



Integrated National
Financing Frameworks

GUIDANCE NOTE

INFFs for Disaster Risk Reduction (DRR)

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1. Introduction

An Integrated National Financing Framework (INFF) helps countries incorporate financing into national planning (see Box 1). It can help governments mobilize additional financing, enhance coherence across different financing policies and match different types of financing to their most appropriate use.

In this note, the focus is on how INFF can support governments in achieving their Disaster Risk Reduction (DRR) objectives.

In 2022, governments, through the ECOSOC Forum on Financing for Development, committed to supporting the implementation of INFF to align financing policies and strategies with national investment priorities, legal frameworks, and disaster risk and sustainable development strategies consistent with the 2030 Agenda for Sustainable Development, the Sendai Framework for Disaster Risk Reduction 2015-2030, and the Paris Agreement's long-term goals.¹

Box 1. What is an integrated national financing framework (INFF)?

Integrated national financing frameworks (INFFs) help countries finance their national sustainable development objectives and the Sustainable Development Goals (SDGs). Through INFFs, countries develop a strategy to mobilise and align financing with all dimensions of sustainability, broaden participation in the design, delivery and monitoring of financing policies, and manage risk.

INFFs are voluntary and country-led. They are embedded within plans and financing structures, enabling gradual improvements and driving innovation in policies, tools and instruments across domestic, international, public and private finance.

Four building blocks can support governments in putting an INFF into practice:



1. **Assessment and diagnostics** (to provide the basis for decision making on financing – i.e. what are the needs, what financing is already available and how it is being used, what are the risks, and what are the underlying obstacles/binding constraints);
2. **Financing strategy** (to guide the design of financing policies and reforms that can mobilise financing in line with national priorities and all dimensions of sustainability);
3. **Monitoring and review** (to bring together all relevant data and information to track progress and facilitate transparency, accountability and learning on all things financing);
4. **Governance and coordination** (to ensure institutions and processes required for the formulation and implementation of coherent financing policies are in place and functional).

Note: Global guidance on each of the building blocks can be found at inff.org.

Against this backdrop, this note provides guidance on leveraging INFFs to align financing policies and strategies with DRR goals as presented in the Sendai Framework. As such, it addresses the following questions:

1. How can INFFs help finance a country's DRR goals?
2. How can INFFs help enhance consistency and alignment of all financing in support of a country's DRR goals?
3. How can INFFs help bring together DRR, national development, and financing actors?

Disasters can wipe out development gains and significantly affect a country's ability to finance sustainable development outcomes. Preventing disasters is better than recovering from them. Although hazards are unavoidable, whether these hazards materialize into disasters depends greatly on how well a country is prepared and whether risks have been reduced through resilience-building investments and policies.

This draws attention to the importance of:

- **Properly assessing financial and non-financial risk and using this assessment to inform finance-related decisions.** Bringing a DRR perspective to INFF is critical to ensure that a wide range of risks are properly considered (see Building Block 1 in Box 1 above). This requires building on disaster risk knowledge, leveraging data to model future events, and gathering information on loss from previous disasters.² It could also necessitate the assessment of the potential fiscal risk that can result from disaster-induced damages. Risk information should then be used to steer investments towards achieving disaster resilience.
- **Ensuring that financial policies and instruments contribute to reducing disaster risks.** As disaster risks are diverse and complex, multiple financial instruments and policies are needed to comprehensively finance DRR goals, making it essential to develop DRR financing approaches, either as a separate strategy, as an explicit and prominent part of a broader financing strategy, or as guidance for financing policy decisions, that integrate diverse financing instruments and policies.³ Without a proper strategy in place, public and private financial flows might also go into potentially maladapted investments due to a lack of clarity on which actions improve resilience, making it even more pressing to align finance with resilience goals.⁴

INFFs provide an opportunity to ensure that otherwise scattered resources are directed to DRR and that new financial resources are secured, while also advancing financing policies that can help advance DRR objectives.

As such, applying an INFF approach to DRR contributes to Priority 3 of the Sendai Framework “investing in disaster risk reduction for resilience”. Indeed, INFFs provide a framework for country authorities to assess the current gaps and identify opportunities to reorient financial flows in support of national objectives, including DRR-related ones. At the same time, a DRR-informed approach to INFF will highlight opportunities for the public and private sectors to de-risk investments.

The next section provides an overview of DRR financing, highlighting its challenges and opportunities, while Section 3 discusses implementing INFFs for DRR and Section 4 provides an overview of the financial mechanisms and policies that countries can use. Finally, Section 5 indicates the next steps forward.

2. Overview of DRR financing

Strengthening resilience is critical to long-term sustainable development as it protects development gains. However, resilient investments tend to be less visible than investing in other development goals. This often translates into underinvestment in DRR despite its well-documented benefits in terms of lives saved, losses avoided, and sustainable development.

The Sendai Framework identifies investing in DRR as one of its four priority actions. A whole mindset shift is needed across the financial system moving from a short-term outlook, which under-prioritizes investment in DRR, to promoting a “Think Resilience” approach in all public and private sector investments, as reflected in the Bali Action Agenda.⁵

DRR is also essential to achieve the Paris Agreement adaptation goal of “enhancing adaptive capacity, strengthening resilience and reducing vulnerability to climate change”.⁶ Directing financial flows towards risk reductions would contribute to the goals of the Sendai Framework, the Paris Agreement, and the Sustainable Development Goals more broadly.

DRR aims at preventing new and reducing existing disaster risks and managing residual risk.⁷ Reducing disaster risk is particularly relevant as current trends indicate an increase of 40 per cent in the number of disasters from 2015 to 2030, even before considering how climate change is accelerating the pace and severity of hazard events.⁸ The increase in disasters has translated in economic terms into more than doubling the average annual direct economic losses from disasters over the past three decades.⁹

Yet, underinvestment in disaster risk reduction prevails worldwide, among other things, because of insufficient long-term focus within financial planning.¹⁰ More than 90% of disaster-related ODA is focused on emergency response, while only 4.1% is allocated to DRR.¹¹ This shows the need to shift towards a preventive mindset in the international development financial flows. Currently, the challenge of financing DRR falls heavily on national governments and domestic finances.

The Global Commission on Adaptation and the UNEP Finance Initiative identified 12 barriers to scaling up investment in adaptation and resilience by the financial system (see Table 1). These barriers are grouped into five broad categories: 1) inadequate support or incentives to act, 2) weak policies and conventions in the financial industry, 3) market barriers, 4) operational gaps at the institution level, and 5) low technical capacity for climate risk management.¹² While these barriers focus on the financial system and private investment, they provide an indication of the wide range of barriers to DRR financing.

Table 1. Barriers to scaling up financing for adaptation and resilience by the financial system¹³

BARRIER CATEGORIES	BARRIERS
Inadequate Support for Action on Adaptation/ Resilient Investment	<ul style="list-style-type: none"> • Insufficient public financial support • Insufficient incentives for private finance to act • Moral hazard surrounding physical climate risks
Policy and Practices in the Financial Industry	<ul style="list-style-type: none"> • Weak legal/regulatory frameworks and guidance • Lack of meaningful disclosure of climate risks • Absence of harmonized and robust metrics and standards
Market Barriers	<ul style="list-style-type: none"> • Perceived lack of profitable investments • Perceived low commercial readiness of adaptation and resilient solutions
Nascent Application of Climate Risk Management Practices	<ul style="list-style-type: none"> • Weak management of physical climate risks • Insufficient availability and adoption of climate risks data/tools
Low Capacity of Climate Risk Management	<ul style="list-style-type: none"> • Low capacity within financial system governance bodies • Low capacity within financial actors

The barriers to private investment and limited international assistance for DRR, combined with constrained public investment and insufficient budget allocation, lead to significant underinvestment in DRR. The finance gap for climate adaptation in developing countries is estimated to be 10 to 18 times greater than current international public adaptation flows.¹⁴ Alarming, this financial gap widens as adaptation costs and financial needs increase, but funding flows remain stable or decrease.¹⁵

Investments in DRR make sense because beyond saving lives, they also save resources and future-proof development gains.¹⁶ DRR provides three types of benefits, the so-called triple dividend of resilience:

1. First, DRR provides benefits because of avoided losses. For example, a 24-hour advance warning of a coming storm or heatwave can cut 30% of the ensuing damage, with early warning systems saving lives and assets worth at least ten times their cost.¹⁷
2. Second, DRR induces economic and development benefits. Research indicates that investments in resilient infrastructure in low- and middle-income countries, particularly in infrastructure assets exposed to hazards, provide benefits four times their cost once climate change is considered.¹⁸
3. Third, DRR benefits also provide social and environmental benefits. Besides the \$80 billion per year in avoided losses from coastal flooding, mangrove forests contribute as much as \$40-50 billion annually in non-market benefits associated with fisheries, forestry, and recreation.¹⁹

By encouraging governments to take a forward-looking approach in financing policy-making, INFF can help design and prioritize financing policies and instruments to unlock these benefits.

