currently met at scale but establishable through enrolment. Non-state education stakeholders reinforced this preference: funds must be fast, simple, and predictable, and flexible grant-style funding is preferable to reimbursement models since schools cannot pre-finance recovery.

Network-mediated distribution. An intermediate option routes payouts through school networks or associations on behalf of member schools. Networks already have relationships with schools and can verify membership and location. However, non-state education stakeholders cautioned that trust in associations varies significantly: some schools explicitly resist channelling funds via associations, while Islamic school networks were described as more trusted. Any network model would need to allow schools to choose their channel and ensure transparent pass-through.

Government-mediated distribution (state schools). For state schools, the existing fiscal architecture routes funding through a structured escalation: the school principal submits a report, which is escalated through the Permanent Secretary to the Commissioner. Repairs are executed by government agencies; funds are not disbursed directly to schools for major works. An insurance payout entering this system would be processed through the same institutional channels unless a parallel, ring-fenced pathway were established—such as a contingency fund with pre-agreed disbursement rules and authority to release funds without the full escalation and procurement chain.

Long-Term Fiscal Sustainability

Three dynamics shape the sustainability outlook. First, the global premium subsidy environment is tightening. The Lagos Parametric Flood Insurance Programme's ISF subsidy is designed to phase out over three years. If education DRF relies on a similar model, the post-subsidy fiscal home must be identified during design, not left for later resolution. Second, climate risk is intensifying, meaning that without adaptation investment premiums will rise over time. Sovereign risk pool stakeholders and industry practitioners both emphasised that the only structural route to reducing insurance costs is investment in flood risk reduction—improved drainage, resilient construction, urban planning. A DRF mechanism not paired with adaptation will face a deteriorating affordability trajectory. Third, the non-state education sector's contribution capacity is real but extremely limited. For the lowest-fee institutions, co-payment may be a few hundred naira per term at most, serving primarily an incentive-alignment function. Non-state education stakeholders suggested that willingness to pay would increase once schools see real, timely payouts—implying that the demonstration effect of early disbursements is itself a prerequisite for building the fiscal base.

Implications and Design Considerations

The preceding sections mapped the technical architecture of the existing parametric product, the institutional and data infrastructure available for education, the fiscal and budgetary pathways, and the cross-sector evidence on what works and what fails. This section brings these findings together to identify what any design should incorporate, what carries high risk, and what appears out of scope. The DRF levers that emerge as plausible from this analysis are assessed in detail in the following section.

Desirable Design Features

The DRF landscape and fiscal analysis together point to five design features that any education DRF architecture should incorporate.

A rapid-response financing layer is a prerequisite, not an addition. Insurance payouts cannot arrive quickly enough to prevent the most time-sensitive education losses. A contingent fund or automatic disbursement mechanism operating within zero to fourteen days must provide immediate liquidity, with insurance serving as medium-term replenishment.

The policyholder and the payment recipient should be structurally separated. Wherever possible, cut-through clauses or dedicated fund arrangements should be used to avoid the delays and diversion risks of general Treasury routing.

Premium financing must be a transitional pathway from subsidy to fiscal ownership, with explicit milestones. A realistic model might involve donor subsidy of 80 to 90 per cent in years one and two, declining to 50 per cent by year three, with Lagos State absorbing an increasing share through a dedicated budget line.

The architecture must account for two fundamentally different school sectors. State schools have a slow but established fiscal channel that a ring-fenced fund would improve. Non-state schools have no fiscal pathway at all, and building one—whether through direct digital payment, network-mediated distribution, or a government-held portfolio policy—is a new institutional construction.

The value chain must be kept efficient. Industry stakeholders warned that multiple intermediaries extracting commissions is the most common source of inefficiency in African DRF mechanisms. Distribution design must be treated as a first-order problem.

What Carries High Risk

Relying on insurance as the primary financing instrument. Parametric insurance is structurally expensive in the Lagos context, with premium rates in the double digits and the Lagos Parametric Flood Insurance Programme dependent on 90 per cent donor subsidy in a tightening global subsidy environment. More fundamentally, insurance addresses severe, infrequent events, while education disruption in Lagos is frequent, localised, and cumulative. An insurance-only approach will either trigger too rarely or be unaffordably expensive. Insurance must be one layer in a broader architecture. This is the converse of the first design feature above: the rapid-response layer leads, insurance replenishes.

Assuming funds will reach education through general government channels. The Lagos Parametric Flood Insurance Programme demonstrates that once funds enter the Lagos State Treasury, earmarking for specific sectors is extremely difficult to enforce. The contingency plan is operationally fragile, and sectoral targeting was described as extremely difficult to operationalise. For education, the risk is that payouts are absorbed into general emergency response or delayed to the point of irrelevance. Any design relying on Treasury routing without structural separation—cut-through clauses, dedicated accounts, or a ring-fenced fund—carries high implementation risk. Structural separation of policyholder and payment recipient, as noted above, is the mitigation.

Designing for state schools only. An education DRF mechanism covering only state schools would miss many of Lagos's most vulnerable learners who attend low cost private schools. A state-school-only mechanism is institutionally simpler but would not address the protection gap that makes education DRF necessary.

Over-investing in trigger precision before institutional infrastructure exists. Sovereign risk pool stakeholders argued that the data required to launch a product is far less demanding than commonly assumed, while institutional and demand-side conditions are far more important. If there is genuine demand and commitment, a product can be designed in three to six months. The risk is that the design process becomes trapped in data improvement exercises that defer the harder institutional and political questions. Delivery infrastructure matters more than trigger sophistication.

What Appears Out of Scope Under Current Conditions

Individual school-level parametric insurance. Direct school-by-school parametric coverage is not feasible at the scale of 20,000 private schools. All industry and sovereign risk pool stakeholders were unanimous that any viable approach must operate at an aggregated level.

A standalone education parametric product without the Lagos Parametric Flood Insurance Programme as foundation. Building from scratch would take two or more years and cost substantially more than adapting existing infrastructure. The Lagos Parametric Flood Insurance Programme has already invested in ICEYE monitoring, JBA modelling, NAICOM regulatory engagement, and local insurer participation. Any education product should build on these assets. A standalone product would also compete with the existing programme for premium budget, political attention, and institutional bandwidth.

DRF for education without a school registry or equivalent exposure layer. No parametric product can function without a defined exposure layer. The school registry gap is the single most significant data constraint. Some form of georeferenced school data is a prerequisite. The data is constructible; the challenge is institutional and political.

Full coverage of all private schools from day one. Given that two-thirds of private schools are unregistered and no payment channel to them currently exists, any mechanism will start with partial coverage. A realistic first-generation product might cover registered schools who are enrolled through networks—perhaps 4,000 initially—expanding as registration and enrolment architecture develops.

POTENTIAL DRF LEVERS

This section assesses four potential levers for integrating DRF into education services in Lagos State. These are not competing alternatives to be selected between. They are components of a single architecture that matures over time: an immediate no-cost action (Lever 1), a near-term operational foundation (Lever 2), its medium-term insurance extension (Lever 3), and the enrolment mechanism through which non-state schools participate (Lever 4). The table below provides a summary comparison; the detailed assessment of each lever follows.

Table 2: Proposed Levers for Education-Focused DRF in Lagos State

	Lever 1: Adapt Lagos Parametric Flood Insurance Programme	Lever 2: Education Continuity Fund	Lever 3: Insurance-Backed Education Continuity Fund	Lever 4: Pooled Non-State Mechanism
What it does	Amends the existing solution's contingency plan to include an education allocation for the 6 pre-defined response packages. No change to the insurance product itself.	Pre-capitalised fund providing rapid grants to enrolled schools within days of a qualifying flood. Finances 6 pre-defined response packages.	The Education Continuity Fund backed by a parametric insurance layer that replenishes the fund after severe events. Insurance serves as a fiscal backstop, not the primary response mechanism.	The enrolment and distribution mechanism through which private schools participate in the fund. Schools join via their association; a broker aggregates the portfolio; payouts reach schools directly via mobile money. This is not a separate mechanism, it is how private schools access Levers 2 and 3.
Speed of response	21 - 30 days	Days	Days	TBD
Covers non-state schools	Weakly - no existing payment channel to private schools, earmarking difficult to enforce	Yes, if distribution pathways built	Yes	Yes - this is its core purpose

Premium / capitalisation	No additional cost	Modest initial capitalisation	Premium financing required	Subsidy essential for low-cost schools
Prerequisites to operation	Agreement on amendments to the contingency plan, defining payment infrastructure	Requires institutional home, governance, payment infrastructure	Requires functioning fund + actuarial assessment + premium pathway	Requires network mapping; broker mandate; enrolment systems; scales over time
Recommendation	Pursue in parallel	Core recommendation	Natural maturation of Lever 2	Enrolment design feature

The remainder of this section examines each potential DRF lever in detail, including its structural design, feasibility constraints, and the evidence base from interviews and desk research.

