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CLARIFYING RISKS IN GEF PROJECTS, WITH A FOCUS ON INNOVATION RISKS

Clarifying risks in GEF projects, with a focus on innovation risks

STAP Guidance Note

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STAP SCIENTIFIC AND TECHNICAL ADVISORY PANEL

An independent group of scientists that advises the Global Environment Facility

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UN environment programme

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Introduction

In February 2024, the Global Environment Facility (GEF) Council adopted a GEF Risk Appetite,[1] describing the level of risk the GEF is prepared to take in its ambition to achieve global environmental benefits (GEBs). It includes an updated framework for assessing risk at the project level (see Annex A). The instructions to assess risk are very brief:

1. Describe the nature of the risk to project outcomes.
2. Identify relevant mitigating measures.
3. Assign a rating to the level of residual risk.

GEF Agencies have subsequently confirmed the need for additional guidance. The Scientific and Technical Advisory Panel (STAP) has identified two main issues requiring clarification. First, there is sometimes confusion about distinguishing the nature of the risk, the mitigating measures, and the residual risk. Second, the framework introduces the new dimension of "Innovation risk," and many are unfamiliar with how best to interpret, describe, and assess its associated risk categories.

This guidance note addresses both issues and aims to assist agencies and countries to ensure consistent and robust risk analyses in projects and programs. The primary audience is project developers and reviewers, though the same principles apply during risk review at midterm evaluation. Section 1 covers basic concepts, distinguishing the overall challenges the project aims to address from the risks that remain once a project design logic has been adopted. It also describes how to avoid the most common pitfalls associated with each of the three steps of risk assessment numbered in the instructions above. Section 2 focuses on Innovation risk in particular, including the implications of the GEF Council's decision to adopt a high appetite for innovation in support of transformational change. Section 3 then illustrates the application of these concepts, with examples of completed risk tables for Innovation risk.

1. Basic concepts to successfully approach the risk table

It is essential that completed Project Information Forms (PIFs)[2] distinguish the challenges the project needs to address in the theory of change (presented in the project description section) from the risks to achievement of project outcomes (presented in the risk table section) that remain after this basic design logic has been formulated**.** Only when this distinction is clear can the appropriate **mitigating measures** be described and the **residual risk** identified. This section addresses these basic concepts, which are required to avoid confusion in completing the risk table.

In practice, good project development is typically iterative, and risk analysis should contribute to refining a robust project design. Ultimately, the aim is to design and implement interventions where the expected outcomes outweigh the risks entailed. The PIF, however, presents a snapshot of the design process. It is important, therefore, to distinguish between the challenges the project is designed to address and the risks to achieving project outcomes that remain even with the basic design logic in place.

[1] GEF (2024).

[2] The same issues apply to the Program Framework Document and its risk table. For simplicity, this guidance note refers to the project level (and therefore the PIF).

1.1. Challenges the project is designed to address

Projects should articulate a **clear theory of change** that explains how the intended outcomes and eventual impact are expected to be delivered. Projects should describe the context and problem being addressed, the system the problem is embedded in, and the drivers that are causing the problem, leading to an objective for the project. Next, the theory of change should be developed by identifying the key **challenges, barriers, and opportunities** that need to be addressed to achieve the objective. Then, working backward, project developers should establish the set of longer- and shorter-term outcomes and project outputs that are expected to deliver the objective.[3] The theory of change should also clearly identify any **assumptions** that have been made in the logic, such as when there is good reason to believe that a certain output will lead to the desired outcome, but this is not certain or is dependent on factors that are outside the project's control.

The **challenges** that the design process identifies may include insufficient institutional and individual capacities, political instability and conflict, inadequate or conflicting policies, rising population pressures or changing demographics (e.g. ageing farmers), economic and market trends or shocks, and climatic and other environmental changes. Some of these trends may be very uncertain. Articulating some simple **future narratives** can help assess the robustness of the project design.[4] In short, good design practices, including appropriate **stakeholder engagement and review**, should result in the best possible project design that addresses the previously identified challenges.

1.2. Risks to achieving project outcomes

Even with the best possible design logic reflected in the theory of change, there will still be risks to project success. These often occur when explicit assumptions in the theory of change are not met in practice, but they may also arise from the known challenges being insufficiently addressed or from less predictable sources, such as a pandemic or unforeseen political or economic shocks.