3. Implementing INFF for DRR

3.1 Key Considerations

To implement the INFF building blocks (see Box 1), some important issues need to be considered, including:

- **Understand absorptive capacity and ensure knowledge transfer:** A core feature of the INFF is that it is country-led. Resources, especially personnel, should be prioritized and ready to engage and be actively involved in the process.
- **Ensure effective development cooperation:** Development partner fragmentation and lack of coordination are enduring issues for many developing countries. It is important that all relevant partners are engaged to avoid duplication and explore synergies with other partners' initiatives. The INFF approach can enhance the coordination among development cooperation partners and provide a platform for clear asks on behalf of governments.
- **Be pragmatic:** Focusing on government priorities and identifying opportunities for some prioritization or a phased approach can prevent overwhelming government capacity. This would be particularly necessary for Least Developed Countries (LDCs) and post-conflict countries. Building on capacities that can be sustained and not attempting too much can also ensure country ownership.
- **Embedding INFFs into national development planning:** Strengthening the incorporation of INFFs into national development plans and existing institutions. Those plans tend to look across sectors and financing policy areas, thus calling for INFFs to be quite broad in scope.

Implementing INFFs in the DRR context should, thus, benefit from (i) building on existing systems; (ii) prioritization; and (iii) considering a phased approach based on government capacity.

Build on existing systems and knowledge

An INFF is based on the premise that countries do not start from scratch – all countries have policies and institutional financing arrangements in place. Many parts of the INFF would likely be done by some officials at some point in their own processes, albeit not in a systematic, cohesive, and integrated way, which is what the INFF aims to do. The key is identifying which part of the existing system would be the best to build on (see [INFF Governance and Coordination Building Block](#)) and avoiding creating a parallel process. This can be done in the Inception Phase of the INFF (see [INFF Inception Phase](#)).

At the institutional level: In most cases, ministries responsible for national planning and/or the national budget will play central roles in INFF implementation, especially if the focus is on the broad application of INFF or towards a specific financing strategy. To ensure that disaster risk is fully integrated into an INFF, ministries overseeing this area, such as national disaster management authorities, and stakeholders overseeing other relevant areas linked to DRR, such as climate actors and infrastructure-related ministries should be involved in these discussions. DRR stakeholders' engagement is essential whether the INFF focuses on public finance, private finance or both. This will allow DRR issues to be properly reflected in financing-related decisions and in the design of main financing policies, which may otherwise overlook DRR-related issues. Table 2 provides an indicative list of relevant stakeholders for developing INFFs that mainstream DRR goals. Strengthening institutional mechanisms, including cross-sectoral collaboration, can also be a co-benefit of developing INFFs.

At the partnership level: DRR financing is, in many cases, heavily dependent on ODA, particularly in LDCs and SIDS. The major partners on financing for development include major bilateral donors, multilateral institutions (e.g., IMF, World Bank), regional development banks (e.g., ADB, AfDB, EIB, EBRD, CAF, CDB, IADB and IsDB) and UN agencies. It will be important to build on these existing partnerships for INFF implementation for DRRs, including on related capacity-building initiatives. In most cases, the INFF focus areas will relate to ongoing initiatives, so it would be good to leverage these partnerships and ongoing initiatives. Some of these key players in support of DRR financing are also shown in the following table.

Table 2. Indicative list of relevant actors for DRR

ACTOR	POTENTIAL ROLE/CONTRIBUTIONS
GOVERNMENT	
Head of State	Set national DRR, vision, priorities and strategy; ensures political buy-in for DRR; provides high-level political leadership
Parliament	Approve DRR-related budgets and disaster-related sovereign insurance and credit lines. Support the creation of suitable contingency funds
Ministry of Finance	Involved in policy and regulatory interventions to create an enabling environment to mobilize DRR financing; coordinate the process and efforts to channel resources into DRR
Relevant Infrastructure-related ministries	Develop and implement regulations in their sector according to the national DRR strategy, for instance to ensure that infrastructure systems are resilient to disasters
Central Bank	Incorporate disaster-related consideration in their monetary policies to enhance financial resilience
Banking regulatory agencies	Assess risk exposure of the financial sector; encourage or mandate disaster-related disclosures; set disaster criteria standards for finance/lending by regulated banks
National Public Development Bank(s)	Incorporate DRR provisions in their infrastructure investments; invest in DRR projects
Subnational governments	Identify, raise awareness, act and coordinate other stakeholders as necessary to address local disaster risks; set and enforce local DRR regulations
National Disaster Risk Management Authorities / National Sendai Framework Focal Points	Articulate, coordinate and champion a national DRR strategy within the different levels and entities of the government; ensure the INFF and related financing policies are risk-informed from a multi-hazard perspective

NON-GOVERNMENT

Development Finance Institutions / Multilateral Development Banks	Provide resources, including technical assistance; help catalyse private investment in DRR-related actions; include DRR consideration in their investments
Private Sector	Contribute to domestic resources mobilization and investment; encouraged to share non-financial risk information to promote risk-informed investments
(Re)insurance Sector	Develop and offer insurance products to distribute risks in the private and public sectors
Stock exchanges	Enable the circulation of disaster-related debt-based instruments such as resilience, climate and sustainability-linked bonds
Civil society	Advocate for the needs of and potential impact on affected populations, and support behavioural changes at the community level

Prioritize

As resources for DRR are limited and stretched over many important and competing areas, at the Inception Phase, it would be important to adopt pragmatism and integrate INFFs into national development planning, giving priority to the following:

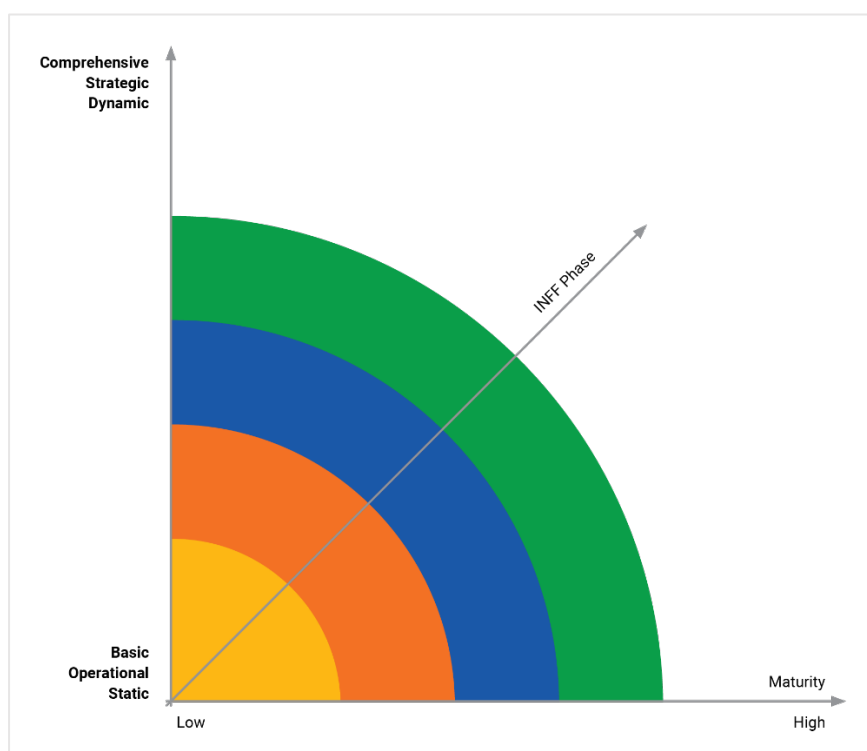
- **The INFF focus area:** In identifying the focus area, in this case DRR, consideration should be given to the timeline of expected INFF implementation and whether it will be a new undertaking or part of the ongoing initiative(s). The complexity of the undertaking, the number of staff/ministries /agencies that would need to be involved, and the engagement of partners should also be assessed against existing priorities and capacity. The aim would be to focus on a strategic/key area that could be advanced through the INFF within the identified timeframe without overloading capacity. This could build political commitment for INFF expansion/deeper application, if successful.
- **The building blocks:** The INFF building blocks are not meant to be sequential or prescriptive. They can and should be tailored to the country's context. For example, some aspects of the assessment and diagnostics building block can be data-intensive, and data needed may not be available or readily accessible. The alternative option to using modelled data may also not be feasible for low-capacity contexts. Authorities should then assess what the value added of having the data/analysis/costing exercise would be to INFF implementation and whether they

should apply it or not. It may also be the case that governance and coordination issues are important to address first.

Proceed with a phased approach

Implementing an INFF in a phased approach can help better manage capacity constraints, especially the immediate demands of officials. It can also help INFF implementation through cycles of political instability and conflict. Implementing an INFF through phases could also better match resources/capacity with INFF objectives, cultivate a risk-appraisal culture and ensure knowledge transfer. A phased approach can help countries make incremental changes to move from an operational to a strategic focus, from static to dynamic processes and from basic to comprehensive systems. How these phases are structured depends on the maturity of current systems and will require careful sequencing (Figure 1).

Figure 1. INFF phased approach



Source: DESA

Embedding INFFs into national development planning

Embedding integrated policy choices in national development planning and financing cycles is critical to ensure that DRR investments are made in a coordinated and strategic manner (see box 2 below). By aligning DRR investments with national planning processes, governments can ensure that DRR is integrated into broader national development strategies. This can help to ensure that DRR investments are not made in isolation, but rather as part of a larger development agenda that is focused on achieving specific development goals and outcomes.