Lever 1: Adapt the Existing Lagos Parametric Flood Programme

Conceptual Overview

The first and most immediate lever would be to adapt the existing Lagos Parametric Flood Insurance Programme so that education-related response activities are formally incorporated within its scope. The core structure would remain intact—Lagos State as the insured entity, satellite-based flood footprint trigger, macro-level catastrophic cover—with the principal change at the level of contingency planning and payout use. This lever is attractive because it requires the least structural change, builds on the existing programme already politically socialised within Lagos State, and creates the precedent that education is a legitimate DRF beneficiary.

Adaptation Pathways

The simpler route would leave the trigger and exposure model unchanged and modify the use of proceeds: a revised contingency plan could specify that a defined share of any payout should finance education-related actions (the six pre-defined response packages set out under Lever 2), directed to a designated education account. The more substantial route would adapt the exposure unit itself, incorporating school locations or enrolment proxies alongside population exposure. Industry stakeholders confirmed this is technically feasible: the population-weighted calculation points could be reweighted to school density if credible georeferenced school data were provided.

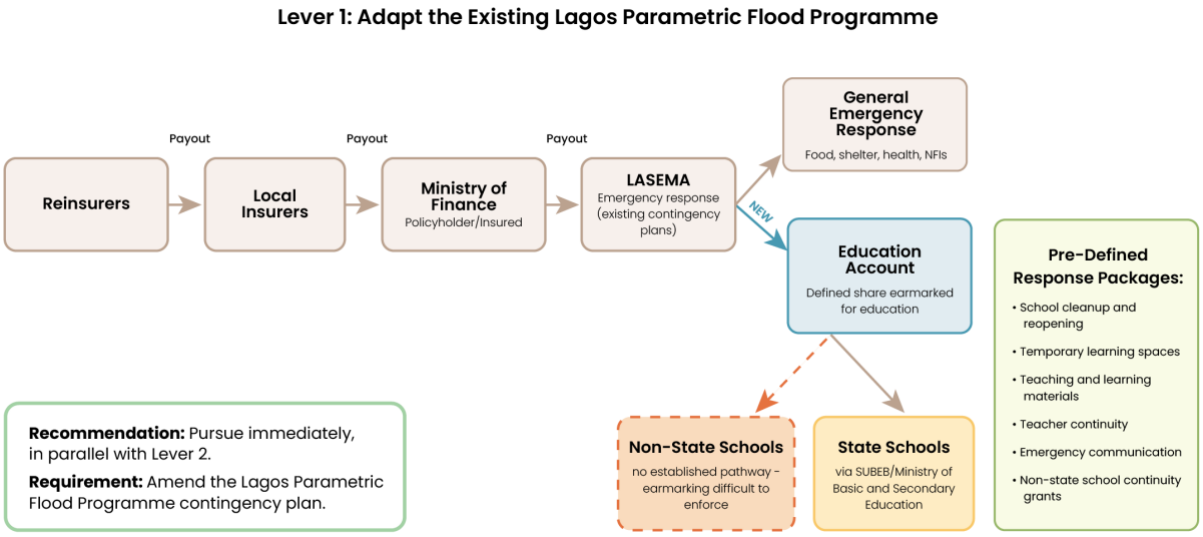

Figure 2. Lever 1: Adapt the Existing Lagos Parametric Flood Programme (contingency plan amendment only; no change to the insurance product).

Key Constraints

Trigger mismatch. Interviews indicated that the existing product is not well aligned with education sector needs: the trigger thresholds are designed for large-scale flood events, and many school disruptions occur at flooding levels well below the programme's attachment point. The 21-to-30-day payout timeline does not match education's needs—state education officials described most flood-related closures as lasting two to five days.

Earmarking enforcement. Multiple interviewees described earmarking for specific sectors as extremely difficult to enforce once funds enter the Treasury.

Data readiness for non-state schools. EMIS provides a foundation for public schools. Private school data is collected through SWEPS though the quality, completeness, and frequency of SWEPS data — particularly whether it includes GPS coordinates — requires verification. A school-weighted trigger would be substantially stronger for public schools than for the full education system due to data limitations for the private school sector.

Assessment

This lever is best understood as a useful but limited entry point. It is politically and administratively attractive because it builds on an existing programme, and it creates the institutional precedent for education's inclusion in DRF. The contingency plan can be amended through agreement between Lagos State and its development partners without changes to the insurance policy itself. This should be pursued immediately as a no-regret first step, regardless of whether other levers are implemented. However, the existing product was consistently assessed across interviews as not well aligned with education sector needs, and this lever does not by itself provide an adequate route to non-state school inclusion or address the timing mismatch between insurance payouts and education continuity needs.

Short-term pilot: Negotiate an education allocation within the existing contingency plan. Requires no new product, no new data, no additional premium.

Medium to long-term: Georeferenced school registry if exposure-weighted adaptation is pursued. NAICOM regulatory engagement if the product structure is modified. Governance arrangements to protect education-earmarked funds.

Lever 2: Education Continuity Fund

Conceptual Overview

A second DRF lever would be the establishment of a dedicated education continuity fund that provides rapid financing for education service continuity following flood events and other disruptions. Unlike the parametric programme, which pays only after independent satellite verification, a contingency fund would meet the education system's immediate financing needs in the days following a shock—providing pre-arranged liquidity for the specific expenditures required to keep children learning and maintain school operations before more substantive recovery resources become available.

This lever responds directly to a central finding: in education, the most time-sensitive problem is not physical damage but interruption of schooling and the risk that disruption leads to learning loss and dropout. This is particularly relevant in Lagos, where non-state schools on thin margins may not survive even short disruption periods.

A stakeholder familiar with the Ministry of Finance provided support for this lever. He confirmed that existing disaster response funding can be approved within hours through the Governor's fast-track process, and noted that a dedicated 'Lagos Flood Risk Insurance Account' already exists. The stakeholder further indicated that education disasters include multiple hazards beyond floods—fire, building collapse, landslides—which a fund structure accommodates more flexibly than a flood-specific product.

What the Fund Would Finance

Industry stakeholders identified service continuity as the most feasible starting point: continuity costs are more readily quantifiable than property damage, and less exposed to reputational risk if payouts do not precisely match actual losses. The tractable question is not how much damage a school building has suffered, but what it costs to keep learning going for a defined number of students under disruption conditions.

Based on flood risks identified in this report, a dedicated Education Continuity Fund might finance six distinct response packages, which could be costed in advance and linked to simple triggers:

- School cleanup and reopening: emergency cleaning and sanitation after floodwater recedes.
- Temporary learning spaces: alternative classrooms and relocation costs where school premises are inaccessible.
- Teaching and learning materials: replacement of essentials needed to resume classes.
- Teacher continuity: salary bridge payments for non-state schools where teachers are employed on termly contracts and risk departing during extended closures.
- Emergency communication: parent and community outreach to facilitate rapid re-enrolment.
- Non-state school continuity grants: modest support to eligible private schools serving poor communities.

These costs are small relative to wider disaster recovery budgets but highly time-sensitive. Two weeks was identified as the threshold beyond which impacts become potentially permanent — pupil disengagement, teacher departure, rent arrears, and irrecoverable learning losses. State education officials confirmed that the system's first priority during flood events is rapid restoration of teaching through temporary relocation, short closures, and online modalities. The fund would formalise and resource what schools are already trying to do informally.

The focus on continuity costs rather than infrastructure repair has a practical advantage for the large share of non-state schools operating in rented premises. Flood damage to the building may be the landlord's responsibility, but the disruption to teaching and learning falls on the school operator. By financing the costs of getting a school operational again regardless of who owns the building, the fund sidesteps the landlord/tenant liability question that would complicate any infrastructure-focused product. Industry stakeholders described this as outcome-based design: define the response you want to finance and cost it, rather than attempting to model exact damages per school.

Institutional Home and Governance

State education officials identified the Ministry of Basic and Secondary Education as the most logical home, since all education agencies report to it. Another stakeholder suggested a trust fund structure and indicated that the Governor would likely establish a cross-agency committee to oversee it that would include the Ministry of Finance, Ministry of Education, LASEMA, the Office of Sustainable Development Goals, and other relevant agencies.