Each of the risks needs to be sorted into the most relevant **risk category**. The nine risk categories outlined in the GEF Risk Appetite are grouped as either (i) **Context** risks, which are risks in the operating environment and could include climate change, conflict, political instability, or a pollution event; (ii) **Innovation** risks, which captures risk related to innovative approaches, such as deeper opposition to planned policy reform, weak adoption of novel technologies, or limited uptake of new business models; and (iii) **Execution** risks, which covers institutional capacity, fiduciary, and stakeholder engagement risks, such as inadequate capacity despite capacity-building investments or an unexpected failure of financial controls or stakeholder inclusion measures. (See Annex A for descriptions of each risk dimension.)

1.3. Mitigation measures

The next task is to determine what actions could **mitigate the impact of the identified risks** at reasonable cost.[5] For risks arising from assumptions in the theory of change that may not

[3] Stafford Smith (2020).

[4] STAP (2023).

[5] In the case of known challenges and barriers, it is reasonable to ask where the line between good design and risk mitigation lies. Formally, when the expected costs (whether financial, social, or environmental) of designing a project to be proofed against a low probability risk exceed the expected costs (likelihood × impact) of the risk materializing, then softer mitigation strategies (e.g. delay, safe-to-fail, or adapt) become more resource efficient than overdesigning the project in the first place. For example, if the risk of a drought occurring during the testing of a novel tree-planting technology is very low, then it does *not* make sense to overengineer that technology to cope with extreme drought (e.g. by adding complex watering mechanisms that are rarely needed), but it *is* sensible to have a cheap adaptive contingency plan whereby, say, the project team is primed to postpone the trials by a year.

materialize, a typical approach to risk mitigation is monitoring these assumptions and being ready to adapt the project in response to what is learned. Some known risks have applicable minimum standards or frameworks that should be applied to develop mitigation measures (e.g. environmental and social safeguards or fiduciary standards to manage procurement and financial management risks). Other risks might be mitigated by establishing timely adaptive management reviews, maintaining strong stakeholder relationships, or activating a contingency plan.

Adequate project resources should be allocated to risk mitigation, while maintaining the underlying project design logic. (If this exercise identifies basic flaws in that design logic, those should be addressed by revisiting the design before repeating the risk assessment.)

1.4. Residual risk

The aim of the risk table is to report the risks to achieving project outcomes and the associated mitigating actions, then assess the residual risk posed to the project's success. **Residual risk** refers to the risk expected to remain *after* the application of mitigation measures.

Completing the risk table is **not an exercise in making sure all residual risks are low**. Indeed, the GEF Risk Appetite purposefully differentiates between the level of risk acceptable at the portfolio level for each of the three risk dimensions.

Box 1 recaps the common pitfalls in completing the risk table and explains how to avoid them by applying the concepts reviewed in this section, resulting in a well-considered rating of residual risk.

Box 1. Common pitfalls in completing the risk table and how to avoid them

The pitfalls that can occur in each of the three steps needed to fill the risk table are detailed below, along with the recommended solution.

Step 1. Describe the nature of the risk to project outcomes

Pitfall: Project design documents may not clearly distinguish the *challenges* that projects are seeking to tackle from the *risks* that remain after the basic design logic has been formulated.

Solution: Design to address challenges through a robust theory of change; mitigate *against* risks anticipated during implementation.

All projects should articulate a clear theory of change that explains how the intended impact is expected to be delivered. This will involve identifying the challenges being addressed, developing a logic to underpin each impact pathway, and clearly identifying the assumptions made when developing this logic. Once the design has been established, the risk table is used to identify remaining risks to this logic being implemented successfully. In other words, the risk table addresses risks to achieving the project outcomes *despite* good design.

Step 2. Identify relevant mitigating measures

Pitfall: Project design documents may characterize fundamental components of design as mitigating measures.

Solution: Focus on the actions needed to reduce the likelihood of failure due to the risks identified *after* developing the theory of change and formulating the project design.

The next step is to ask what measures can mitigate the impact of these identified risks. The mitigating measures in the risk table should not repeat core parts of the project design that are covered in the theory of change.

Step 3. Assign a rating to the level of residual risk

Pitfall: Project design documents may assign a risk rating based on the likelihood or impact of the identified risk irrespective of mitigating measures.

Solution: Make sure to rate the risk to project success that remains *after* mitigating measures have been taken into account.