Box 2. Embedding INFFs in national development planning and financing policy cycles

INFFs bring together the sustainable development aspirations of national planning systems with the financing policies, regulations, instruments and partnerships that government uses to mobilise, align and create incentives for investment in sustainable development.

National plans – whether long- or medium- term national development plans, SDG or Nationally Determined Contributions (NDC) action plans, sectoral or thematic strategies – lay out what needs to be financed. Governments use INFFs to determine and deliver a strategy for how these priorities will be financed.

The INFF approach is most impactful if it is embedded within a country's existing planning and financing policy systems and the institutions that manage them. Given the diversity of the architecture, systems and capacities of planning and financing policy institutions in different contexts, this may look quite different from one country to another.

The following questions can help governments consider how to do this, while at the same time informing the scope of the country's INFF (1):

1. At which point of the planning cycle is the INFF being introduced? For example, as a plan is being developed, during implementation, or alongside a mid-term review.
2. Which processes are used to design, deliver, monitor, learn from and report on national plans, and how will the INFF approach be embedded at each stage in the process?
3. How is the financing aspect of the identified plan/ strategy going to be strengthened? For example, is it lacking altogether? Is there limited/no understanding of financing needs? Is it focused on public finance alone, and requires more consideration of the roles that different sources of finance could play?
4. At which point of relevant financing policy development cycles is the INFF being introduced? For example, at the start of the national budget cycle, as an investment promotion policy is being articulated, during the review of a specific financing policy.
5. Which institutions (2) exist to lead and manage implementation and monitoring of the identified national plan? How will they need to evolve to implement the INFF? What capacities exist and may be needed as the INFF develops?

6. Which monitoring and review systems exist to track implementation of the identified national plan and ensure learning is fed back to policy design? How is financing treated?
7. What key outputs are produced throughout the cycle of planning and financing policies (e.g. annual statements, monitoring reports, open data initiatives) and how could INFF data be incorporated into them?

Notes:

1. Scope refers to whether the INFF is going to focus on an entire national development plan or a particular objective/set of objectives therein, as well as whether it is going to focus on all financing policy areas (public, private, macroeconomic) or one/a subset of them.
2. In line with the global guidance on Building Block 4 Governance and Coordination, the term 'institutions' here is used in its broader sense, with an emphasis on institutional functions and the organisations, processes and coordinating mechanisms that are in place.

3.2 Assessment and Diagnostics

DRR is embedded within the INFF global guidance, forming the basis for operationalizing the four building blocks. The objective of building block 1 is to provide a comprehensive picture of the national financing needs, available financing sources, as well as an understanding of the constraints and risks. Specifically, within building block 1, the guidance emphasizes the need to assess the financial implications of potential disasters, utilizing evidence-based assessments.

Build on existing systems and knowledge: Immediate or short-term financing needs and sources of finance for DRR may be known, as reflected in the national budget or national DRR strategies.²⁰ Binding constraints are also likely to be well understood by policymakers, many related to the unique characteristics of their administrative and political context as well as their fiscal constraints.

However, as DRR-related activities spread across several sectors and ministries, it is challenging for governments to identify, quantify and monitor public expenditures and budgetary commitments related to DRR. To address this issue, some governments are implementing DRR budget tagging and tracking systems to mainstream DRR in government processes and identify funding gaps. In the same vein, identifying and costing the necessary measures to reduce disaster risks is complex, albeit critical.

Another weakness, in many contexts, is financing needs to achieve more medium to long-term resilience goals and considering risks beyond the economic ones, which is an area that should be developed (see [INFF Building Block 1](#)). There may also be less attention/awareness on non-traditional sources of financing, such as blended finance and other innovative financing options for DRR (see next chapter for a comprehensive overview of options).

Yet, moving from an immediate/short-term/traditional focus to a medium/long-term/innovative focus cannot be done overnight. While this mind-shift can be supported by development partners, it should build on existing procedures or planning processes so that INFF assessments/reports can add value and not add to the “reporting fatigue” that plagues many developing countries. Development partners’ support should be accompanied by knowledge transfer and capacity building on DRR assessments.


Prioritization: In most cases, attention is dedicated to responding to immediate challenges from various disasters or shocks. However, to build resilient systems, scarce resources and financing policies need to be prioritized for risk prevention and for reducing the impact of a wide range of hazards.

Here are a couple of steps to consider:

- Conduct a comprehensive risk assessment to identify the areas, assets, and communities most exposed and vulnerable to disaster risks. This can involve analysing historical data on disasters, projecting future weather conditions, identifying possible cascading impacts of disasters, mapping out areas prone to natural hazards, and assessing the vulnerability of communities to these hazards.²¹
- Identify critical infrastructure and assets most at risk or vulnerables to disasters, for instance through a stress-testing analysis. These assets can include hospitals, schools, bridges, power plants, and other essential facilities necessary for the functioning of communities.
- Using a multi-stakeholder approach is important to involve all stakeholders in the decision-making process when prioritizing financing for DRR. This can include government agencies, private sector organizations, civil society organizations, and local communities (see Table 2 above).

Phased approach: Incorporating medium- and long-term assessments and diagnostics can be included over phases, depending on the maturity of country systems and resources/capacity available. The aim is to ensure that these assessments are done independently by country officials and included systematically for policy deliberation. Moving ahead too fast without understanding whether these assessments would add value to current processes runs the risk of not using them effectively, or at all. Relying predominantly on development partners to undertake these assessments without knowledge transfer and capacity building would also jeopardise country ownership and long-term viability of INFF application.

Table 3. Assessment & Diagnostics for DRR

INFF BUILDING BLOCK	BUILD ON EXISTING SYSTEMS AND KNOWLEDGE	PRIORITIZATION	PHASED APPROACH
 <p>1. Assessment & Diagnostics</p>	<p>Consider own national budget/sectoral/ thematic risk assessments</p> <p>Review past post-disaster needs assessments (PDNAs)</p> <p>Identify DRR-related expenditures in budget</p> <ul style="list-style-type: none"> - Are financing needs, sources of finance, risks and binding constraints well understood for DRR? (see INFF Building Block 1). <p>Is development partner support needed to supplement gaps? If needed, ensure knowledge transfer and capacity building</p>	<p>Consider the impact of any immediate challenges from hazards/shocks (e.g., hurricane, flooding etc)</p> <p>Consider critical infrastructure and assets, and potential cascading risks</p> <p>Focus on risk assessments (see INFF Building Block 1.3).</p> <p>Involve risk-related stakeholders throughout the process</p>	<p>Consider whether a phased approach can help embed medium and long-term DRR assessments in national budget/ sectoral /thematic assessments if not done already</p>

3.3 Financing Strategy

The objective of building block 2 is to provide a comprehensive overview of how DRR considerations can be mainstreamed into decision making in the process of formulating financing policies, instruments and regulatory frameworks. Furthermore, coherence checks are outlined to ensure that DRR policy identification and prioritization consider the full spectrum of sustainability dimensions, encompassing social, environmental, and economic aspects.

Build on existing systems and knowledge: There is a need for policies that mobilize all types of finance for DRR and align both public and private finance. Chapter 4 below provides a comprehensive overview of DRR financing policy options. Most governments usually have in place processes for policy design, implementation and review related to financing. The public financial management (PFM) process is central to this architecture. As part of the PFM process, policies (e.g., on revenue, expenditure, investment, trade, and private sector development) are designed mainly with macroeconomic goals in mind (economic growth, employment, inflation).


During the Inception Phase, it would be important to link the objectives of the INFF focus area (in this case, DRR) with the PFM, or alternative financing policy-making, process and the broader national sustainable development goals, as well as national disaster risk reduction strategies and climate change adaptation plans.

This will help embed the INFF approach in-country processes and enable coherence checks between different national objectives. For example, applying an INFF approach to DRR would mean checking whether this approach is consistent with debt sustainability targets (macro check), aligned with other sustainable development goals (coherence check), and to what extent all types of risks, such as natural hazards and other disaster risks, are considered (risk check).

Prioritization: Immediate challenges should be considered in the policy prioritization process. For example, in the aftermath of a disaster, governments focus their efforts on relief measures and rebuilding. An INFF undertaken during this phase must link well with these efforts. Macroeconomic and coherence checks, resource requirements and political/institutional preconditions can help prioritise and sequence policies (see [INFF Building Block 2 policy prioritization](#)). Attention to climate change and disaster risk reduction strategies during policy prioritization is particularly relevant in SIDS and other vulnerable contexts.

Phased approach: Successful implementation of DRR financing strategies is dependent on an enabling environment that may require political will, legal frameworks, and institutional/resource capacity, among others. Given that financing systems and institutional structures in countries have varying levels of maturity, the DRR financing strategy may benefit from implementation over phases.

