

**SPHERE X STRATEGIC POLICY NOTE  
IMPORTANT POLICY NOTE**

A Self-Sustaining Fiscal Innovation for Agricultural Sector Protection | Developed following stakeholder engagement and the reported rejection of direct farmer contributions to a stabilization fund.

**Presented to**

Government of Guyana (for discussion)

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## Indicative Notice & Executive Thesis

**Indicative notice**

This publication is an **indicative** policy note prepared for public-domain discussion. It is **not** legislation, a budget commitment, or a binding financial arrangement.

**Methodology & limitations (at a glance)**

- Model outputs are drawn from an indicative RSF spreadsheet model (seed + redirected tax inflows + conservative investment policy + payout rules).
- Key results are sensitive to tax inflow definitions, crisis frequency, return environment, governance quality, and trigger calibration.
- Guarantee and insurance integration are presented as **design options** and are subject to feasibility and negotiation.

**Executive thesis**

The mistake is to treat stabilization as episodic relief. Once direct farmer contributions are rejected, the policy choice becomes: recurring treasury raids or a ring-fenced compounding buffer funded from **existing sector tax flows**.

**Base-case model outputs (10-year)**

- Fund value (Year 10): **GYD 28.9bn** (≈US\$138.8mn)
- Direct govt outlay reduction: **86%**
- Treasury savings (10-year): **~GYD 17.8bn**
- Sustainability ratio: **~2.76×**

## Key highlights

**Why this wins now**

- Farmer contribution model is politically non-viable; RSF resolves the impasse by using existing fiscal flows.
- Volatility is rising; ad-hoc relief converts climate/price shocks into fiscal shocks.
- RSF creates a compounding buffer that reduces repeated emergency spending.

**How risk is controlled**

- Conservative, diversified investment policy + emergency liquidity reserve.
- Payout discipline: cap annual disbursement (20%) + target liquid reserve (15%).
- Optional risk-transfer: MIGA-style guarantee + embedded crop insurance (subject to feasibility).

# Executive Summary

## *Transform recurring rice-sector volatility into a dynamic, rules-driven protection buffer*

By leveraging a circular fiscal flow, existing sector taxes are continuously channelled into a dedicated fund—systematically invested and strategically redeployed for relief. This approach ensures farmers are safeguarded, while reducing unpredictable, ad-hoc treasury interventions.

### The problem (fiscally fragile)

- Crisis relief is delivered through unpredictable treasury outlays.
- Farmers rejected direct-contribution stabilization proposals.
- Relief dollars do not compound; the state repeatedly pays cash instead of building a buffer.

### The RSF mechanism (circular fiscal flow)

- Redirect existing rice-sector taxes (Base-case: ~GYD 2.1bn within an estimated range of GYD 1.5bn–2.8bn) into a ring-fenced fund (no new farmer contribution).
- Invest via a conservative policy (incl. GY T-bills/bonds + US Treasuries) so returns compound protective capacity.
- When relief is required, RSF disburses under rules—**treasury remains untouched** to the extent payouts are covered by the fund.
- **Circular fiscal flow:** taxes → RSF → T-bills/US Treasuries → interest returns → fund growth → farmer protection.

**How to read the numbers:** the model is designed to show (i) survivability under historical payout stress and (ii) capacity build under normal years. The governing logic is that stabilization must accumulate in calm periods to remain credible in crisis periods.

### Key takeaways

- **Core design shift:** replace the rejected farmer-contribution concept with a ring-fenced fund capitalized by **existing rice-sector tax flows** and a one-time seed.
- **Quantified base case (10-year):** fund value of **~GYD 28.9bn** by Year 10, with modelled **~86%** reduction in direct outlays and **~GYD 17.8bn** in treasury savings versus an ad-hoc approach.
- **Stabilization must be institutional:** credible operation requires (i) trustees, (ii) an investment management firm under mandate, and (iii) an independent custodian/trust bank to segregate assets and strengthen controls.
- **Payout discipline is non-negotiable:** codify caps (e.g., 20% of fund value) and liquidity reserves (e.g., 15%) so the fund survives multi-year shock cycles.
- **Risk-transfer is additive:** MIGA-style guarantee and embedded crop insurance are optional design layers that can improve credibility, but they remain subject to feasibility and negotiation.
- **Implementation priority:** the critical early decisions are the legal ring-fence of inflows, governance appointments, custody setup, and publication of a quarterly dashboard to build trust.