The risks to achieving the project outcomes despite good design have been identified (Step 1), and the mitigating measures to address those risks have been described (Step 2). However, some degree of risk will likely remain even after the effect of the mitigating measures has been accounted for. That is the residual risk. **The rating in the risk table** (low, moderate, substantial, or high for each category) **applies *only* to residual risk.**

2. Assessing innovation risks

A key purpose of the GEF Risk Appetite is to encourage **innovation in pursuit of greater impacts** from GEF investments, accepting that innovation typically implies a greater risk of not achieving the expected outcomes (but also a greater chance of achieving outsized positive impact if successful). The GEF Council's *high* appetite for Innovation risk contrasts with its *substantial* appetite for Context risk and *moderate* appetite for Execution risk.

For many projects, the theory of change requires innovation to overcome certain challenges. Pilots may be needed to test certain innovations; likewise, **innovation is often needed to scale** successful pilots to the point where they deliver a transformative level of change. STAP's papers on innovation[6] cover five types of innovation – in technology, finance, business models, policy, and institutions – and provide many examples. The GEF Risk Appetite framework captures these five types of innovation under the three categories of the Innovation risk dimension (see Annex A).

A project incorporating innovation should be designed to provide the best chance of delivering the innovation (and consequent impact) successfully. The GEF has a **high appetite for risk** in such projects provided they have a strong rationale based on the potential to deliver outsized GEBs, over the long term, if not immediately. That rationale (in the project description section) should ideally include a justification of the catalytic role of GEF investment. This could include, for example, a strategic fit with other investments targeting the same system transformation and a low likelihood of an investor other than the GEF being willing to take the same risk.

Of course, **innovation risks should be clearly justified in the theory of change by the potential for high returns** if the innovation is realized successfully. As the GEF Risk Appetite states: "Setting a high-risk appetite means that the risk appetite for purposeful innovation in projects and programs is unconstrained, so long as these risks are taken as part of a sound design grounded in a well-conceived theory of change."

The process for assessing Innovation risk is the same as for the other risk dimensions (see Box 1). Nevertheless, because this is the newest part of the risk table, a more detailed discussion is useful.

2.1. Step 1. Describe the innovation risks remaining despite good project design

Once a sound project design has been prepared, the first step in assessing Innovation risk is to identify the risk that the selected innovation(s) may nevertheless fail to deliver intended

[6] Toth (2018).

project outcomes. In general terms, as described in Section 1, these sources of potential failure may relate to design assumptions in the theory of change that do not hold up in practice, foreseen design challenges that the project does not manage to address sufficiently, or other less foreseeable issues.

People probably think about innovation risks most commonly around the development of new technologies. Despite good design, technological innovation may fail to deliver intended outcomes for various reasons: the research and development itself might fail; the technology might be developed successfully but turn out to be unattractive for commercialization or too expensive to scale to a level where it can yield transformative environmental benefits; an unknown competitor might develop a more attractive solution before the project is completed; the technology might work but not suit the cultural context (though this should be a key sociotechnical design consideration); or the technology might have unexpected side effects that render it unusable or that could result in unintended negative consequences. In terms of technological innovations expected to scale significantly for transformative effects, failure to scale may be the most common concern. For this reason, STAP urges developers to create a separate theory of change for scaling so that these challenges are addressed in design rather than being left as residual risks.[7]

While technology failures are an issue, the primary barriers in the development of new technologies are often "non-technical – lack of local awareness, affordability issues, poor distribution channels, and cultural resistance to changes"[8] as well as problems related to the policy context. Overcoming these barriers may require innovation in the other Innovation risk categories, such as creating supporting policies or financing mechanisms to enhance the likelihood of success. However, the supporting innovation themselves may also carry some risk of failure. Indeed, **most complex problems that the GEF targets require multiple types of innovation** to achieve transformative change at the intended scale.[9]

2.2. Step 2. Identify mitigating measures for innovation risks

Typical mitigating measures for Innovation risk are likely to be similar to those for other risks (Section 1). For example, an assumption that there will be no competitors for a technical innovation could be monitored with regular market **scanning**; an assumption that a novel incentive will drive a plausible behaviour change could be tested by **monitoring** behavioural reactions. If an assumption made during project design looks to be failing, the project should be prepared to decide whether adaptive management is possible. For less predictable risks – such as investor confidence collapse for financial innovations, or loss of critical innovation staff for technical inventions, or a change in administration signalling declining support for policy innovations – regular project **re-evaluation** may allow for rapid **adjustments**.