Table 4. Financing Strategy for DRR

INFF BUILDING BLOCK	BUILD ON EXISTING SYSTEMS AND KNOWLEDGE	PRIORITIZATION	PHASED APPROACH
 <p>2. Financing Strategy</p>	<p>Include DRR considerations in national planning/budget/sectoral financing strategies by exploring:</p> <ul style="list-style-type: none"> - What are the gaps in policies/ strategies/ frameworks, financing instruments/ regulations, processes/systems? - Are all relevant actors engaged? (see INFF Building Block 2 Step-by-Step Guidance) 	<p>Consider the impact of immediate challenges on policy prioritization:</p> <ul style="list-style-type: none"> - Undertake macro, coherence and risk checks - Assess pre-conditions and resource requirements (see INFF Building Block 2 policy prioritization) 	<p>Consider implementing the financing strategy over phases depending on the maturity level of country systems</p>

3.4 Monitoring and Review


The objective of INFF building block 3 is to help monitor and review financing strategies to track progress and draw lessons from policy design and implementation. Monitoring and review consist of three layers (i) monitoring progress in different financing flows and policy areas, (ii) strengthening coherence among already existing tracking and monitoring systems and closing gaps in the architecture, and (iii) assessing whether the financing strategy itself is succeeding in increasing overall coherence and alignment of financing and related policies.

Build on existing systems and knowledge: Different countries can have various levels of monitoring and review processes in place; from a basic and high-level system to a more comprehensive and detailed one, whether at the national level (e.g., for the national disaster risk reduction plan), at the sector level (e.g., for climate or infrastructure), or at the organisational level (Ministry-, SOE-level). These would be ideal places to start from or connect to. However, for many developing countries, data and statistics are an area of weakness. Monitoring and review systems can also be fragmented. These issues should be accounted for in establishing the baseline (see [INFF Building Block 3](#)). There are also existing or planned initiatives to support governments in strengthening existing DRR systems at different levels by various development partners. To avoid duplication, leveraging existing work and initiatives with development partners should be considered.

Prioritization: To strengthen existing systems, it is also important to consider the maturity of country data and statistical systems, as well as monitoring and review systems. Priority should be given to processes that enhance the financing policy design and implementation process (must-have) rather than those that may only have negligible added value vis-à-vis the resources needed to strengthen them (nice-to-have).

Phased approach: Plans to strengthen monitoring and review systems may have low priority against immediate challenges and limited resources. Adopting a phased and incremental approach to move from a basic to intermediate or advanced monitoring and review level (see [illustrative levels](#) in INFF Building Block 3) can help mitigate this issue. Concerning DRR infrastructure, the phased approach to monitoring and review should move risk monitoring from an asset-based approach towards a system-based approach that considers cascading risks between infrastructure sectors.

Table 5. Monitoring & Review for DRR

INFF BUILDING BLOCK	BUILD ON EXISTING SYSTEMS AND KNOWLEDGE	PRIORITIZATION	PHASED APPROACH
 <p>3. Monitoring & Review</p>	<p>Consider own national planning/budget/sectoral M&E and statistical systems</p> <p>Are there any existing or planned development partner initiatives to strengthen these areas?</p>	<p>Identify monitoring & review processes that, if strengthened, will enhance policy design and implementation. See INFF Building Block 3</p>	<p>Consider a phased approach to move from a basic to an advanced level</p>

3.5 Governance and Coordination


The objective of building block 4 is to provide governance and coordination mechanisms that guide the entire INFF process. These mechanisms encompass a range of tools, including safeguards, screening tools, coherence checks, mainstreaming and incentives for inter-ministerial coordination. These can help facilitate the coherence of financing policies and support effective delivery.

Build on existing systems and knowledge: Identifying existing institutions, policy processes and development partners that support DRR financing decisions should be a key part of the Inception Phase (see [global guidance documents](#)). Focusing on governance and coordination at the start helps with ensuring political backing and country ownership for a successful INFF implementation. In addition, engagement with the private sector, civil society and academia can help support the design and review of DRR financing policies, particularly for those most at risk. Countries have varying levels of engagement with these actors, which should be considered in assessing existing governance arrangements.

Prioritization: Peace and security, political stability and the rule of law are foundations for effective governance and coordination. INFF implementation will be hampered if countries are/have recently been in conflict or in a period of political instability. Lowering the ambition of an INFF and working on advancing core governance and coordination components that require incremental changes can also help in a period of transition. Even in periods of stability, enhancing coherence of existing governance arrangements and closing gaps would likely be the most difficult part of an INFF without political commitment and leadership (see [INFF Building Block 4](#)).

Phased approach: Strengthening governance and coordination arrangements over phases can help with sustaining interest and buy-in, as well as mitigate capacity and resource limitations. There are likely to be several development partners supporting DRR on different aspects of governance and coordination. Sequencing and coordinating activities during the different phases will help with improving coherence.

Table 6. Governance & Coordination for DRR

INFF BUILDING BLOCK	BUILD ON EXISTING SYSTEMS AND KNOWLEDGE	PRIORITIZATION	PHASED APPROACH
 <p>4. Governance & Coordination</p>	<p>Consider own institutional arrangements, policy processes and engagements with development partners, private sector, civil society and academia</p>	<p>Consider peace and security, political stability and rule of law conditions</p>	<p>Consider a phased approach to strengthen governance and coordination arrangements</p>

4. Compendium of Policy Options for DRR Financing

DRR is cross-cutting by nature. It involves many sectors and can be integrated and streamlined into existing financing policies. As outlined above, the INFF guidance on [Building Block 2](#) can help strengthen the development and integration of DRR into policy choices, across public finance, private finance, and macroeconomic/systemic conditions in support of DRR.

Applying a DRR-lens to INFF helps connect the disaster risk profile and assessment of the country with suitable funding mechanisms, policies and regulations. It integrates multiple financial sources and mechanisms to achieve the DRR financial goals and defines responsibilities to achieve them. For example, an INFF can help a government better consider DRR when reviewing public finance policies and deciding on budget allocation.

Similarly, the INFF process guides a government in its interaction with key finance stakeholders, such as businesses, financial market participants, insurance companies, and development partners. For example, DRR elements could be embedded through an INFF process in policies that regulate how the private sector and financial markets operate. It could also help identify ways to further engage the insurance sector in support of national development objectives. In the same vein, the integration of DRR into INFF should inform discussions between a government and its development partners, while enabling synergies and maximizing development impacts.

The table below summarizes a variety of possible legal or regulatory measures, financing instruments, and processes that can support achieving identified DRR objectives, while linking these policy options with their targeted audience. These policy options are then further detailed in the rest of this section

and structured around the chapter of the Addis Ababa Action Areas, which provides the global framework in terms of financing for development.

Table 7. Indicative list of DRR-related financing policies and instruments by targeted audience

PUBLIC		PRIVATE SECTOR		INTERNATIONAL
DOMESTIC RESOURCES	BUSINESSES / INDIVIDUALS	FINANCIAL SECTOR	INSURANCE	COMMUNITY
Assign a minimum share of budgetary resources to DRR activities	Build regulatory frameworks that enhance resilience	Develop taxonomies for DRR investment	Reduce the protection gaps through better insurance coverage	Embed DRR in development partners' projects
Create a budget tagging and tracking system for DRR-related expenditures	Use financial incentives for leveraging private investment into DRR	Issue resilience bonds and call for credit enhancement mechanisms	Shift the insurance's mindset from protection to prevention	Ring-fencing funds for DRR-related activities
Mainstream DRR in infrastructure services planning and delivery	Review "Force Majeure" clauses in public-private partnerships	Introduce disaster-related clauses in sovereign debt instruments	Support innovative risk transfer solutions for DRR	Pursue reforms of IMF, World Bank and other DFIs in relation to DRR
Add DRR criteria to public procurement selection	Request corporate disclosure on risk exposure and management	Conduct disaster scenarios/stress testing to assess the country's financial stability		Factor in country vulnerabilities for concessional finance eligibility
Use national reserve (or contingency) fund for building back better	Address vulnerabilities from global value chains (concentration, overdependence, etc.)	Require commercial banks to include disaster risk assessment in credit allocation		Create international pooling mechanisms to diversify risks
Connect anticipatory finance with social protection systems		Advocate for lengthening the time horizon of Credit Rating Agencies		Ensure sufficient access to emergency liquidity
				Scale up the use of debt swaps for resilience investment

4.1 Public Domestic Resources

Public resources are the main source of financing for DRR activities since resilience investments often do not generate a revenue stream, although they avoid future losses. Governments can consider the following options to increase the impact of domestic resources on DRR objectives.

Assign a minimum share of budgetary resources to DRR activities

While risk reduction activities provide net economic benefits in the long term, policymakers may be tempted to direct scarce public resources to more immediate and visible priorities. To ensure enough resources are allocated to DRR activities appropriate to each sector, governments can decide to safeguard a certain percentage of their budget for this purpose.

Pros: This ensures that DRR activities are prioritized and that available resources are not diverted for other purposes.

Cons: Assigning budget resources to DRR interventions at all levels and in all sectors implies a trade-off with using these resources for other public objectives. Defining the exact percentage needed for DRR is challenging and creates rigidities in the budget.

Corrective actions: INFF allows governments to review and align their financial frameworks considering their multiple development objectives leading to better budget assignment.