# Background

## Strategic Policy Note: Rice Stabilization Fund (RSF) for Guyana

This strategic policy note introduces an indicative design for the **Rice Stabilization Fund (RSF)**—an institutional, rules-based instrument crafted to protect Guyana’s rice sector from recurrent shocks and to minimize fiscal volatility caused by emergency, case-by-case interventions. The RSF aims to empower policymakers with a permanent stabilization architecture, facilitating faster and more predictable relief while reinforcing medium-term budget discipline and sector credibility.

The policy rationale is simple: when **direct farmer contributions** are unfeasible, the Government faces a choice between repeated, unpredictable budget support or a ring-fenced mechanism funded by **existing rice-sector fiscal inflows**. The RSF concept outlined here places emphasis on (i) transparent eligibility and trigger rules, (ii) prudent investment and liquidity safeguards, and (iii) robust governance controls to prevent the fund from becoming a discretionary account.

### Objectives of this Report

- Define the RSF concept, financing logic (**circular fiscal flow**), and governance principles essential for sector credibility.
- Present indicative model outputs to test whether a one-time seed and redirected inflows can build a compounding buffer over time.
- Clarify key policy decisions—eligible inflow streams, payout caps, triggers, custody and investment arrangements—needed for implementation.
- Frame risk-mitigation options (e.g., guarantee/insurance layers) as potential design add-ons, subject to feasibility and negotiation.

### Scope and Usage Guide

This note is focused on **stabilization for crisis relief** (e.g., flooding, input-cost surges, and price-support events), rather than the full agriculture budget or long-term structural investments. Quantitative outputs are indicative, designed to test feasibility, rule performance, and fiscal risk reduction given specified assumptions.

Policymakers are encouraged to begin with the Executive Thesis and Key Highlights, then explore fund structure, rules/triggers, and assumptions to pinpoint the legal, fiscal, and governance choices necessary to operationalize the RSF.

# Why a Rice Stabilization Fund, Why Now

<b>Volatility is structural</b> Climate shocks + input-cost shocks + price variability are now recurring, not exceptional.	<b>Ad-hoc relief is fiscally noisy</b> Unplanned crisis spending disrupts fiscal planning and weakens credibility.
<b>Farmer contribution proposals failed</b> Direct contributions were rejected, limiting viable policy options.	<b>Opportunity cost is material</b> Relief disbursements do not compound; a buffer must be built in advance.

## Fund Structure (Indicative)

<b>Fund objective</b> Create a perpetual, rules-based mechanism that reduces ad-hoc treasury relief and improves farmer protection credibility.	<b>Capital sources (indicative)</b> <ul style="list-style-type: none"> <li>• Seed: GYD 3.0bn (one-time).</li> <li>• Recurring inflows: Base-case: ~GYD 2.1bn within an estimated range of GYD 1.5bn–2.8bn (modelled 3% growth).</li> <li>• Investment income: conservative compounding under a diversified policy.</li> </ul>
<b>Payout discipline</b> Cap annual disbursement at 20% of fund value; target liquid reserve ratio 15%.	<b>Governance (illustrative)</b> Trustee oversight + professional investment committee + rules-based disbursement secretariat + independent audit + quarterly reporting.

The RSF’s accumulation trajectory is sensitive to the level of fiscal inflows. **Under the conservative scenario (GYD 1.5bn annually)**, the fund continues to accumulate at a slower rate and remains capable of supporting rules-based disbursements under baseline shock conditions. **Under the upper-bound scenario (GYD 2.8bn)**, accumulation accelerates materially, increasing payout capacity and strengthening treasury protection. This demonstrates that the RSF remains structurally viable across the estimated inflow range.

### Estimation of Rice-Sector Fiscal Inflows (Proxy Methodology)

The RSF model uses a modelled estimate of annual fiscal inflows of approximately **~GYD 2.1bn** within an estimated range of **GYD 1.5bn–GYD 2.8bn**, derived from a structured proxy methodology, in the absence of publicly disaggregated tax data for the rice sector.