2.3. Step 3. Rate the residual risk to innovations

Special attention is needed to characterize **residual risk** correctly. Residual risks should be **necessary** risks given the project design – in other words, they are risks that need to be taken to allow the innovation to be tried. Sometimes the residual risk will be **transient** – that is, if the risk doesn't materialize early in the project, then the innovation will have overcome a critical step (e.g. first exposure to the market, initial scepticism from stakeholders, or adoption of policy reform), and the residual risk declines. At other times the residual risk will

[7] Salafsky et al. (2021); Stafford Smith et al. (2021).
[8] Miller and Swann (2017).
[9] Donaldson and Ratner (2023).

be an **intrinsic** risk of failure, but one still worth taking. Some examples are provided in Section 3.

It is unusual for all risks to be completely mitigated, and this is particularly unlikely for Innovation risk, for which the GEF Council has expressed a high appetite for risk in pursuit of greater returns across the GEF portfolio. At the project level, residual innovation risks may still be substantial or high because they are deemed to be **risks worth taking** to achieve exceptionally significant impact, if successful.[10]

3. Completing the risk table for each category of innovation risk

This section provides examples of **ways in which different types of innovations may fail** despite good design. For each category of Innovation risk, it also notes a **point of caution**: citing typical challenges that should be considered as part of a thorough design process, rather than appearing only in the risk table. Because GEF projects address complex social, economic, technological, institutional, and cultural factors underlying environmental change, the **risks identified in different categories may interact**. In other words, failures or successes in one category may often be caused (or mitigated) by effects in another.

Each subsection also provides **worked examples** of how the risk table can be completed clearly and concisely for the different categories of Innovation risk, illustrated with a variety of project types (notional projects 1–6). Each example is introduced with a brief indication of the type of project and the more specific risk being addressed. Within each example, the first column notes the risk category, as defined by the GEF Risk Appetite. The second column identifies the residual risk rating (rating options: low, moderate, substantial, or high). The third column describes the risk and the mitigation measures that result in the residual risk rating.

3.1. Institutional and policy innovation risk

Examples of institutional and policy innovation failure include:

- Vested interests that block or subvert policy dialogue or reform processes
- Good innovative policy being devised but not adopted, or being adopted but not enforced
- Insufficient adherence to voluntary standards despite well-planned incentives
- Unexpected resistance to a change due to failure of public awareness or cultural barriers

Note: incoherent policies and resistance from vested interests are foreseeable challenges and, hence, should be addressed in good project design!

Table 1 provides two worked examples of how institutional and policy risk might be assessed. The first example is for a project (project 1) that aims to introduce a new social norm around recycling and the circular economy. The key risk is that **old social norms are too resistant**. Project 2 is an example of an International Waters project aiming to create novel institutional models) public-private partnerships in the blue economy). The key risk is that **trust-building efforts are insufficient**.

[10] Donaldson and Ratner (2023).

Table 1: Worked examples of institutional and policy innovation risk, in the risk table format

Risk category	Rating	Assessment and mitigation measures
Institutional and Policy [Project 1] Old social norms too resistant	Substantial	The project component seeking to change social norms about recycling is based on good behavioural science and has engaged experienced advertising expertise; if successful, it will lead to great benefits that could be scaled elsewhere. However, it remains possible that existing social norms will prove more resistant to change than expected (likelihood: *moderate*) and this will undermine the success of the project (consequence: *high*). To mitigate this risk, the project will invest in annual large-scale surveys of the target public, using citizen science approaches; if the expected change is not occurring, initially, messaging and stakeholder engagement will be adjusted. If that is not effective, then the approach will be adjusted more completely. The residual risk is, therefore, *substantial* but necessary to test this promising solution.
Institutional and Policy [Project 2] Trust-building efforts insufficient	Moderate	Despite several trust-building activities embedded in the project to support the innovative "Blue Economy Business Hub" to provide alternative sources of income for local people and reduce pressure on coastal and marine resources, there remains a risk that local people will be reluctant to engage with these new enterprises due to lack of trust in some public and private sector actors involved (likelihood: *low*, but consequence: *high* because the public-private partnership model is a critical component). To mitigate this risk, the project will regularly assess public sentiment through interviews and focus groups and by monitoring social media to adjust public messaging and other planned outreach intended to highlight the benefits of supporting blue economy enterprises. The residual risk is, therefore, *moderate*.

3.2. Technological innovation risk

Examples of technological innovation failure include:

- The planned development of a novel technology failing to deliver (despite good design) or having unexpected (and undesirable) side effects
- A successful technology innovation failing to commercialize due to a new competitor or superior alternative or a lack of capacity
- An environmental technology (e.g. for emissions reduction or waste reduction) delivering benefits, but too slowly.

Challenges in ensuring a new technology is fit-for-purpose or suited to the target environment, or in achieving scale, should generally be anticipated and hence be part of good project design!