Example

The government of **India** assigns 20% of its disaster-related budget to DRR activities, leaving the rest for disaster response (40%), recovery and reconstruction (30%), and preparedness and capacity building (10%).²²

Create a budget tagging and tracking system for DRR-related expenditures

Budget tagging and tracking systems help governments identify, quantify and monitor public expenditures and budgetary commitments to different national priorities, for example, by assigning budget codes for specific socio-economic objectives. While progress has been made in advancing climate or “green” budget tagging and tracking, these approaches have not captured the whole range of DRR-related activities beyond those related to climate change adaptation (CCA). Short of proper budget tagging and tracking, countries have done DRR-specific public expenditure reviews or budget circulars in which the Finance Ministry requests a report on expenditures related to a given theme (such as climate change adaptation).²³

Pros: A tagging and tracking system ensures the mainstreaming and institutionalizing of CCA and DRR in government processes. It helps uncover funding gaps by checking the adequacy of spending vis-à-vis country policy ambitions, improving spending effectiveness by monitoring performance, and facilitating prioritization of spending allocation.

Cons: To implement budget tagging, policymakers need a taxonomy describing “eligible” disaster-related activities. However, it can be challenging to precisely define what these activities are. For example, some activities include disaster considerations, such as building infrastructure with resilience in mind, despite not being primarily about DRR. The complexity of the system could create an administrative burden that might be challenging to overcome for some developing countries.

Corrective actions: A way to reduce the administrative burden and increase the system sustainability is to build on the existing public financial management framework rather than creating a separate system.

Example

UNDRR has developed a methodology and taxonomy for conducting integrated DRR and CCA budget tagging and tracking systems, which include a review of country experiences with these systems.²⁴

Mainstream DRR in infrastructure services planning and delivery

Many DRR interventions are embedded in public infrastructure either by considering disaster resilience in their design or by building infrastructure specifically to reduce disaster risk (e.g., flood protection walls). Policy and institutional framework can ensure that infrastructure systems consider DRR in their planning, design and operation.

Pros: Incorporating DRR considerations into infrastructure provides a resilient dividend in the form of reduced lifecycle cost of infrastructure.

Cons: Mainstreaming DRR into infrastructure development requires significant coordination efforts and internal capacity.

Corrective actions: By considering the financial framework as a whole, INFF allows the required coordination of different sectors towards national development goals including aligning infrastructure financial flows towards promoting DRR.

Example

UNDRR has developed the Principles for Resilient Infrastructure,²⁵ which can form the basis of planning and implementation of infrastructure projects with resilience as a core value, communicate the desired outcomes of national infrastructure systems to establish resilience of critical services, and assist in making risk-informed policy and investment decisions.

Add DRR criteria to public procurement selection

In addition to streamlining DRR in the planning of public procurement, it is possible to revise procurement law to mandate risk prevention and disaster resilience in the criteria for selecting bidders. For example, public procurement rules could ask that suppliers demonstrate how their services will remain operational during a disaster and what measures they take to reduce disaster risks. Including risk reduction requirements in public-private partnerships is another way to use private funds to embed DRR in infrastructure development.²⁶

Pros: Given the amount at stake, integrating DRR considerations into public procurement can have a significant impact on reducing risk and improving the resilience and longevity of the services procured.

Cons: Designing appropriate DRR-related selection criteria is complicated and those criteria need to be balanced/weighted against other public objectives to lead to the best possible outcome.

Corrective actions: Governments can identify multiple development goals during the INFF that use common financial mechanisms, such as public procurement, making the implementation of these financial mechanisms more cost-effective when integrated.

Example

The government of **Japan** developed guidelines for risk allocation and contracting, and embedded DRM in bidding documents and technical specifications to ensure the development of risk-informed infrastructure.²⁷ Detailed DRM specifications are included in bidding documents and contracts according to each project's characteristics and risks.

Use national reserve (or contingency) fund for building back better

Several countries have also set aside funds to be able to cover the costs of responding to a disaster. While these funds are created to enhance disaster response, they could be structured in a way to promote investment in future resilience by ensuring that part of these funds is used for building back better. In this context, UNDRR has been working on recommendations for scaling up DRR in humanitarian action.

Pros: Building up reserve funds gives countries resources to deal with post-disaster expenditures quickly, without putting national finances at risk, which is crucial for limiting the damages and long-term impact on development, especially if those funds are also used to prevent future crises. Reserve funds are particularly suited to deal with frequent but low-impact events.

Cons: Setting aside funds for future disasters has a cost, as governments cannot use those resources to fund other current activities. It is not trivial to estimate the size of the resources assigned to these funds, nor the share that should be devoted to future risk reduction. If a fund is too small, it won't be able to protect the economy from financial risk; if it is too large, the fund will prevent the government from using resources in other activities. As disasters become more frequent and intense, replenishing such funds may also become challenging.

Corrective actions: In order to quantify the amount of budget that can be allocated into a reserve fund, countries could use the INFF approach to take a comprehensive look at the national financial landscape to identify resources that could be reassigned.

Example

Tonga established a National Emergency Fund (NEF) set up to 1% of the GDP.²⁸ Funds can also be set up at a regional level to distribute the risk among a group of countries. An example is the EU Solidarity Fund which provides aid upon request of the affected EU member in the event of a major nature-induced disaster to cover costs for emergency and recovered operations incurred by public authorities.²⁹

Connect anticipatory finance with social protection systems

Anticipatory Finance uses forecast-based parametric triggers and pre-established financing to act earlier and at a larger scale (i.e., between when a disaster is forecasted and when it occurs). This allows the implementation of actions that reduce the disaster impact. Embedding anticipatory finance in social protection systems is a way to provide financial resources to individuals and communities when a disaster becomes imminent.

Pros: Integrating anticipatory finance into social protection systems can reduce disasters' overall economic and social impacts and promote resilience. The pre-arranged financial mechanisms can be quickly activated when a disaster is forecasted, reducing delays in providing assistance and increasing the effectiveness of the response.

Cons: Anticipatory finance mechanisms often depend on external funding, which could make them subject to fluctuations and lack of continuity. Designing and implementing effective anticipatory finance measures requires accurate and up-to-date data on disaster risks and vulnerabilities, and coordination between multiple stakeholders, both of which can be challenging.

Corrective actions: INFF allows a comprehensive approach to social protection systems, which serve several purposes, and avoids a piecemeal approach to social protection reforms.

Example

The Productive Safety Nets Programs (PSNP)³⁰, now in its 5th phase in **Ethiopia** provides cash and in-kind support to food-insecure families living in drought-prone areas in exchange for participating in activities improving the communities' climate resilience.

4.2 Private Sector

The Sendai Framework acknowledges the need for the private sector to integrate disaster risk into their management practices and calls for disaster risk-informed private investments. There are multiple ways in which the government can incentivize businesses, financial markets and insurance companies to further contribute to DRR objectives, which could be considered as part of an INFF process:

Business/individual-related interventions

Build regulatory frameworks that enhance resilience

Private companies operate within the regulatory framework provided by public authorities, which could be designed to reduce the risk of disasters.

Pros: Regulatory frameworks can embed DRR into the daily actions of multiple sectors. For example, policymakers can use land use procedures and building codes to ensure that real estate is not constructed in disaster-prone areas and meets appropriate design and construction standards. Similarly, health and safety laws, as well as environmental laws, have a key role in reducing disaster risks linked to business activities.

Cons: Appropriate regulations and standards are necessary but not sufficient if not implemented nor properly enforced. For example, when building standards are set too high, it might be impossible for people to comply, hence the importance of reflecting local building practices and affordability into standards.

Corrective actions: Engaging with relevant stakeholders when reviewing regulatory frameworks will ensure that those are fit for purpose and realistic while enabling synergies between different development goals to be identified.

Use financial incentives for leveraging private investment into DRR

Governments can leverage private investments by offering subsidies to targeted, resilience-generating projects. They may also use price signals to encourage a more efficient use of scarce resources (e.g., pricing water for more efficient management of scarce resources). Policymakers can also use tax incentives to encourage property owners to manage stormwater runoff on their properties (e.g., through green roofs, and permeable pavements) and/or harvest rainwater (e.g., water tanks).

Pros: Incentives and regulations, allow governments to align private investments with national resilient goals.

Cons: It is challenging to properly design incentives schemes that will maximize impact and limit cost for the public purse. Also, pricing mechanisms for infrastructure services can have negative impacts on the most vulnerable population facing affordability constraints.

Corrective Actions: Participatory processes plus monitoring and reviewing mechanisms are important to make sure that financial incentives achieve their intended benefits at a reasonable cost for society.

Example

North Macedonia offers performance base payments to fund investments by SMEs in renewable energy and energy efficiency; these investments will reduce energy demand and hence increase the resilience of its infrastructure.³¹ **Italy** provides an example where fiscal incentives have been used to encourage investment in the seismic upgrading of private buildings (as part of Italy's national plan for seismic risk prevention following the 2009 Abruzzo earthquake).³² On flood prevention, Washington D.C. uses stormwater fees, which are based on the total area of impervious surface on a property (e.g., roofs, driveways), to fund activities reducing sewer overflows.