Interviewees from the non-state education sector disclosed that the draft Lagos State Policy on Non-State Schools, currently at the Honourable Commissioner's office awaiting sign-off, includes a recommendation for an education trust fund for non-state schools. The proposed model is similar to the existing Lagos State Employment Trust Fund (LSETF) but education-focused, with interest from the trust fund's loan portfolio repurposed to support a contingency component. If adopted, this trust fund could serve as a sustainable institutional home for the Education Continuity Fund, with contributions and intervention funds flowing into the contingency element. The LSETF was also identified as a potential interim vehicle — it already lends to the education sector, has structures on the ground, and experience with payouts — though it was not considered an optimal long-term solution.

A critical question is whether an existing emergency fund or budget mechanism at the ministry or state level could be adapted, rather than creating an entirely new fiscal instrument. State education officials indicated that emergency budget lines exist within SUBEB and the Ministry. If a suitable mechanism exists, adapting it would be faster, cheaper, and less bureaucratically complex than building from scratch. Industry stakeholders reinforced this: if the Ministry of Education already has, or can establish, an emergency fund, the insurance product (if added later) should function as a backstop to replenish it.

At minimum, the fund would require: a clearly designated owner and manager; a governing framework specifying who authorises releases; a pre-agreed list of eligible expenditures; proportionate reporting requirements; and mechanisms to ensure that education funds are not absorbed into broader emergency spending during major disasters. The interviews reinforced that distribution failure is a central risk—the problem is often not whether a financing mechanism exists, but whether funds reach intended beneficiaries quickly enough to matter. Governance design should focus not only on fiduciary control but on preserving timeliness.

Trigger Logic and Activation

A contingency fund does not require a fully developed actuarial trigger. Interviews confirmed that the existing rapid-approval pathway—agency identifies need, writes to Governor, Ministry authorises disbursement—can operate within hours. This should be used rather than designing a new trigger architecture. Potential trigger bases include: LASEMA or Ministry of Education emergency notification; NiMet/NIHSA flood advisory; verified school closure reports from district offices; Office of Education Quality Assurance or a hybrid combining hazard evidence with disruption reports.

Industry stakeholders suggested that education-focused DRF need not be constrained to hazard-only parametric logic. Disruption indicators such as attendance interruptions or closure records may

be more meaningful than flood depth alone. One stakeholder referenced a precedent where a flood product with excessive basis risk was restructured around a government-reported population-affected model, with secondary validation through independent reports and satellite data—an approach that separates the payout index from credibility validation. For education, a similar architecture might use school-reported closure data as the primary index, validated by independent hazard evidence. In early stages, however, simpler administrative triggers are more realistic. The key principle is that the trigger should be clear enough to enable rapid disbursement, but simple enough to be understood by stakeholders.

Eligible Beneficiaries and Distribution Pathways

For public schools, institutional building blocks exist: a structured reporting pathway, monthly maintenance subventions of NGN 250,000, and SUBEB and SCRPS for larger works. The fund could pre-authorise SUBEB or SCRPS to release emergency allocations without the full escalation chain.

For non-state schools, the distribution challenge is more significant. Direct government financing of non-state school infrastructure remains politically and institutionally constrained, even though non-state schools are recognised as essential providers. State education officials noted that government 'takes care of its own schools,' while private schools usually address infrastructure issues themselves.

A contingency fund could offer a pragmatic middle ground by financing continuity costs rather than asset ownership—supporting learning continuation in affected non-state schools without assuming open-ended responsibility for private property repair. Distribution pathways include: disbursing to approved school networks or associations; routing funds via the Office of Education Quality Assurance; direct digital payments to participating schools; or standardised support packages where schools meet minimum criteria.

Sovereign risk pool stakeholders recommended the simplest possible model: direct payment to schools via mobile money, avoiding intermediary handling entirely. Their caution was that intermediary distribution introduces delay, discretion, and risk of capture—described as the most common point of failure for DRF mechanisms in African contexts. State education officials reinforced that non-state schools are the most vulnerable part of the system and should be a major focus, with design centred on students, teachers, and classrooms.

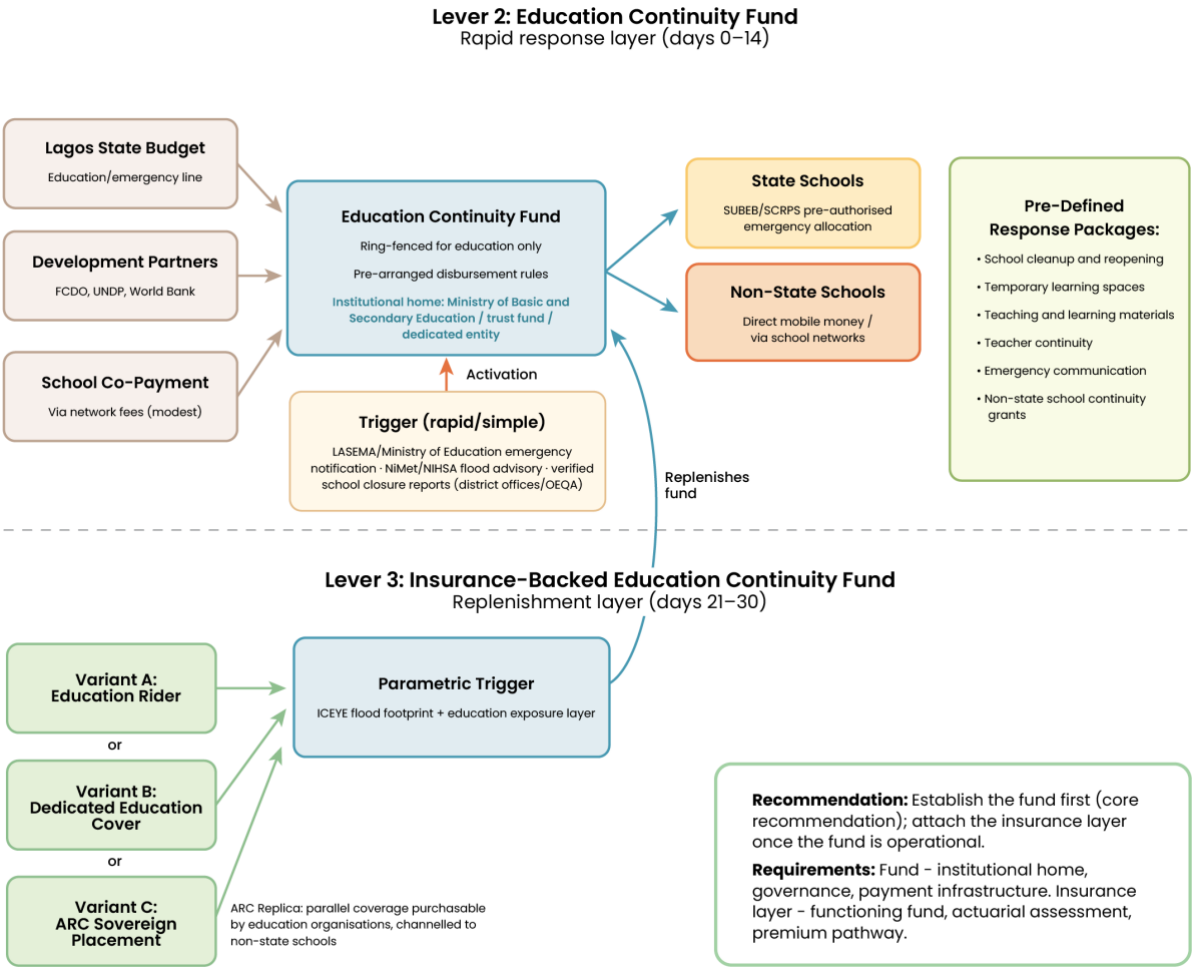

Figure 3. Levers 2 & 3: Education Continuity Fund and its insurance layer. The fund provides speed; insurance provides fiscal sustainability.

Feasibility Assessment

This is the lever toward which the evidence most consistently converges. Industry stakeholders recommended it as the operational foundation for any DRF architecture. Government stakeholders indicated institutional appetite and identified existing fiscal mechanisms that could support it. Education stakeholders described a system already oriented toward continuity that a fund would formalise and strengthen. The lever aligns with the actual timing needs of education continuity, providing financing in days rather than weeks. It does not depend on solving all of the modelling and data issues associated with insurance placement before action can begin. It can be piloted incrementally. And it generates the operational evidence—on school-level costs, disruption patterns, distribution effectiveness, and institutional behaviour—that any future insurance product would require.