*This figure should not be read as a fixed tax statistic. It is a **modelled estimate** used to test whether the order of magnitude of existing fiscal flows could support a rules-based stabilization mechanism.*

The estimation framework is constructed across three layers:

- **1. Economic base (observable data)** . The model anchors to the measurable scale of the rice industry, including:
  - Nominal contribution to GDP
  - Export revenue levels
  - Production volume

These provide the foundation for estimating the sector’s value-generating capacity

- **2. Taxable base construction (derived estimates)** . Fiscal inflows are approximated by constructing a proxy taxable base across key channels:
  - **Corporate tax (millers/exporters):** Estimated using export revenue and margin assumptions to derive a profit base, then applying applicable corporate tax rates.
  - **Labour-linked taxes (PAYE/NIS proxies):** Estimated using assumed wage shares of sector value-added and effective tax contribution rates.
  - **Indirect fiscal contributions:** Including residual taxes and fees associated with inputs, logistics, and ancillary services, recognizing that core agricultural outputs are largely zero-rated.
- **3. Fiscal capture ratio (validation anchor)** . Fiscal capture in the rice sector is structurally low due to the zero-rated nature of primary agricultural outputs and preferential tax treatment, with most government revenue arising from corporate profits, labour-linked taxes, and indirect economic activity rather than direct production taxation.

Two validation ratios are reported to demonstrate that the inflow estimate is economically plausible at both the **sector** and **macro** levels. **Within-sector**, using the model’s rice-sector nominal value-added benchmark ( $\approx$ GYD 73.0bn in 2026; “*Historical Data*” rice GDP estimate converted at  $GYD/USD = 208.5$ ), the modelled estimate (Base-case:  $\sim$ GYD 2.1bn within an estimated range of GYD 1.5bn–2.8bn) implies a fiscal capture ratio of approximately  **$\sim$ 2.1%–3.8%** of rice-sector value-added (base:  **$\sim$ 2.9%**), consistent with a sector where primary outputs are largely zero-rated and fiscal capture occurs mainly via corporate, labour-linked, and indirect channels. **At the macro level**, expressed against **non-oil GDP (2025)** as a reasonableness check (Budget Speech GDP table, Appendix II, p.104), the same modelled estimate implies a fiscal capture ratio of approximately  **$\sim$ 0.14%–0.25%** of non-oil GDP (base:  **$\sim$ 0.19%**). These ratios are provided as order-of-magnitude checks for policy design and should not be interpreted as audited fiscal measurement.

Taken together, this approach does not attempt to produce precise tax accounting. It provides a transparent, order-of-magnitude estimate sufficient to test whether existing fiscal flows can be redirected to capitalize a stabilization mechanism without introducing new farmer contributions.

Component	Estimation method	Indicative range (GYD)
Corporate tax (millers/exporters)	Profit proxy $\times$ tax rate	GYD 0.9bn – GYD 1.6bn
Labour-linked taxes	Wage proxy $\times$ effective rate	GYD 0.3bn – GYD 0.6bn
Indirect taxes & fees	Residual estimate	GYD 0.3bn – GYD 0.6bn
<b>Total estimated inflow</b>	<b>Aggregated</b>	<b>GYD 1.5bn – GYD 2.8bn</b>

## Investment Policy (Indicative)

**Portfolio intent:** preserve capital, maintain payout liquidity, and earn conservative returns while supporting domestic market deepening (T-bills/bonds) and USD diversification (US Treasuries).

Asset class	Allocation	Model yield	Role
Guyana 364-day T-bills	30%	~1.09%	Domestic liquidity + circular financing to government.
NBS Save & Prosper shares	15%	~2.75%	Low-to-medium risk domestic yield enhancement.
Guyana government bonds (new instruments)	15%	~3.00%	Medium-term domestic paper; supports market deepening.
US Treasury securities	20%	~4.31%	USD diversification + benchmark risk-free returns.
Commercial bank on-lending program	10%	~5.00%	Channel concessional credit through banks; uses bank underwriting capacity.
Emergency reserve (liquid)	10%	~0.50%	Immediate payout capacity; limits forced liquidation risk.