Review “Force Majeure” clauses in public-private partnerships (PPPs)

Force majeure clauses tend to exonerate the private partner in a PPP contract of its liability in case of unforeseen events beyond its control, such as natural hazards, cause the interruption of services. However, natural hazards often do not have to turn into disasters, and the private partner can take preventive and mitigation measures to reduce the risk of disasters.

Pros: The private partner will have an extra incentive to implement DRR measures if the “force majeure” clause does not entirely exonerate its responsibility in case of service disruption caused by hazards.

Cons: It is not easy to find the right balance as private partners might be reluctant to enter contracts that put them at risk in case of disasters and this would require defining what would be considered reasonable measures to reduce risks and service interruptions.

Corrective Actions: By engaging with the private sector, governments can refine the clauses in public-private partnerships so that national goals and private constraints are taken into account.

Request corporate disclosure on risk exposure and management

Companies need to be transparent about the risk they are facing and the actions they intend to take to prevent risks from materializing, for example in their annual reporting. Recognizing the importance of enhanced disclosure by corporates, regulators in around 80 countries have taken close to 200 measures to improve corporate sustainability disclosure since 2015 (with 60% calling for mandatory disclosure).³³

Pros: Enhanced transparency forces companies to assess risks and put in place measures to mitigate them (what gets measured gets managed). Meanwhile, investors can use this information to guide their investment decisions and allocate capital away from companies not managing risk properly.

Cons: Additional reporting has a cost for companies (e.g., collecting data), which can be prohibitive for smaller companies and those in less advanced economies.

Corrective Actions: INFF Building block 4 considers engagement with the private sector to build suitable institutional arrangements, which provides a space to negotiate the conditions for risk disclosure reporting. Smaller companies might be able to do simplified reporting or government support might be provided if required.

Example

New Zealand was one of the first countries to announce in 2020 mandatory reporting for companies based on the recommendations from the Task Force on Climate-related Financial Disclosures (TCFD), before being followed quickly by several other countries. TCFD recommendations call for companies to be transparent on four themes: governance, strategy, risk management, and metrics and targets regarding the climate-related risks they are exposed to.

Address vulnerabilities from global value chains (concentration, overdependence, etc.)

Global value chains have both advantages and disadvantages when it comes to risk. On one hand, they can help diversify sources and create redundancy to prevent localized disruptions. However, as value chains become longer and more complex, they also increase the potential for risk exposure. This is especially true if the complexity of the value chain reduces transparency, making it difficult to identify vulnerabilities such as overdependence on key suppliers or concentrations of production in specific areas. Additionally, multiple value chains can overlap, creating an even more complex network which compounds with vulnerabilities particular to each industry. Therefore, it's crucial to identify and address vulnerabilities in global value chains to ensure global stability.

Pros: By addressing vulnerabilities in specific parts of the value chain, broader benefits can be generated as the solutions may have an industry-wide effect. Additionally, making production decisions based on risk assessment can move away from cost-based competition and promote more sustainable and resilient industries.

Cons: When assessing vulnerabilities that could pose a risk, it's crucial to approach the matter with sound reasoning. Acting on perceived risks rather than actual ones when modifying global value chains may lead to unwarranted economic inefficiencies. It's therefore imperative to ensure that proposed changes are based on factual evidence.

Corrective Actions: INFF's assessment and diagnostics of the national financing framework could identify potential to develop domestic production in key areas that reduce dependencies on global value chains aligning national resilience and economic development goals.

Example

The Covid-19 pandemic resulted in unexpected disruptions to both supply and demand, as well as temporary trade restrictions across a diversity of products.³⁴ These disruptions had a significant impact on the global economy, highlighting vulnerabilities in production

strategies and supply chains. As a result, companies began to re-evaluate their value chains, leading to increased domestic production, reduced reliance on a limited number of suppliers, and a rethinking of lean inventory and just-in-time replenishment strategies. This increased emphasis on risk-informed production decisions has made the global economy more stable and has created opportunities for innovative production methods.

Financial sector-related interventions

Develop taxonomies for DRR investment

Taxonomies have been instrumental to the green bond market's exponential growth. They define eligible activities that can be financed by this type of financial instrument. Developing dedicated taxonomies for DRR investment, for example identifying eligible risk reduction activities, should allow the capital market to play a greater role through the emergence of DRR-dedicated financial products (e.g., resilience bonds, funds targeting companies providing solutions to resilience challenges).

Pros: DRR taxonomies provide standards and norms for capital market investors that help ensure the credibility of investment products branded as contributing positively to DRR.

Cons: Taxonomies must balance details with clarity to be rigorous in assessing what constitutes resilience without becoming overly complex. Contextual factors might affect the contribution to resilience of a given activity making it difficult to create strict rules about what is taxonomy-compliant and what is not.

Corrective Actions: Matching new or existing DRR taxonomies with resilient plans as part of an integrated overview of the financial framework and the national development goals could be the link connecting capital markets with national DRR strategies.

Example

UNDRR has worked with the Climate Bond Initiative on a Resilience Classification Framework that can serve as a standard for capital markets in this area. Another example is the Adaptation Solutions (ASAP) Taxonomy allows the identification of small and medium enterprises (SMEs) that offer adaptation solutions in developing countries.³⁵ Once these SMEs are identified, support programs targeted to these companies can be implemented.

Introduce disaster-related clauses in sovereign debt instruments

Disaster-related clauses help the government free up cash flow in times of crisis by suspending debt repayment for a certain period (e.g., 1 or 2 years). The disaster-related clause must specify the type and magnitude of events triggering debt suspension (e.g., hurricane, pandemic).

Pros: Disaster-related clauses avoid that governments devote scarce public resources to repay debtors while they face a huge demand for relief and rebuilding purposes to protect their people. The clauses also reduce the risk of a costly sovereign default.

Cons: Disaster-related clauses do not provide “free” resources for governments as they are currently designed as net present value (NPV) neutral. This means that the debt is simply deferred but will have to be repaid either during the remaining duration of the debt or through an extension of the debt maturity. It is also unclear whether governments may have to pay a premium for including a disaster-related clause in their debt instruments, for instance, due to the risk of a slightly delayed repayment schedule or lower liquidity of the debt instrument. However, the NPV characteristic should provide comfort to investors and the clause could also be seen as improving the resilience of the borrowing country and reducing the risk of default following a disaster.

Corrective Actions: Periodic monitoring of the use of disaster-related clauses should help draw lessons from practical experiences to improve future design of these clauses.

Example

Grenada and **Barbados** have pioneered disaster-related clauses, and **Barbados** also launched the first government bond with a pandemic clause. The Inter-American Development Bank (IDB) has also included a two-year debt suspension clause in its loans to **Barbados** in case of disasters triggered by natural hazards. Meanwhile, the international Capital Market Association (ICMA) published in 2022 a standardized term sheet for Climate Resilient Debt Clauses (CRDCs) to facilitate market adoption of these clauses. The UK Export Finance (UKEF) announced at COP27 that it will become the first export credit agency to incorporate CRDCs in its direct sovereign lending, allowing debt repayment to be deferred in case of climate change-related emergencies.³⁶

Issue resilience bonds and call for credit enhancement mechanisms

Resilience bonds are a subset of the fast-growing green bond market, for which the proceeds raised are used to finance resilience-building projects and activities. While the green bond market has been able to rely on well-developed green taxonomies to identify eligible projects for financing, there is currently no direct equivalent in the resilience space, which is a gap the Climate Bond Initiative and UNDRR are currently working on to address (see the section on taxonomies above).

Pros: By issuing this type of bond instrument, governments may be able to attract investors willing to align their investments with sustainable development objectives. Through this type of issuance, the country also signals its commitment to taking appropriate measures to reduce disaster risks. This should be perceived favourably by the market.

Cons: This type of bond requires governments to provide information on the use of proceeds, which involves some administrative costs. It is also unclear whether governments could benefit from cheaper financing costs through the issuance of a resilience bond compared to traditional borrowing, beyond possibly a few basis points due to higher demand from investors. However, the pricing could become much cheaper if resilience bonds are combined with credit-enhancing mechanisms, for example from development partners willing to support governments in this area.

Corrective Actions: Assessing the financial landscape as part of an INFF process can help identify the potential use of proceeds and estimate the amount needed to issue resilience bonds or bundle them with other use-of-proceeds for sustainability bond issuance.

Example

Although there is not yet an example of a resilience bond issued by a sovereign at the time of writing, the European Bank for Reconstruction and Development (EBRD) issued a resilience bond for \$700 million in 2019, providing a proof of concept.³⁷ Meanwhile, different initiatives have emerged to enhance the credit profile of green bonds, which could be extended to the resilience bond market to lower financing costs for countries. For example, the World Bank partially guaranteed the blue bond issued by **Seychelles** in 2019. A first credit loss tranche mechanism was also supported by multilateral development banks for the Amundi Planet Emerging Green One fund, which focuses on green bonds from emerging markets and includes a donor-funded Green Bond Technical Assistance Program. The Green Climate Fund also invested in the Green Guarantee Company, which is established to provide guarantees for climate bonds.³⁸

Conduct disaster scenarios/stress testing to assess the country's financial stability

Disasters have significant economic consequences and can derail the financial stability of a country. Central banks and other financial regulators have an interest in better understanding the exposure of financial institutions to disaster risks. To this end, they can consider different disaster risk scenarios and assess their impact on the economy and financial systems. Such impact can have cascading effects and materialize through different transmission channels (e.g., property damages due to acute weather events, lower agriculture productivity due to slow onset events such as desertification, and stranded assets due to stricter regulations such as coal-fired power plants).