Its limitations are equally clear. A continuity fund is not, by itself, a risk transfer instrument. Unless replenished after severe events, it remains exposed to depletion. It requires budget discipline and political commitment to remain capitalised over time. Administrative triggers may be subject to political discretion or delayed reporting. Nevertheless, it is difficult to envisage an effective education-focused DRF architecture in Lagos that does not include some form of pre-arranged rapid education financing.

Short-term pilot: Establish with modest capitalisation. Enrol public schools in flood-prone districts and a pilot non-state network. Register mobile money payment endpoints. Test rapid-response disbursement through next flood season. Collect disruption and expenditure data.

Medium to long-term: Formal institutional home and governance. Pre-capitalisation pathway. Costed response packages validated with school operators. Expansion beyond pilot cohort. Insurance layer (Lever 3).

Lever 3: Insurance-Backed Education Continuity Fund

A third lever combines the continuity fund's operational strengths with the fiscal protection benefits of insurance. The fund provides rapid liquidity in the first days after an event; a parametric insurance mechanism replenishes the fund after more severe events. This layered approach was strongly supported across interviews: the Lagos sovereign programme already sits within a risk layering logic; complex problems should be broken into solvable components; and insurance is most useful where it supports a clearly defined institutional response rather than substitutes for one.

Core Operating Model

The fund releases money rapidly once an education-relevant trigger is met. If the event also meets the insurance layer's attachment threshold, the payout arrives later (typically several weeks) and either replenishes the fund, finances a second recovery phase, or funds medium-term response costs. The insurance is not expected to finance the first response. Industry stakeholders stated directly: if the Ministry of Education has an emergency fund, insurance can top it up. Any education-focused structure should avoid the expectation that parametric insurance delivers immediate liquidity.

Structural Variants

Variant A: Education rider on the Lagos Parametric Flood Insurance Programme. Preserves the macro architecture while creating an education exposure layer. Calculation points weighted by school locations or pupil numbers. Institutional advantage of building on an existing programme, but inherits a slow payout timeline. Industry stakeholders cautioned against shoehorning education into a product built for a different purpose.

Variant B: Dedicated education parametric cover. A new product calibrated to the fund's response package costs. Greater design flexibility, but requires additional structuring work.

Variant C: ARC sovereign placement. Nigeria is an ARC member with treaty-based regulatory exemptions. Cost difference versus local market placement described as substantial. ARC's mandatory contingency plan requirement imposes more rigorous pre-commitment. The Replica model enables education organisations to purchase parallel coverage channelled to non-state schools through non-governmental pathways. Main constraint: ARC engages nationally, requiring federal coordination.

ARC can provide services across all the design pathways: sovereign insurance for state schools at concessional pricing (as a member institution), Replica-style coverage for non-state schools, and underwriting or reinsurance capacity through ARC Ltd. Nigeria is a signatory with access to concessional market prices and services, and ARC has demonstrated the ability to pay governments within five days.

Trigger Design and Distribution

The insured layer should avoid over-engineering school-level damage modelling in an environment characterised by incomplete asset inventories, weak data on non-state providers, and large

heterogeneity in infrastructure quality. The risk is not simply technical failure, but reputational failure: a product that purports to measure school damage but pays in ways disconnected from actual experience may lose legitimacy. A continuity-oriented trigger is more defensible: it asks not 'what loss has school X suffered?' but 'what level of disruption justifies release of pre-agreed continuity resources?' The insured layer should remain aggregated even if fund disbursement is more granular. Industry stakeholders warned against micro-level parametric plans: too granular, too expensive, too exposed to basis risk.

Cut-through clauses can separate the policyholder from the payment recipient, allowing the policy to be held at macro level while payouts flow directly to schools or a designated fund without passing through the policyholder's accounts. This preserves pricing efficiency while reducing distribution delays and diversion risk. Industry stakeholders noted that resistance to cut-through arrangements—where a body administers a programme but does not control the cash flows—can reveal underlying political economy concerns. Whether such arrangements are legally permissible within the Lagos public financial management framework requires further engagement with the Ministry of Finance.

Affordability and Subsidy

Any insured education structure is unlikely to be self-financing in the short term. Parametric flood cover is expensive in the Lagos context—not primarily due to insurer margins, but because of upward basis risk, peril complexity, relatively high event frequency, and satellite data costs. Premium rates for the existing product are in the double digits. The Ministry of Finance indicated that premium financing would likely require multiple sources, including government contributions, donor support, and potentially a dedicated disaster risk fund. Industry stakeholders suggested approximately 90 per cent subsidy initially, declining over a three-to-five year pathway as the product becomes more tailored and data improves. However, the global environment for premium subsidy is shifting and long-term reliance on external donor subsidy is increasingly uncertain.

Sovereign risk pool stakeholders emphasised that the only structural route to reducing insurance costs over time is adaptation investment—improved drainage, resilient school construction, urban planning. Without risk reduction, climate-driven premium increases will erode affordability. Industry stakeholders also proposed that schools or associations should contribute something modest to avoid distorted incentives from fully universal subsidy. Possible mechanisms include bundling a small amount into school association membership fees. However, they cautioned that bundling insurance into school fees raises conduct risk, regulatory concerns about fairness, suitability, and disclosure, and recommended validation with Nigeria's insurance regulator before implementation.

Feasibility Assessment

This lever presents the strongest medium-term architecture for education-focused DRF in Lagos. It is stronger than insurance-only approaches because it addresses the timing mismatch between payout and need. It is stronger than continuity-fund-only approaches because it offers a route toward replenishment and fiscal sustainability following severe events. Importantly, it is not a separate mechanism from Lever 2 but its natural maturation: the uninsured continuity fund is the first phase, and attaching insurance is the second phase of the same architecture. Its principal requirements are: a functioning continuity fund with operational track record; clear response packages validated through implementation; governance arrangements trusted by both public and private actors; an agreed policyholder and payout architecture; sufficient data to support credible trigger design; and a premium financing pathway.

Short-term pilot: Commission a preliminary actuarial assessment for education-specific product costing. Engage ARC on feasibility and cost of sovereign education flood coverage and Replica coverage.

Medium to long-term: Georeferenced school registry. Legal clarity on policyholder and cut-through arrangements. Premium financing pathway. Comparative cost analysis of local market versus ARC. NAICOM engagement. Integration with adaptation measures.

Lever 4: A Pooled DRF Mechanism for Non-State Schools

Non-state schools educate a large number of students in Lagos, with the ratio of public to private schools approximately 1:12, and an estimated 90 to 95 per cent carry no insurance because of cost. Interviewees confirmed there is no systematic government emergency response for the low-fee private sector; support following flooding comes from the community, parents, and school operators' own resources.

Why Pooling Is Necessary

Individual school onboarding is not feasible at the scale of 20,000 non-state schools. Industry stakeholders warned against micro-level parametric plans: too expensive for the upward basis risk. Pooling is necessary to reduce transaction costs, aggregate risk meaningfully, distribute through existing intermediary structures, and create incentives for registration and data sharing. Sovereign risk pool stakeholders were clear: 20,000 individual schools are unmanageable, but 20 to 30 networks are feasible.

Structural Models

Model A: Government-supported pooled policy. Government aggregates risk at sovereign pooling rates, with participation linked to registration as a formalisation incentive. The Ministry of Finance confirmed openness to covering both school types. This model may face political constraints around underwriting private entities.

Model B: Association-based mechanism. Schools enrol through private school networks that provide membership data and school locations to the DRF mechanism. Feasibility depends on whether associations are sufficiently trusted by individual schools. Interviews suggested that trust varies significantly, with Islamic networks described as more trusted.

Model C: Broker-led distribution. Sovereign risk pool stakeholders proposed this as the most practical model: mandate brokers to enrol schools through networks at a standard commission (10–15 per cent). Brokers specialise in portfolio assembly and no other agency has the capacity for enrolment at this scale.

Given the scale of Islamic education provision in Lagos and the higher levels of trust reported in Islamic school networks, Takaful-compliant structures should be considered as part of the product design. NAICOM already licenses Takaful operators, and Takaful-compliant catastrophe risk products have been developed in other markets. The fund structure recommended in this report, contributions pooled, grants disbursed against qualifying events, is arguably more naturally compatible with Islamic finance principles than conventional parametric insurance, since it avoids the gharar (uncertainty) objection that can apply to traditional insurance contracts. Any future insurance layer attached to the fund should explore Takaful-compliant placement options for Islamic school networks. Whether Takaful can be incorporated within the same product structure or requires a parallel arrangement is a technical design question for the next phase.