## Rules & Triggers (Indicative)

<p><b>Coverage scope</b> Emergency relief only (flooding, input-cost spikes, low price episodes).</p> <p><b>Trigger concept (illustrative)</b> Price decline &gt;15% and/or production loss &gt;20%.</p>	<p><b>Payout discipline</b> Max annual disbursement: 20% of fund value.</p> <p><b>Liquidity discipline</b> Target liquid reserve: 15% of fund value.</p>
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**Purpose of the cap:** the 20% annual payout cap is a fund-preservation rule. It prevents one severe year (or repeated shocks) from structurally depleting the RSF and turning a stabilization asset into a one-time grant mechanism.

## Payout Cap & Continuity Protocol (20% Rule)

- **Step 1 — Immediate disbursement up to the cap:** The RSF disburses up to 20% of fund value within the period, subject to verification of triggers and beneficiary rules.
- **Step 2 — Residual requirement is treated as a “continuity gap”:** Any assessed relief need above the cap is not ignored; it is handled through a pre-defined continuity protocol so support continues without collapsing the fund.
- **Step 3 — Prioritization and staging:** The disbursement committee applies published prioritization (e.g., most vulnerable farmers/regions, inputs-critical relief) and stages remaining support across quarters or into the next period where appropriate.
- **Step 4 — Contingency liquidity activation (policy choice):** Where the gap is too large to stage without harm, Government may activate pre-agreed facilities (e.g., a standby credit line, contingency appropriation, or emergency facility) to cover the residual while preserving the RSF’s capital base.
- **Step 5 — Balance-sheet protection measures:** The RSF can temporarily tighten non-core deployments (e.g., pause expansion of on-lending) to preserve liquidity until normal inflows rebuild capacity.

**Extreme shock override (indicative):** In a severe national emergency (e.g., multi-region agricultural collapse, compounded flooding/drought, or an externally driven price shock of exceptional magnitude), Government could authorize a temporary override of the annual payout cap (e.g., up to **60%**) under predefined conditions, with documented approvals and a published recapitalization plan.

**Natural Resource Fund (NRF) / Consolidated Fund replenishment backstop (policy option):** Under an extreme-shock override, the RSF could be replenished through an extraordinary transfer ultimately funded from Guyana’s Natural Resource Fund (NRF) **via the Consolidated Fund**, consistent with the practical mechanics that NRF withdrawals are first transferred to the Consolidated Fund and then appropriated for specific uses. Accordingly, any RSF replenishment would be executed as a **Consolidated Fund** transfer/appropriation financed by an NRF withdrawal. This option would remain **subject to the NRF Act’s withdrawal rules, legal/legislative requirements, and fiscal decision-making**, and should be structured as a transparent, rules-based mechanism to preserve the RSF’s long-run stabilization function after an exceptional drawdown.

**Interpretation:** The cap is not a denial mechanism; it is a discipline mechanism. It forces transparency about how much can be paid from the stabilization asset versus what must be funded through exceptional, separately approved channels during extreme shock years.

## Summary of Key Model Assumptions

Assumption	Base value	Why it matters
Seed capital	GYD 3.0bn	Establishes investable scale and credibility from Day 1.
Annual tax inflow (Y1)	Base-case: ~GYD 2.1bn within an estimated range of GYD 1.5bn–2.8bn	Primary recurring capitalization stream; definition/earmarking is critical.
Tax inflow growth	3% p.a.	Drives long-run accumulation and ability to absorb multi-year shocks.
Blended gross yield	~2.33% p.a. (model uses 2.325%)	Return environment influences compounding and buffer depth.
Operating + risk premia	0.5% opex; 1.0% insurance; 0.75% guarantee (modelled)	Sustained costs must be covered without eroding protective capacity.
FX conversion	GYD/USD = 208.5	Used to translate projected fund value for external comparability.
Payout cap + reserve	20% cap; 15% liquidity	Prevents depletion and preserves response speed.