Pros: Scenarios are particularly important as historical losses are unlikely to be a good predictor of future losses in a changing environment and climate. Anticipating future losses allows the timely implementation of risk reduction actions.

Cons: Modelling the impact of disasters on financial institutions often relies on numerous assumptions and requires data that might not be available in many countries. While central banks are starting to consider climate-related risks, they may ignore other types of hazards (e.g., technological and biological risks).

Corrective Actions: More complete information on the national financial framework can help develop more precise scenarios.

Example

The Network of Greening the Financial Systems (NGFS), gathering 100+ central banks and observers, develops climate scenarios to understand the range of plausible outcomes

resulting from different climate policy choices (early action, delayed actions, actions in only some jurisdictions, etc.)

Require commercial banks to include disaster risk assessment in credit allocation

Financial regulators are responsible for ensuring financial stability and supervising domestic financial institutions. In line with their mandate, they could require banks to integrate disaster risk assessment into credit screening processes.

Pros: This type of regulation will force borrowers to evaluate existing and potential disaster risks to their projects, thereby prompting them to act to build resilience. In the same vein, countries could ask for international regulatory frameworks for banks, the so-called Basel norms, to penalize projects that do not properly mitigate disaster risks.

Cons: Not all projects are relevant for disaster risk assessment and such regulatory requirements add some operational burden to commercial banks.

Corrective Actions: An INFF process could facilitate integrating the requirements for disaster risk assessment as a component of a larger reform to banking sector regulations.

Example

As of 2023, 139 financial institutions in 39 countries are members of the Equator Principles. These Principles require the signatory financial institutions to conduct a climate change risk assessment, which will consider relevant physical risks, for all the projects they finance with potential significant adverse environmental and social risks.³⁹

Advocate for lengthening the time horizon of Credit Rating Agencies

Credit Rating Agencies (CRAs) play an important role in capital markets. They inform investors about the creditworthiness of borrowers, including government entities. Their ratings are also used in many jurisdictions for regulatory purposes. CRAs typically base their assessment on financial and economic forecasts up to three years, which may overemphasize short-term considerations and not appropriately capture investment in long-term economic resilience.⁴⁰

Pros: Lengthening the CRA time horizon beyond the traditional three-year timeframe and creating long-term ratings is necessary to better account for risks and properly reward investment in resilience. For example, a country's efforts to invest in climate adaptation should be viewed favourably in credit ratings as it should enhance a country's economic resilience and a government's ability to repay.

Cons: The opponents of long-term credit ratings typically argue that making predictions beyond the three-year timeframe is challenging and subjective, which can undermine the credibility of ratings.

Corrective Actions: INFF could build the case for lengthening the CRA's horizon by highlighting the benefits this could have on other development goals beyond DRR.

Example

Revising CRA's practices would require government and national regulators to engage in discussion with them as well as large investors advocating for changes, for instance through meetings such as the High-Level Meeting on the Role of CRAs in the implementation of the 2030 Agenda for Sustainable Development organized by UNDESA in 2022. Engagement with CRAs can also help countries better understand how DRR investment can improve their ratings.

Insurance sector-related interventions

Reduce the protection gaps through better insurance coverage

Although disaster risk insurance is not sufficient on its own, it could be part of a larger disaster risk reduction strategy, especially for managing risks for high-impact, low-frequency events. However, it's important to ensure that the natural hazards most relevant to a particular region are included in the coverage. One way to do this is by making it mandatory for home or other insurance policies to include these hazards. By bundling different hazards together in one policy, insurance coverage can offer more comprehensive protection.

Pros: Policyholders can benefit from more comprehensive coverage. This approach also allows the government to ensure that disaster risk insurance offers the appropriate protection in accordance with the country's context.

Cons: When multiple risks are combined into one policy, cost may increase which could cause that some policyholders are unable to afford it or that insurance companies leave the market.

Corrective Actions: Governments could integrate incentives for insurance companies to provide more comprehensive coverage into their financial strategy if the cost of these incentives is lower than the socio-economic benefits from this extended coverage.

Example

The European Insurance and Occupational Pensions Authority (EIOPA) has created a dashboard that displays the factors contributing to the climate-related insurance protection gap.⁴¹ This tool helps identify measures to reduce losses in the event of natural hazards. By comparing the level of insurance protection to the estimated risk, it is possible to identify areas where the risk is high and insurance coverage is inadequate.

Shift the insurance's mindset from protection to prevention

The insurance industry has been largely focused on protecting insurers against disaster risks. However, covering policyholders against potential damages does not reduce risk, but rather transfers it to an external party (i.e., the insurance company). Reducing risk requires implementing specific measures such as installing fire extinguishing appliances, sprinklers, and security cameras. The insurance industry can incentivize policyholders to make DRR-related investments, for example, by applying variable pricing and offering discounts to those implementing DRR measures. The International Cooperative and Mutual Insurance Federation (ICMIF) and UNDRR have produced a joint report on shifting the focus of the insurance industry from protection to prevention, which identifies seven practical mechanisms for how the cooperative and mutual insurance sector can help drive prevention and disaster risk reduction.⁴²

Pros: With the increasing frequency and severity of disasters, insurance could quickly become unaffordable. Preventing risks from happening can help mitigate future increases in insurance premiums by reducing the number of claims and enhancing the financial sustainability of the industry.

Cons: Efforts to promote risk prevention should not result in excluding people from insurance protection by requiring difficult-to-meet DRR measures as prerequisites for insurance coverage.

Corrective Actions: Governments can engage with insurance companies to find mutually beneficial ways to implement DRR measures that help mitigate future increases in insurance premiums without excluding people from insurance protection.

Example

Climate Insurance Linked Resilient Infrastructure Financing (CILRIF)⁴³ is an insurance solution developed by UNCDF that offers 10-20 year climate insurance to cities with pre-arranged premiums that decrease as the city invests in climate resiliency. As the city manages its risk by implementing the adaptation measures agreed in the insurance policy, the insurance premium will decrease to reflect the updated risk.

Support innovative risk transfer solutions for DRR

Digitalization and the growing availability of data are helping insurers better understand and price disaster risk, which has led to insurance products being offered in areas that were not covered before. Against this background, index insurance products and parametric insurance have emerged, which provide a pre-agreed sum in case specified parameters are met, such as drought. For example, these can be used to protect small-scale farmers against losses from extreme weather. Another risk transfer solution is catastrophe (cat) bonds, which allow the bond issuer to receive funding from capital market investors if certain conditions are met (e.g., hurricane) within the bond period (typically three to five years). In return, the issuer pays an interest rate to investors. Insurers have used cat bonds to lay off some of their risk through capital market instruments, thus freeing up capital for additional underwriting. A specific variation of catastrophe bonds includes a reduction in the coupon when pre-agreed risk-reducing actions are implemented.⁴⁴

Pros: Index insurance products and cat bonds can be cheaper to operate as there is no need to estimate the actual loss and can lead to quick disbursement. They have also allowed the coverage of risks previously considered as uninsurable.

Cons: Setting the parameters correctly remains challenging and there are cases where policyholders are not covered during a catastrophic event because certain triggers are not activated. In addition, the products can be expensive and not well understood by consumers. As a result, their uptake has been slow, despite substantial public support.⁴⁵ There is also a risk that with the growing frequency of hazards, as well as greater forecasting precision, regions and sectors most at risk will be priced out of insurance markets, and only those with low or moderate risk will be able to find coverage.

Corrective Actions: Innovative risk transfer solutions for DRR are easier to develop when governments and insurance companies engage with each other with comprehensive information and perspective.

Example

UNDP is collaborating with the insurance sector through the Insurance Development Forum (IDF), and with funding from BMZ, to support the development of a portfolio of new insurance solutions for sovereigns. The goal is to deliver technical assistance and risk financing tools to 20 climate-vulnerable countries, providing \$5bn of risk capacity between 2022 and 2025 (in line with the InsuResilience global partnership vision 2025). Another example is the Global Index Insurance Facility from the World Bank, which facilitates catastrophic risk transfer solutions and index-based insurance to smallholder farmers, micro-entrepreneurs, and microfinance institutions in developing countries.

4.3 International Community

Disaster prevention and preparedness only account for a marginal fraction of international assistance despite its great benefits in terms of saving lives and reducing economic damages. Only 11% of Official Development Assistance (ODA) is related to disasters and the vast majority of this money flows to emergency response and reconstruction (96%). Yet, grants and other concessional financing are critical for mobilizing financial resources for DRR, including through blended instruments. Beneficiary countries and development partners could consider the following options to increase the role of international assistance for DRR as part of an INFF process.