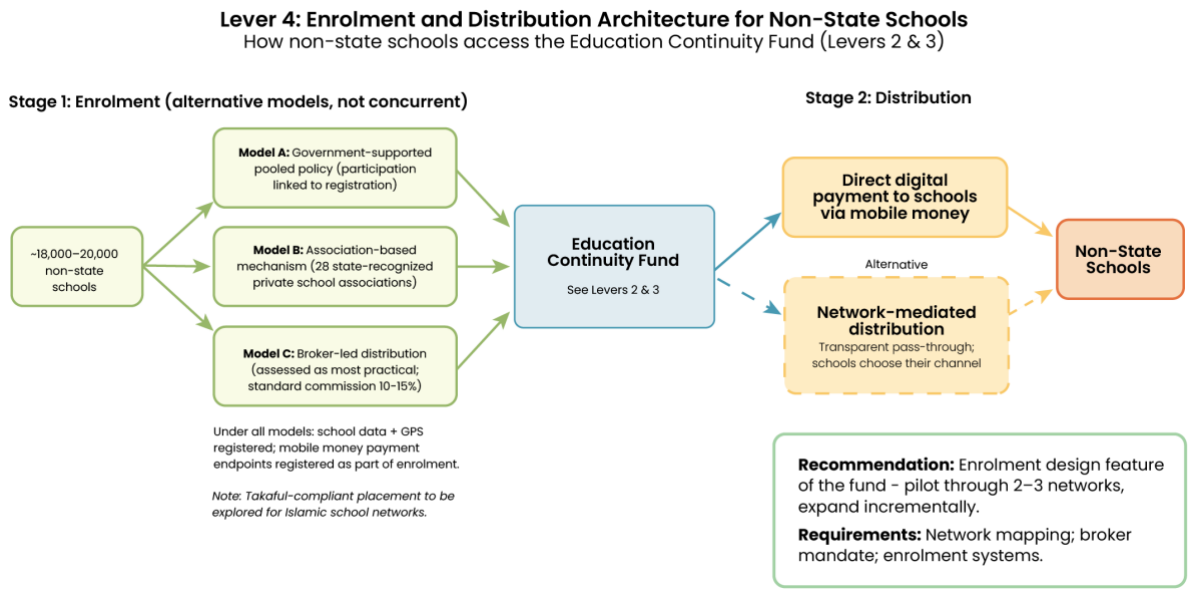

Figure 4. Lever 4: Enrolment and distribution architecture for non-state schools.

Distribution and Payment Design

Sovereign risk pool stakeholders recommended the simplest possible model: funding going directly to schools via mobile money, avoiding intermediary handling entirely. Their warning was that relying on local organisations to distribute funds introduces delay, discretion, and risk of capture. Non-state education stakeholders reinforced this: funds must be fast, simple, and predictable, and flexible grant-style funding is preferable to reimbursement models since schools cannot pre-finance recovery. The payment chain should be as short as possible. The aggregation chain (how schools are enrolled) and the payout chain (how money reaches schools) need not be identical. Digital payment methods should be used wherever feasible, and structures should reduce discretion once the trigger is met.

Affordability and Inclusion

A pooled mechanism will almost certainly require subsidy. Low-cost schools operate with limited margins, and non-state stakeholders described schools as very interested in insurance but unable to afford current market rates. At most, the lowest-fee schools could absorb a few hundred naira per term in co-payment, serving primarily an incentive-alignment function. Willingness to pay would increase once schools see real, timely payouts—implying that the demonstration effect of early disbursements is a prerequisite for building the fiscal base. The late-2025 compulsory insurance announcement for non-state schools, if genuine, has significant implications for enrolment architecture and political backing.

Assessment

In practice, the pooling logic described here should be understood not as a standalone fourth mechanism but as the enrolment and distribution architecture through which non-state schools participate in the education continuity fund described under Levers 2 and 3. The fund serves both state and non-state schools; this section addresses how non-state schools are brought in at feasible scale. Coverage will be partial initially, perhaps 4,000 to 6,000 schools through registered networks, with the design built for incremental scale-up.

Short-term pilot: Network mapping exercise to identify viable enrolment partners. Pilot through two to three networks with standardised continuity packages. Test payment endpoint registration and simulated disbursement.

Medium to long-term: Regulatory clearance. Verified network data. Premium financing pathway. Broker mandate and commission structure. Digital payment at scale. Progressive expansion using the mechanism as a registration incentive.

Additional Mechanisms Considered

Forecast-based financing and anticipatory action. Pre-arranged financing triggered by climate forecasts before a flood occurs. ECW has piloted this in Pakistan and Somalia. In Lagos, industry stakeholders rejected rainfall as a reliable proxy, limiting forecast precision for sudden pluvial events. This should be built into the fund's trigger architecture as an early-action window rather than pursued separately.

Shock-responsive social protection. Automatic transfers to flood-affected households with school-age children. IRC's CREST programme in Kenya provides a precedent. This could be valuable as an element of the fund's response package, but the social registry in Lagos is incomplete and outdated—not viable as a standalone mechanism.

Integration into existing education development programmes. Significant resources are already flowing into Lagos: GPE's USD 53.8 million system transformation grant (2025–2030); World Bank HOPE-EDU (USD 500 million); HOPE-GOV (USD 500 million); and FCDO's PLANE programme. CERCs, IPF-DDOs, and crisis modifiers could be integrated into these programmes, making existing investments shock-responsive without new instruments. ECW's US$41+ million in Nigeria is concentrated in conflict-affected northeast states; there is no equivalent resilience financing for climate-affected education in Lagos.

Captive insurance structure. Disproportionate to current needs, but the cut-through concept it embodies is highly valuable and should be incorporated into whichever lever is pursued.

Recommendations

The weight of evidence from this study—industry consultations, government interviews, non-state education engagement, and the global literature—converges on a single recommended approach: the establishment of a dedicated Education Continuity Fund (Lever 2) as the primary mechanism for expanding disaster risk financing coverage to education services in Lagos State. The fund would be a ring-fenced mechanism releasing pre-agreed grants to enrolled schools—both state and non-state—when a qualifying disaster event disrupts education. Over time, a parametric insurance product would be attached to replenish the fund, converting it from a standalone continuity instrument into an insured fund consistent with standard risk-layering principles.

This recommendation reflects convergence across independent evidence. Industry stakeholders identified service continuity as the strongest entry point, because continuity costs can be approximated from the scale of service without requiring precise property damage modelling. Sovereign risk pool stakeholders argued that institutional conditions matter more than data and modelling requirements, which are far less demanding than commonly assumed. Government stakeholders described existing fiscal mechanisms—including rapid emergency approval processes, dedicated disaster accounts, and emergency budget lines within education agencies—that could support a fund structure. State education officials described a system already oriented toward continuity of teaching and learning that a fund would formalise and strengthen. And the global evidence on prearranged financing for shock-responsive education systems reinforces the approach.

Adapting the existing parametric product (Lever 1) should be pursued as an immediate, low-cost action—amending the contingency plan to include education creates a useful precedent and costs nothing additional. But across the interviews, the existing product was consistently assessed as not well aligned with education's needs: its trigger does not capture education-relevant disruption, its payout arrives weeks after the event, and earmarking is difficult to enforce within general Treasury systems. It is a useful complement, not the primary mechanism.

The insurance layer (Lever 3) is the natural maturation of the recommended approach. Once the fund is operational and has generated evidence on school-level costs, disruption patterns, and viable distribution channels, attaching an insurance layer to replenish the fund after severe events becomes both feasible and valuable. In practice, the recommended architecture evolves over time: a continuity fund is established first, and insurance is attached only once the operational system and data foundation are in place. Industry stakeholders reinforced that insurance should back a clearly defined institutional response, not substitute for one. The existing Lagos flood programme demonstrates that technically sophisticated insurance can remain operationally fragile if the underlying contingency planning, institutional ownership, and distribution arrangements are not sufficiently developed. The insurance component should follow the fund, not precede it.

The pooled non-state mechanism (Lever 4) is similarly not a separate architecture but a feature of the fund's enrolment design. The fund serves both state and non-state schools; the pooling logic—network-based aggregation, broker-led enrolment, digital disbursement—is the means by which non-state schools participate in the same mechanism.

Next Steps

The present study is intended to ensure that any technical phase starts from a credible evidence base about what the institutional context can support and what the insurance market can deliver. The most consistent finding across is that the binding constraint for education focused DRF in Lagos is institutional rather than technical. The hazard data exists. The satellite monitoring infrastructure exists. The insurance market exists. What does not yet exist is a mechanism through which education is protected when disasters occur. Building that mechanism, and the institutional architecture around it, is the necessary first step.