# Model Logic & Calibration (How to Read the Numbers)

Two lenses used in this paper	Interpretation guardrails
<ul style="list-style-type: none"> <li>• <b>Historical validation (2021–2026):</b> tests survivability under forced payout conditions based on the dataset’s crisis relief profile (with a realistic implementation start after the August 2020 administration change).</li> <li>• <b>Forward build (2026–2036):</b> shows capacity accumulation under “normal” years (no major drawdowns), which is the buffer-building phase.</li> </ul>	<ul style="list-style-type: none"> <li>• Outputs are indicative and sensitive to crisis frequency, governance quality, and return environment.</li> <li>• “Relief subsidies” represent <b>crisis relief</b> only, not total sector support.</li> <li>• Guarantee and insurance parameters are modelled design inputs, not confirmed commitments.</li> </ul>

## Historical Validation (2021–2026): Survivability Under Real Payout Patterns

To stress-test viability under a realistic administrative timeline, the model assumes the RSF were established in **2021** (post-August 2020) and then forced to absorb the historical crisis relief subsidy profile through **2026**. The purpose is not to perfect history; it is to test whether the RSF structure can survive real payout patterns while maintaining a positive balance after accounting for operating costs and modelled risk premia.

Year	Opening (GYD mn)	Tax inflow (GYD mn)	Investment income net of risk premia (GYD mn)	Opex (GYD mn)	Subsidy payout (GYD mn)	Closing (GYD mn)
2021	3,000.0	2,100.0	17.3	15.0	1,000.0	4,102.3
2022	4,102.3	2,100.0	23.6	20.5	1,200.0	5,005.4
2023	5,005.4	2,100.0	28.8	25.0	1,500.0	5,609.1
2024	5,609.1	2,100.0	32.3	28.0	2,500.0	5,213.3
2025	5,213.3	2,100.0	30.0	26.1	2,300.0	5,017.2
2026	5,017.2	2,100.0	28.8	25.1	2,000.0	5,120.9

*Note: figures are shown in GYD mn and may not sum perfectly due to rounding. Openings are chained to the prior year’s closing. “Net investment carry” includes investment income via the gross yield assumption and nets out modelled risk premia only: (2.325% gross yield – 0.75% guarantee premium – 1.0% insurance premium) × opening, i.e., ~0.575% of opening. Opex is shown separately as (0.5% × opening) and is explicitly netted out in the closing balance. For simplicity in the historical validation (2021–2026), the annual tax inflow is held constant at a base-case level (~GYD 2.1bn); the 3% inflow growth assumption is applied in the forward projection results.*

# Forward Projection (2026–2036): Capacity Build Under Normal Years

The forward case illustrates the RSF’s compounding logic under “normal” years (i.e., no large crisis drawdowns), which is precisely how a stabilization mechanism should be evaluated: it must accumulate capacity in calm periods so it can absorb shocks when volatility materializes.

Year	Opening (GYD mn)	Tax inflow (GYD mn)	Investment income (GYD mn)	Closing (GYD mn)
0	0	3,000	0	3,000
1	3,000	2,163	69.8	5,187.8
5	12,259.2	2,434.5	285.0	14,794.9
10	25,907.0	2,822.2	602.3	28,942.9

## Risk Mitigation Stack

<p><b>MIGA-style credit guarantee (concept)</b></p> <ul style="list-style-type: none"> <li>• Coverage: 90% of principal (modelled).</li> <li>• Premium: ~0.75% p.a. paid from fund earnings (modelled).</li> <li>• Indicative Year-10 protected value: ~GYD 26.0bn.</li> </ul> <p><b>Purpose</b> Improve institutional credibility and protect principal against adverse sovereign/political risk outcomes (subject to feasibility and negotiation).</p>	<p><b>Crop insurance layer (concept)</b></p> <ul style="list-style-type: none"> <li>• Annual premium: 1.0% of AUM (modelled).</li> <li>• Trigger concept: price decline &gt;15% and/or production loss &gt;20% due to flooding/drought.</li> <li>• Works within RSF payout discipline (20% cap; 15% liquidity target).</li> </ul> <p><b>Purpose</b> Shift a portion of volatility from discretionary relief into rules-based, trigger-linked risk transfer.</p>
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## Comparative Analysis