Embed DRR in development partners' projects

Development banks are a large source of financing for many countries. They could leverage their lending to promote DRR, for example by strengthening the way they embed disaster risks (natural hazard-induced or human-induced) in their project assessment, design, and monitoring.

Pros: This would create more risk-informed programmes while incentivizing resilience-building activities. Over time, increasing resilience also contributes to improving a country's risk profile, which could facilitate its access to lower borrowing costs, creating a virtuous cycle.

Cons: Adding more elements to consider when deploying development finance can make the lending process heavier and possibly slower, although this does not need to be the case.

Corrective Actions: Identifying financial gaps related to national resilience and development goals simultaneously as part of the INFF process would facilitate countries accessing development funds with DRR embedded in them.

Example

The World Bank has created a Resilience Rating System to assess (i) the resilience of the project (i.e., whether the project has properly considered climate and disaster risks) and (ii) the resilience through the project (i.e., whether the project contributes to increasing climate resilience of the broader community). When launching the methodology in 2021, the Bank also announced that they were piloting it with 20 projects.⁴⁶

Ring-fence funds for DRR-related activities

Ring-fencing funds for DRR could mean that, by default, a certain percentage of every loan/grant must be spent on risk prevention and resilience. Similarly, humanitarian activities need to ensure that part of “disaster response” funds are allocated for the prevention of future risks in order to build back better and break the cycle of “disaster-rebuild-repeat”.

Pros: Ring-fencing resources ensure that risk prevention is not overlooked and safeguarded, creating long-term benefits.

Cons: MDBs and other financial institutions that do not have an explicit DRR mandate might require internal reforms to mandate DRR in all their loans. Furthermore, the resources dedicated to DRR would reduce the available resources for other activities, so the need to increase the overall development assistance remains.

Corrective Actions: Financial needs addressing resilience and development/humanitarian goals simultaneously could be identified through an integral assessment of the national financing landscape and targeted by development funds assigned for DRR-related activities, increasing the efficiency of the development funds by advancing multiple national goals.

Example

The Global Environment Facility was the first global source of funds for climate adaptation and continues to play an important role through its Least Developed Countries Fund (LDCF) and the Special Climate Change Fund (SCCF).

Pursue reforms of IMF, World Bank and other DFIs in relation to DRR

Member States can further integrate DRR into IMF, World Bank and work and better use their balance sheets for this purpose.⁴⁷

Corrective Actions: Countries' assessments of their disaster costs and DRR financial needs could support their claim for DFIs to integrate DRR further.

Example

In 2022, the IMF established the Resilience and Sustainability Trust (RST) to help low-income and vulnerable middle-income countries build resilience to external shocks and provide them with longer-term affordable financing to address longer-term structural challenges, including climate change and pandemic preparedness. RST resources are to be mobilized based on voluntary contributions from IMF members with strong external positions, including those wishing to channel Special Drawing Rights (SDRs).⁴⁸

Factor in country vulnerabilities for concessional finance eligibility

To fully account for countries' vulnerability, donors and DFIs should move beyond using simple indicators such as Gross National Income (GNI) to allocate their support. Composite risk index (such as GRAF, INFORM, GFDRR Disaster-FCV Vulnerability Index etc.) and even ad hoc composite index can better capture complex, cascading and systemic risk.

Pros: Composite risk indexes can include multiple dimensions improving the assessment of a country's risk exposure.

Cons: Designing the adequate composite index is complex and the design choices can have significant impact on which countries will be eligible or not.

Corrective Actions: While the specific design of a composite risk index might be contentious, the argument to go beyond GNI is strong. Engaging with relevant partners and periodic review cycles could serve to advance toward an accepted composite risk index.

Example

The United Nations is working on the development – and implementation – of a Multidimensional Vulnerability Index (MVI).⁴⁹ Despite a relatively high GNI per capita, SIDS represents two-thirds of the countries with the highest relative losses from nature-induced disasters showing their vulnerability due to their reliance on the ocean for their economics.⁵⁰ Using the MVI could increase SIDS eligibility to receive financing in more competitive terms to address their unique vulnerabilities.

Create international pooling mechanisms to diversify risks

Risk pooling facilities mutualize disaster risks across locations and types of events, making use of diversification for risk management. Risk pooling facilities have been developed nationally, such as the Philippine Catastrophe Insurance Facility (PCIF),⁵¹ or at a regional scale, such as the African Risk Capacity (ARC).⁵²

Pros: Pooling risks might enhance the financial viability of insurance mechanisms due to diversification benefits and reduce premiums paid by policyholders as a consequence.

Cons: Pooling risks from different countries is complex to structure.

Corrective Actions: A holistic understanding of the national financial frameworks, including the DRR financial gap, provides useful information to develop national risk pooling facilities or to integrate a given economy into a regional pool risky facility.

Example

The Caribbean Catastrophe Risk Insurance Facility (CCRIF) was established in 2007 as the first multi-country risk pool that provides parametric insurance to the Caribbean and Central American countries against natural hazard events (e.g., tropical cyclones, earthquakes, and excess rainfall). Since its inception, CCRIF has made 54 payouts totalling \$245 million to 16 countries (all within 14 days of the event).⁵³ The grants provided by international partners support participation fees from members, insurance payouts, and technical assistance.

Ensure sufficient access to emergency liquidity

The economic loss associated with all disasters – geophysical, climate, and weather-related – has averaged approximately \$170 billion per year over the past decade on a global level,⁵⁴ creating significant financial challenges for countries hit by these disasters.

Pros: By securing access to emergency liquidity facilities, countries can quickly mobilize financial resources to respond to the urgent needs of their population, fast-track the rebuilding of their economy, and avoid costly defaults as well as a debt crisis.

Cons: Emergency facility providers may require borrowers to implement certain reforms, which may be unpopular, the so-called conditionalities. In addition, the size of these facilities is often capped to a certain level, which may prove insufficient for countries to deal with a crisis. Countries may also be less inclined to take preventive measures if they know they have access to financing in times of crisis.

Corrective Actions: Countries should pre-emptively assess, as part of an INFF process, whether the size of facilities they have access to is likely sufficient to cope with the fallout of a disaster.

Example

IMF has established the Rapid Financing Instrument (RFI) and Rapid Credit Facility (RCF) to help countries address economic shocks, such as disasters caused by natural hazards. Compared to the RFI, the RCF is only available to low-income countries and has a lower interest rate and longer repayment period (10-25 years vs. 3-5 years) but includes policy

conditionalities. The RCF provided, for example, over \$40 million to **Haiti** following Hurricane Matthew (category 4), which hit the country in 2016.

Scale up the use of debt swaps for resilience investment

Debt-for-climate swaps aim at providing debt relief to countries committed to investing in climate-related projects. This approach is designed to help governments prioritize climate resilience without putting their budgets at risk or neglecting other development needs.⁵⁵ In this transaction, the debtor countries stop paying their external debt and instead use this money to finance climate projects domestically.

Pros: Under some circumstances, debt-for-climate swaps could be an efficient way to provide debt relief to countries while freeing resources to achieve climate goals.

Cons: Swap agreements can be complex to negotiate, and climate-related commitments may be vulnerable to political changes over time.

Corrective Actions: Understanding the financial landscape and financial gaps to reach resilience goals in a country provides information useful to assess and negotiate potential debt swaps for resilience investment.

Example

Back in 2018, the **Seychelles** government collaborated with The Nature Conservancy (TNC) and other development partners to create a debt-for-nature swap. This involves TNC buying **Seychelles** external debt and having Seychelles repay the debt to a national trust fund that will finance marine protected areas.⁵⁶

5. Moving Forward

More than eighty-five countries are using INFFs to articulate ambitious financing agendas suited to their unique context and challenges, lay foundations for forward-looking policy-making, and exploit financing innovations. For example, among the G20 countries, Indonesia issued its INFF in September 2022.⁵⁷

With accelerated progress needed to reach the Sendai Framework objectives by 2030, now is the time to strengthen partnerships and leverage finance policies and instruments in support of DRR in order to turn ambitions into a reality.

In its resolution 77/289, the General Assembly called upon States to invest in DRR, including by:

- Identifying gaps in public spending on DRR and allocating increased domestic resources to DRR to ensure [...] that integrated national financing frameworks are risk-informed, according to national plans and policies
- Developing comprehensive national and local DRR financing strategies that leverage the full spectrum of pre- and post-disaster financial resources from public, private, domestic and international source

Development partners can build on the growing momentum around INFFs - including the endorsement by G20 leaders of the [G20 framework of voluntary support to INFFs](#), and the focus on INFFs in the UN Secretary General's [SDG Stimulus to Deliver Agenda 2030](#) - to channel their technical and financial assistance to contribute to the successful integration of DRR into INFF, and to support others in furthering their INFF journeys.

Countries interested in embarking on, or already implementing, INFFs can benefit from the technical guidance on applying an INFF to DRR co-authored by UNDESA and UNDRR, while intergovernmental platforms could consider welcoming this technical guidance and encouraging relevant international organizations to build on this guidance to support countries in addressing DRR challenges.

Endnotes

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- ²⁵ [Principles for Resilience Infrastructure, UNDRR, 2022](#)
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