If FCDO and other stakeholders decide to move from scoping to design, the next phase would need to include: consolidation of hazard, exposure, and operational response data; development and testing of trigger options; costing of response packages and contingency layers; legal and institutional design of the policyholder and payout architecture; premium and subsidy modelling for the insurance component; market engagement on pricing and placement; and design of payment and verification channels for both public and non-state beneficiaries. Annex 3 and 4 provide a brief roadmap describing these steps as well as other design considerations.

ANNEXES

Annex 1. Key Stakeholders

Ministry of Finance is the central government institution responsible for managing the state's public finances, fiscal policy, debt management, and treasury operations. It is also the policy holder for the Lagos Parametric Flood Insurance Programme.

The **Ministry of Economic Planning and Budget** serves as the state's primary strategic planning and budgeting authority, coordinating the work of ministries, departments, and agencies to develop and implement development programmes. Interviews identified the ministry as a potential source of funds that the governor can tap into in the event of extensive flooding damages.

Lagos Office of Sustainable Development Goals is a unit within the Lagos State Ministry of Economic Planning and Budget focused on coordinating, monitoring, and promoting the implementation of the United Nations Sustainable Development Goals within Lagos State. The office works across ministries, departments, and agencies to align state policies, development programmes, and budget priorities with the global SDG framework. Interviews described the office as housing the Lagos Parametric Flood Insurance Programme.

The **Office of Quality Assurance** in the Lagos Ministry of Basic and Secondary Education is responsible for registration of private schools and inspection of all schools. The office also participates in the assessment of damages following natural disasters. Based on interviews with education officials and private school associations, this is the only ministry office that engages with private schools on a regular basis. Data collected during registration includes school contact information, a description of school infrastructure and school addresses, but not GPS data.

The **Office of Policy, Planning, Research and Statistics** in the Lagos Ministry of Basic and Secondary Education manages the Education Management Information System (EMIS), which contains data on the location, enrolment and basic infrastructure of public schools. EMIS data is collected separately for public and private schools. Public school data is collected through the Annual School Census managed by the Ministry of Basic and Secondary Education. Private school data is collected through the Statewide Enumeration of Private Schools (SWEPS), managed by the Office of Education Quality Assurance Department of Private Education. SWEPS data covers all school types - approved, registered but unapproved, and unregistered - and feeds into the EMIS database.

The **Lagos State Universal Basic Education Board** (SUBEB) is a statutory institution created under Nigeria's Universal Basic Education framework whose mandate includes school construction and rehabilitation. Interviews indicated that SUBEB is one of two bodies that oversee rehabilitation after natural disasters.

The **Special Committee on Rehabilitation of Public Schools** (SCRPS) is a special purpose committee created by the Lagos State Government to address severe infrastructure deficits in public schools. The committee focuses on rehabilitation, construction of new buildings, provision of furniture and improvements to school safety. A budget implementation report from 2025 indicates that SCRPS had a budget of 20,663,675,742 naira (USD 15,079,672) for that year. During interviews for this report SCRPS rehabilitation work was described as complementary to rehabilitation work completed by SUBEB.

Private school associations represent non-state education providers by coordinating with the government, advocating for their interests, and strengthening standards within the private education sector. Interviews indicated that there are 21 private school associations in Lagos State formally

recognised under the Conference of Private School Associations In Lagos (COPSAIL), though the actual number is approximately 28. The Office of Education Quality Assurance is currently restructuring COPSAIL to revalidate and streamline the associations. A World Bank report found that in 2014, 82 per cent of private schools in Ajeromi-Ifelodun were part of a school association. Private school associations could serve as an insured party, data aggregator or communication node in a DRF mechanism focused on private schools.

The **Lagos State Emergency Management Agency** (LASEMA) is responsible for the overall co-ordination of emergency management in Lagos State including disaster prevention, preparedness, mitigation, recovery and relief. LASEMA is a key implementation partner of the Lagos Parametric Flood Insurance Program. Funding for LASEMA is not sector specific.

The **Lagos State Ministry of the Environment and Water Resources** (MOEWR) oversees the state's stormwater drainage network. It clears debris ahead of the rainy season, repairs flood-affected environmental infrastructure, issues flood advisories and coordinates with other state agencies to identify high-risk areas and prioritise maintenance.

Annex 2. DRF Instruments from Other Contexts.

Education-focused DRF Instruments

The **UNICEF Today and Tomorrow Initiative (TTI)** is one of the more developed models. Launched in 2023, the initiative seeks to close persistent financing gaps by combining risk reduction, anticipatory action, and pre-arranged risk transfer within a single initiative. The programme is designed to shift humanitarian and social sector financing from reactive post-disaster response toward proactive, predictable financial protection.

TTI is structured around two complementary pillars. The "Today" pillar focuses on ex-ante risk reduction and preparedness, including climate adaptation, disaster risk reduction, early warning strengthening, and anticipatory action. The "Tomorrow" pillar introduces parametric insurance coverage designed to provide rapid liquidity following climate shocks. Under this approach, insurance payouts are triggered by predefined hazard parameters rather than post-event damage assessments, enabling faster disbursement and reducing delays in recovery financing.

By 2025, TTI had generated USD 3.9 million in insurance payouts across multiple pilot countries following cyclone events. These payouts supported rapid response and early recovery activities benefiting children, including the rehabilitation of education infrastructure. While education is not the only sectoral focus of TTI, it demonstrates the potential for parametric risk financing to contribute directly to education continuity.

A key strength of TTI is its emphasis on government alignment and system integration. It is implemented with national authorities and embeds risk financing within public financial management and disaster risk governance structures. The initiative also engages private insurance markets to expand the availability of risk transfer solutions for child-focused services. This blended public-private approach could lay the groundwork for scaling disaster risk financing beyond donor-funded pilots.

There are limitations to the applicability of TTI to the Lagos context. First, current TTI pilots are focused on countries exposed primarily to tropical cyclones. The transferability of the model to large, urbanised and flood-prone environments will require careful adaptation. Second, while TTI is explicitly child-focused, the degree of sectoral earmarking for education varies across pilots. In many cases, payouts support broader child-related services rather than being ring-fenced specifically for

ministries of education or school system recovery. Third, the initiative primarily operates through government systems, with limited focus on private schools and non-state education providers. Given the significant role of private and low-cost schools in Lagos State's education ecosystem, any adaptation of the TTI model would need to consider how risk financing instruments could equitably cover both state and non-state providers.

The **International Rescue Committee's Climate Resilient Education Systems Trial (CREST)** is piloting the application of disaster risk financing instruments to education continuity. Funded by the UK Foreign, Commonwealth and Development Office, the GBP 3 million, 30-month initiative is designed to generate evidence on whether insurance-backed, early-action financing can reduce climate-related disruptions to children's learning. The trial is being implemented in Tana River County in Kenya in partnership with Africa Risk Capacity Ltd. It began making payments in 2026.

CREST is notable for integrating parametric climate insurance into education in emergencies programming. Under the model, predefined climate indicators, primarily related to drought, serve as triggers for insurance payouts. When thresholds are reached, rapid financing is released to support early action measures intended to protect children's access to education. This approach seeks to address a persistent gap in the education sector: while climate shocks are a major driver of school disruption, financing to protect learning continuity has historically been slow, ad hoc, and largely reactive.

CREST links climate triggers to education outcomes through a sequenced response chain. Insurance payouts are intended to increase the speed and predictability of financing available following climate shocks. These resources are then deployed through a bundled response package that may include cash and voucher assistance to households, remote learning support and child protection services. By stabilising household welfare and enabling continuity of learning modalities, the programme aims to reduce the duration and severity of education disruption during climate events.

A further innovation of the trial is its emphasis on participatory design and evidence generation. The programme has incorporated community engagement processes to identify locally relevant climate risks and coping strategies, and it is intended to build the global evidence base on the cost-effectiveness and operational feasibility of insurance-linked education interventions. This focus on learning is important given the nascent state of education-specific disaster risk financing globally.