Metric	Current approach (ad-hoc)	RSF approach
10-year government outlay	GYD 20.8bn (illustrative continuation)	GYD 3.0bn seed (one-time)
Fund asset after 10 years	None	GYD 28.9bn stabilization asset
Treasury protection	None	High (rules-based pre-funding)
Farmer contribution requirement	Proposed (rejected)	None (redirect existing taxes)
Risk transfer / assurance	Limited	MIGA-style guarantee + embedded crop insurance (modelled)
Response speed	Discretionary / episodic	Trigger-based / automatic (concept)

## Governance & Reporting (Indicative)

A stabilization fund fails when it is treated as a discretionary account. The RSF requires institutional design that separates (i) political oversight, (ii) professional investment execution, and (iii) rules-based disbursement adjudication—supported by audit and transparent reporting.

Governance layer	Composition (illustrative)	Primary mandate
Board of Trustees	Government + farmer/industry representation + independent members	Mandate, policy guardrails, appointment/oversight of service providers, approval of audited statements.
Investment Management Firm	Licensed/qualified manager appointed by the trustees under a mandate and performance benchmarks	Execute the investment policy, portfolio construction, risk management, and reporting within approved limits.
Custodian/Trust Bank	Regulated custodian appointed by the trustees; independent from the investment manager	Safekeeping and segregation of assets, trade settlement, cash controls, and independent custody reporting to support governance integrity.
Investment Committee	Qualified professionals (fit-and-proper rules; conflict-of-interest controls)	Set strategic asset allocation, approve risk limits, review manager performance, and recommend adjustments.
Disbursement Committee	Rules-based secretariat + stakeholder observers	Validate trigger conditions and execute disbursements per policy; document decisions for auditability.
External auditor	Independent audit firm	Annual audit; verification of compliance with mandate, controls, and reporting integrity.
Reporting cadence	Quarterly dashboard + annual report	Transparency, credibility, and early-warning risk management.

## Stress Testing (Prototype Scenarios)

Stabilization design must be evaluated under stress, not only under steady-state compounding. The Excel prototype includes scenario paths that vary return assumptions, tax growth, and crisis disbursements to test survivability and recovery dynamics.

Scenario (prototype)	Key shock settings	Illustrative outcome	Interpretation
Conservative	Lower returns (~1.74%), lower tax growth (~1.5%), +GYD500mn extra subsidy	End-2026 fund estimate ~GYD 3.16bn (historical simulation variant)	Manageable drawdown; recovery remains feasible if rules are maintained.
Optimistic	Higher returns (~2.91%), higher tax growth (~4.5%)	End-2026 fund estimate ~GYD 3.82bn (historical simulation variant)	Demonstrates compounding advantage; strengthens payout capacity.
Stress (crisis)	Lower returns (~1.16%), 0% tax growth, +GYD2.0bn extra subsidy	End-2026 fund estimate ~GYD 1.70bn (historical simulation variant)	Shows the importance of payout caps, reserves, and early re-capitalization triggers for multi-year shocks.

## Conclusion & Recommendations

The RSF is not simply a relief program; it is a **fiscal institution** designed to transform recurring rice-sector volatility into a pre-funded protection buffer. The critical error would be to frame stabilization as an annual budget item, rather than as an asset to be built and governed over time. Model results indicate that a one-time seed of **GYD 3.0bn** combined with redirected annual tax inflows can accumulate a protection asset of **~GYD 28.9bn** over ten years—substantially decreasing direct treasury exposure to recurring emergencies.

### Recommendations

1. **Adopt the “no new farmer contribution” financing principle:** Redirect defined rice-sector tax streams into the RSF via enabling legislation and transparent reporting.
2. **Capitalize the RSF at investable scale:** Treat a single large relief package (e.g., **GYD 3.0bn**) as seed capital rather than a one-off disbursement.
3. **Institutionalize governance:** Establish a trustee board, investment committee, audit requirements, and quarterly disclosure.
4. **Implement payout discipline:** Codify a maximum annual disbursement cap (20%) and liquidity reserve ratio (15%) to prevent depletion during multi-year shock cycles.
5. **Engage risk-transfer partners:** Launch technical engagement on a MIGA-style guarantee feasibility and parametric crop insurance triggers tailored to Guyana’s agronomic risk.
6. **Operationalize concessional credit:** Implement a commercial bank on-lending programme with rate caps and recovery accountability, transforming stabilization into both relief capacity and productive financing.