However, the CREST model exhibits limitations that are relevant for policymakers considering adaptation in Lagos. First, the trial remains pilot-scale, and robust evidence on cost-effectiveness, scalability, and long-term sustainability is still emerging. Second, the response operates through household-level support rather than direct financing to education systems or school infrastructure. Third, the primary hazard focus has been drought in predominantly rural settings, which differs from the complex, urban flood risk in Lagos. Any application of the CREST model in Lagos would need to consider more granular urban flood triggers, mechanisms for channelling resources to education providers, and explicit provisions for the inclusion of low-cost private schools. CREST does, however, provide a useful reference point for the design of layered disaster risk financing solutions that combines parametric insurance, anticipatory action, and targeted support to protect learning.

Education Cannot Wait's Multi-Year Resilience Programmes (MYRPs) represent a complementary but distinct financing approach. Rather than providing rapid post-trigger liquidity, MYRPs deliver predictable, multi-year grant financing to education systems in protracted crisis settings. These programmes explicitly incorporate risk reduction, preparedness, and system-strengthening measures designed to improve the resilience of education delivery in the face of conflict and climate shocks. While MYRPs are not parametric risk financing instruments, they function as pre-arranged resilience financing that reduces the volatility and fragmentation typical of humanitarian funding.

Their primary limitation is speed: funds are programmed rather than automatically triggered by shocks. However, MYRPs are increasingly including crisis modifiers that set aside funds to respond quickly and flexibly to new emergencies, including those driven by climate change. MYRPs may serve as an important complement to more rapid-disbursing DRF tools. ECW announced a USD 15 million dollar MYRP for Nigeria in 2024, but it is focused on conflict affected areas in the northeast.

Education Cannot Wait has recently launched education-focused disaster risk financing initiatives through its anticipatory action pilots in Pakistan and Somalia. These pilots use climate and flood forecasts to trigger early, pre-arranged financing before a shock occurs. The goal is to reduce education disruption by enabling partners to take preventive measures such as reinforcing school infrastructure, pre-positioning learning materials, and activating continuity plans ahead of forecast hazards.

The approach reflects a broader humanitarian shift toward forecast-based financing and anticipatory action, with the education sector now beginning to adopt similar tools that have been more common in food security and disaster management. However, the pilots remain relatively small-scale and are still generating evidence on cost-effectiveness, trigger design, and operational feasibility. For contexts such as Lagos State, the model offers a promising example of how parametric or forecast-linked triggers could be tailored to protect learning continuity in flood-prone urban systems.

DRF Instruments Supporting Other Sectors

CCRIF SPC, established in 2007, is the world's first multi-country risk pool. It provides parametric insurance for tropical cyclones, earthquakes, and excess rainfall to 23 Caribbean and Central American governments, and has made 78 payouts totalling approximately USD 390 million, all within 14 days of the triggering event.

What makes CCRIF particularly instructive for Lagos is its progressive expansion from general sovereign coverage into sector-specific products. In 2019, CCRIF launched the Caribbean Ocean and Aquaculture Sustainability Facility (COAST), a parametric product protecting small-scale fisherfolk. COAST is a sovereign product purchased by governments, but with a built-in mechanism for transferring payouts to pre-identified beneficiaries in the fisheries sector. The COAST model is the closest existing precedent to the education rider concept. It demonstrates three directly relevant design features: a sovereign parametric product can incorporate a sectoral disbursement pathway; it was built on existing risk pool infrastructure rather than requiring a new standalone product; and participating countries must implement specific sectoral policy reforms as a condition of coverage, creating an explicit link between insurance access and governance improvement.

Following Hurricane Beryl in 2024, CCRIF demonstrated the practical value of layered sector-specific coverage. Grenada received approximately USD 43 million from its sovereign policies plus USD 12.6 million on dedicated electric utility, water utility, and fisheries policies—demonstrating that general sovereign coverage can be complemented by dedicated sector-specific products. This approach offers a structural template for how education coverage might be layered onto the existing Lagos parametric product.

CCRIF has also expanded into coverage for electric utility and water utility companies. These products are purchased by the utility companies themselves, with payouts designed to finance rapid restoration of service. The exposure model is built around the utility's physical infrastructure and the trigger captures modelled loss from wind, storm surge, or flooding. The utility model is relevant because it demonstrates that parametric products can be structured around service continuity—getting essential services back online—rather than asset replacement, a framing that maps directly

onto education's primary need.

The African Risk Capacity (ARC) Group, established in 2012 as a Specialised Agency of the African Union, provides sovereign parametric drought insurance to AU member states. ARC's model requires a structured preparedness process: customising risk modelling software, developing a contingency plan specifying how payouts will be used, and defining risk transfer parameters. Since 2014, ARC has provided approximately USD 720 million in coverage and payouts exceeding USD 100 million.

ARC's design offers several lessons for Lagos. Its mandatory contingency plan requirement—in which countries must specify in advance how payouts will be used and who will receive them—addresses one of the central weaknesses identified in the Lagos flood programme, where the contingency plan was described as operationally fragile and weakly enforced. ARC also operates the Replica model, in which humanitarian organisations (such as UNHCR and WFP) purchase parallel coverage triggering alongside the sovereign policy, enabling payouts to reach specific populations through non-governmental channels. This offers a template for how education-focused organisations could participate alongside a Lagos sovereign product without requiring the state to manage all disbursement—directly relevant to the pooled non-state school pathway.

Nigeria is already an ARC member state, and ARC's treaty-based regulatory and tax exemptions mean it could insure Nigerian sovereign risk directly if the government chose to engage. This would avoid the higher costs associated with placing risk through local commercial insurance markets. The most cost-effective structure for any education DRF mechanism would be for government to aggregate the risk and for a sovereign pool to transfer it. If sovereign aggregation is not used, risk must go through local markets, costs increase substantially, and distribution becomes far more complex.

Agricultural index insurance is the most widely implemented form of parametric insurance globally, with extensive experience across sub-Saharan Africa, South Asia, and Latin America. These programmes insure smallholder farmers against drought, excess rainfall, or other weather-related crop losses using satellite-derived vegetation indices or rainfall measurements as triggers. While the sectoral context differs from education, agricultural index insurance has generated a substantial evidence base on design challenges directly analogous to those facing education DRF in Lagos.

Three lessons are particularly relevant. First, basis risk remains the dominant challenge—the gap between index-measured conditions and actual losses is a persistent barrier to uptake and trust, even where products are technically sound. This supports the conclusion that trigger design should be kept simple and refined through real payout experience rather than over-engineered before implementation. Second, aggregation and distribution are more difficult than product design—most successful programmes have adopted aggregated structures, with governments, cooperatives, or financial institutions as policyholders rather than individual-level coverage. This directly parallels recommendations from all Lagos interviews: direct school-by-school onboarding is not feasible, but 20 to 30 school networks are manageable, and brokers should be mandated to enrol schools through networks at standard commission with defined targets. Third, premium subsidies have been necessary in virtually every scaled programme—commercially viable uptake without subsidy remains rare, particularly among the poorest participants, carrying direct implications for fiscal sustainability of any education product.

Shock-responsive social protection represents a fundamentally different approach from parametric insurance but addresses many of the same objectives—particularly the need to deliver rapid financial assistance to vulnerable populations following a disaster. Programmes such as Kenya's Hunger Safety Net Programme (HSNP), which uses a vegetation index to trigger automatic scale-up payments, and Ethiopia's Productive Safety Net Programme (PSNP) demonstrate that pre-

positioned delivery infrastructure—beneficiary registries, digital payment systems, pre-agreed trigger protocols—can dramatically reduce the time between shock and assistance.

For education in Lagos, the ASP model speaks directly to the contingent fund pathway. A pre-financed fund could function as the rapid-response layer that parametric insurance cannot provide given its 21-to-30-day payout timeline. The evidence consistently shows that effectiveness depends far more on pre-positioned delivery infrastructure than on trigger sophistication—suggesting that the most important near-term investment is building the institutional systems through which any future mechanism would operate. Industry stakeholders reinforced this from a different angle: for certain categories of education loss—particularly damage to school contents and teaching materials—early warning and protective measures (covering equipment, elevating materials, pre-emptive closures) may be more cost-effective than post-event insurance. A contingent fund with early warning-linked triggers could finance these anticipatory actions, complementing a parametric layer for larger events.

World Bank Contingency Emergency Response Components (CERCs) allow funds to be reallocated from existing World Bank-financed projects for emergency response following a declared disaster. Their relevance to Lagos lies in the possibility of embedding contingent disaster financing within ongoing education sector programmes—whether World Bank, GPE, or UBEC-funded—without requiring a standalone insurance product. If Lagos State or federal education programmes include multilateral financing, incorporating a CERC for education disaster response merits exploration as a complementary instrument.

Annex 3. Practical Next Steps

The following actions are the concrete steps required to move from the levers in this report to a functioning pilot. They are designed to be actionable within the timeframe and institutional relationships available to FCDO and its partners.

Step 1: Secure institutional commitment (0–6 months). A structured follow-up engagement with the Ministry of Finance and the Ministry of Basic and Secondary Education is needed to: confirm the institutional home for the fund; establish the governance framework; clarify the legal pathway for covering non-state schools with public or donor funds; test the feasibility of cut-through or ring-fenced payment arrangements; and clarify the status of the 2025 compulsory insurance announcement for non-state schools. Through these conversations, designers should determine if the Ministry of Basic and Secondary education has concerns about potentially incentivising enrollment in private schools.

In parallel, education earmarking within the existing parametric programme's contingency plan should be negotiated as an immediate no-cost action. Coordination should occur with key development partners to identify synergies with other education and emergency response programming, such as the recently launched Lagos Education and Access Fund. Formal partnerships may need to be established with state authorities in order to access and assess existing datasets held by SUBEB, the Office of Quality Assurance and the Office of Policy, Planning, Research and Statistics to better understand what data and data collection processes exist and how these can be utilised to support DRF.

Step 2: Evidence-gathering on school-level costs and priorities (0–6 months). A structured survey of state and non-state school operators should establish: what risks they most need protection against; what it costs to reopen a flood-affected school by flood severity and school type; whether they would accept direct digital payment or network-mediated distribution; what co-payment is

feasible from private schools; if private schools participate in community savings and loan mechanisms that might be leveraged; whether schools operate in owned or rented premises; whether landlords hold any form of commercial property or flood insurance; and whether existing commercial insurance products are available to schools in the low-cost segment. This evidence will inform whether indemnity-based alternatives to parametric cover merit exploration in the technical design phase. Industry stakeholders recommended costing the response package the system needs to deliver rather than modelling exact damages. This evidence shapes the fund's design and, later, any insurance product's calibration.

Step 3: Map and select pilot schools (0–6 months). An assessment of private school networks should identify viable pilot partners. Variables to consider should include: governance quality, membership coverage, geographic concentration in flood-prone areas, data holdings, and trust among member schools. State schools in the same LGAs should also be identified for participation through coordination with SUBEB using EMIS data. Participating private schools register digital payment endpoints as part of enrolment.

Step 4: Capitalise, pilot and learn (6–18 months). Establish the fund with modest capitalisation, sufficient for one or two moderate events affecting the pilot cohort, from Lagos State and development partner contributions. Test rapid-response disbursement through the next flood season using pre-defined response packages and simple administrative triggers (LASEMA emergency declaration or verified school closure report). For state schools: pre-authorised emergency allocations through SUBEB. For non-state schools: direct digital payment to registered endpoints. Record what disruptions occurred, what support was used, how quickly funds moved, whether response packages were adequate, and which distribution channels worked. This pilot simultaneously tests operations and generates evidence on education-related flood disruption that does not currently exist and that any future insurance product would require.

Step 5: Evaluate and determine the path forward (12 - 24 months). Following one flood season of pilot operation, assess whether the fund achieved its objective. Key questions: did funds reach schools within the target timeframe; were response packages adequate; did the trigger activate appropriately; were non-state schools successfully reached through network channels; what institutional challenges emerged. Three decisions follow: whether to scale the fund to additional networks and LGAs; whether to commission a preliminary actuarial assessment for the insurance replenishment layer (using pilot-generated school registry and loss data); and whether to seek integration of contingent components (CERCs, crisis modifiers) into the active GPE, World Bank, and PLANE programmes in Lagos.

Annex 4. Additional Design Considerations

The levers assessed in this study address a specific question: how to finance education continuity when flooding disrupts schools in Lagos. But any mechanism will operate within broader conditions that determine whether financing translates into protection. This section addresses four cross-cutting considerations: early warning, the relationship between DRF and adaptation, holistic response coordination, and connection to the wider education financing landscape.

Early Warning and Anticipatory Action

The most effective investment in disaster response is the one made before the flood arrives. Schools that mitigate flood damage, secure equipment, alert parents, and activate alternative learning plans will reopen faster and lose fewer students. The national forecasting architecture is functional and improving: NiMet produces seasonal climate predictions, NIHSA translates these into location-specific flood outlooks, NEMA issues formal advisories, and a recently launched NiMet 'map room'

combines ground station readings with satellite data. Interviews confirmed that emergency funding approval can occur within hours suggesting that fiscal machinery for rapid response exists even if not yet applied to education.

However, industry stakeholders rejected rainfall as a reliable trigger in Lagos because water accumulation dynamics are too complex. Forecast-based approaches are better suited to slower-onset seasonal patterns than to localised rapid-onset flooding. The practical implication is that anticipatory action should be built into the contingency plan of whatever mechanism is adopted: when seasonal forecasts indicate elevated risk, participating schools receive advance notification and, where the fund permits, a small pre-event disbursement for protective measures. This formalises what schools are already doing informally—moving ICT equipment to upper floors, reinforcing drainage—and extends it systematically. ECW's anticipatory action pilots in Pakistan and Somalia provide emerging precedents for how forecast-based triggers can release education-specific financing before a shock arrives.

Building Back Better: Linking DRF to Adaptation

Sovereign risk pool stakeholders were emphatic that the only structural route to reducing insurance costs over time is reducing the underlying risk through adaptation investment. Without it, climate-driven premium increases will erode affordability. Much of Lagos's flood risk is produced by infrastructure failures including inadequate drainage, unregulated construction in low-lying areas, blocked canals, absence of flood-resilient building standards. Insuring schools without addressing these conditions is unsustainable.

Several interviewees framed this as a design opportunity. Insurance participation could be linked to adaptation: schools meeting defined resilience standards could receive priority access to the fund, following the CCRIF COAST model which requires sectoral policy reforms as a condition of coverage. For Lagos, this means linking participation to private school registration and school safety compliance —making the DRF mechanism a vehicle for sector reform.

The education continuity plan should not only specify what happens after a flood but should identify priority adaptation investments such as school-level flood resilience measures, drainage improvements around high-risk schools, relocation of the most vulnerable facilities. Interviews emphasised that the Lagos Parametric Flood Insurance Programme is not designed to rebuild infrastructure as rehabilitation is funded through other mechanisms. The Education Continuity Fund (Lever 2) finances continuity and rapid recovery; longer-term reconstruction comes through capital budgets and development partner programmes. The two streams should be linked through a single contingency plan but not conflated into one instrument. The Global Partnership for Education's BRACE initiative, which channels Green Climate Fund resources into climate-resilient school infrastructure, provides a financing model for this integrated approach, though it has not yet been applied in Nigeria.

Education DRF as Part of a Holistic Response

Education disruption from flooding crosses sectoral boundaries. Schools close because roads are impassable, children are displaced, electricity and water fail, buildings are used as shelters, parents withdraw children for household recovery, and school operators cannot pay rent or teachers. Any education-specific mechanism must interface with LASEMA's operational planning and early warning systems. Interviews confirmed that disaster response funding flows through LASEMA regardless of sector. An education fund operating entirely outside LASEMA's awareness would create coordination problems.

Schools used as emergency shelters illustrate the coordination challenge; emergency management officials confirmed that finding alternatives to schools as displacement sites remains an ongoing

trade-off. The relationship between education and social protection is equally important: cash transfers have been shown to support education access and outcomes. In Fiji, social protection top-ups after Cyclone Winston found that 15 per cent of household assistance was spent on clothing and school supplies—the third highest priority after food and repairs. For Lagos, fee-replacement vouchers flowing through non-state schools could simultaneously protect household welfare and school cash flow. Interviews noted that education disasters also include fire, building collapse, and landslides. While flood is the appropriate starting point, the mechanism should accommodate future extension to additional hazards. A fund structure is inherently more adaptable to multi-hazard coverage than a parametric product.

Connection to the Education Financing Landscape

Significant international resources already flow into Lagos's education sector including GPE's USD 53.8 million system transformation grant; the World Bank's USD 500 million HOPE-EDU programme; and FCDO's PLANE programme. The global literature on shock-responsive education financing recommends that all new education programmes should incorporate DRF instruments into their frameworks. For Lagos, this means exploring whether CERCs, IPF-DDOs, or crisis modifiers can be integrated into these active programmes.

ECW's investments in Nigeria are concentrated in conflict-affected northeast states. There is no equivalent resilience financing for climate-affected education in Lagos. Whether ECW's mandate extends to climate-driven education disruption in a middle-income sub-national context like Lagos is a question for IRC and FCDO to explore.