**Strategic conclusion:** The RSF’s viability does not hinge on perfect tax measurement. What matters is whether the aggregate of existing fiscal flows is sufficient to support a rules-based stabilization mechanism. The model provides evidence that this threshold is met.

# Assumptions, Methodology, Limitations & Caveats

## 1) Treasury savings (10-year) — what it means and how it is calculated

In the base-case model, “treasury savings” is defined as the reduction in **direct crisis-relief outlays from the central government budget** under an RSF structure, relative to a continuation of the current ad-hoc relief approach.

**Formula (conceptual): Treasury savings** = (Baseline 10-year ad-hoc relief outlays) – (RSF direct outlay).

**Baseline outlays assumption used in the model:** GYD 20.8bn over 10 years (illustrative continuation, aligned to ~GYD 2.08bn/year average crisis relief in the historical dataset).

**RSF direct outlay assumption used in the model:** GYD 3.0bn one-time seed (capitalization).

**Implied savings:** 20.8bn – 3.0bn = **17.8bn**.

*Interpretation: this metric isolates treasury cash outlay reduction. It does not attempt to value the RSF’s accumulated assets (which are reported separately as “fund value”).*

## 2) Annual tax inflow estimate (Base-case: ~GYD 2.1bn within an estimated range of GYD 1.5bn–2.8bn) — how it is derived in the spreadsheet model

The model treats the annual tax inflow as a **modelled estimate** (Base-case: ~GYD 2.1bn within an estimated range of GYD 1.5bn–2.8bn) for recurring rice-sector fiscal inflows that could be ring-fenced into the RSF without imposing new farmer contributions. In the spreadsheet, this modelled estimate is constructed using a **proxy-based framework** (e.g., profit/taxable-base and incidence assumptions) calibrated to the sector’s scale, then carried forward with a modest uplift.

**Key point:** this is a **modelled estimate** intended for policy design and should be validated with actual Ministry of Finance / GRA collections (and clarified by which specific tax heads are eligible to be earmarked).

**Growth assumption:** the model applies ~3% uplift into later years to reflect nominal base growth and/or sector expansion.

*Implementation note: in practice, Government would define the eligible inflow streams (e.g., a defined portion of sector corporate taxes, levies, or other earmarkable receipts) and publish them as part of the enabling RSF framework.*

### Additional Methodological Clarification

The annual tax inflow is constructed using a structured proxy methodology in the absence of disaggregated tax reporting, consistent with standard analytical approaches in data-constrained environments. The modelled estimate is therefore presented as a range rather than a point statistic and should be interpreted as an order-of-magnitude input for policy design rather than an audited fiscal value.

## 3) What “subsidies” represent in this model (and what they do not)

The “subsidies” used in the historical validation and baseline outlay assumptions represent **crisis relief disbursements only** (e.g., flooding support, input-cost relief, and price-support episodes).

They are **not** a proxy for total annual government support to the rice industry.

The rice industry is also supported through substantial non-relief channels (e.g., drainage & irrigation and wider infrastructure, GRDB operations and programs, extension services and sector institutions). Those broader structural supports can total **tens/hundreds of billions of GYD annually** and are outside the RSF scope as defined here.

*Scope discipline: the RSF is designed to replace unpredictable crisis relief payouts with a pre-funded mechanism — not to replace the full agriculture budget.*

- **Fiscal relief history:** modelled crisis relief subsidy amounts (2022–2026)
- **Guarantee concept:** indicative World Bank MIGA premium and coverage assumptions as an input parameter (subject to feasibility and negotiation).

### Important clarification (scope of RSF):

Throughout this publication, “subsidies/relief” refers specifically to **crisis relief disbursements** such as flooding, input-cost spikes, and price-support episodes. **It does not encompass the total annual government support** provided to the rice sector, which also includes significant structural and institutional investments—for example, drainage and irrigation, broader infrastructure, GRDB operations and programmes, extension services, and other agricultural support mechanisms.

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#### About SphereX

SphereX Professional Services Inc. provides financial insight, strategic advisory, and analytical products supporting decision-making across government and the private sector.

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