Table 2 provides two worked examples for **technological innovation risk**. Example project 3 is investing in the development and commercialization of artificial intelligence for tracking patterns in illegal wildlife trade. The key risk concerns the assumption on **research and development** needed to deploy the technology successfully. Project 4 is a Chemicals and

Waste project developing novel processes to reduce hazardous chemicals in textiles. The key risk is that **environmental benefits are overestimated**.

Table 2: Worked examples of technological innovation risk, in the risk table format

Risk category	Rating	Assessment and mitigation measures
Technological [Project 3] Research and development unsuccessful	High	The project, which has been designed to use artificial intelligence to uncover patterns in the illegal movement of wildlife, which should be impossible to hide, would have a very beneficial outcome for biodiversity. The theory of change assumes that illegal traders will not be able to find ways around the pattern detection algorithms, and this assumption may not be valid (likelihood: *moderate*, with consequence: *high* for project success). The assumption will be monitored by tracking how detection rates change over time, with plans for adaptive management. The residual risk is still rated *high* (but worth taking for the global scale of the possible benefit).
Technological [Project 4] Environmental benefits insufficient	Moderate	The theory of change assumes that pilot projects testing blockchain technology to trace recycled materials will find that the environmental benefits from using a circular economy approach (reduced waste, water, energy, etc.) will outweigh the greater energy use associated with blockchain technology. This assumption may not hold (likelihood: *moderate*, with consequence: *substantial* for project scaling). As a mitigation measure, these variables will be measured over time to test this assumption and modify the tracing approach if essential. The residual risk is *moderate* as this is a small element of a much larger project and will be monitored closely. The monitoring of variables may also enhance knowledge about the costs and benefits associated with blockchain technology that can be applied to other areas and projects.

3.3. Financial and business model innovation risk

Examples of financial and business model innovation failure include:

- Unanticipated global economic conditions weakening public and private sector investment
- A novel blended finance instrument being undermined by greenwashing perceptions
- An unexpected loss of trust in public-private collaboration
- A business model failing to replicate or enhance sustainable local supply chains, or its benefits not being able to be tracked economically

The risk of failing to deliver environmental benefits should be a key project design consideration, as should allowing for uncertain demand.

Table 3 provides two worked examples for **financial and business model innovation risk**. Project 5 is applying a novel blended finance instrument: a new incentivized "debt

restructuring for nature" model. The key risk concerns **GEB achievement**. Project 6 is testing a novel business model to finance affordable residential solar photovoltaic (PV) energy. The key risk is **product theft to supply a secondary unregulated market**.

Table 3: Worked examples of financial and business model risk, in the risk table format

Risk category	**Rating**	**Assessment and mitigation measures**
Financial and Business Model [Project 5] GEB achievement unrealized	Substantial	The project is designed to channel 30% of the funds released by national debt restructuring into conservation trust funds that have a good track record in delivering environmental outcomes and that will be incentivized by the potential to convert part of the guarantee provided by the GEF into additional grant funding. However, it remains possible that countries will not invest the funding in ways that ensure enduring GEBs are delivered (likelihood: *low*, but consequence: *high* for project success). The convertible instrument incentive is designed to minimize this risk, but the GEF agency will insist on interim reporting on progress to mitigate this risk. The residual rating remains *substantial* but worth the investment if it works.
Financial and Business Model [Project 6] Product theft to supply unregulated market	Substantial	Given the unreliability and high cost of electricity from the grid, there is high demand for solar PV and interest in the project but also increasing reports of theft and a burgeoning secondary market for solar panels. This might create a *high* reputational risk for the proposed project's government and public partners, on which the project depends to channel rebates to consumers, to provide solar-friendly policies, and to increase overall public awareness of the long-term financial benefits of solar energy. To mitigate this risk, the project will closely monitor the development of any black market and be prepared to divert funding to subsidize anti-theft devices for purchasers of solar PV as part of the financing package, as well as tracing support for police. The residual risk remains *substantial* but worth taking because, once enough power systems are in place, the value of any black market will decline.

Conclusion

Good risk assessment is an ongoing process, **integral to adaptive project and program management**. The risk table completed at the PIF stage (or the Program Framework Document stage, in the case of programs) **should be reviewed and updated through the course of implementation**, including at **midterm review**. STAP also recommends that risks be reassessed in a reflective mode at **terminal evaluation** to provide lessons for other project developers and build knowledge base for future projects. How did the foreshadowed risks actually play out? What risks remain relevant to the longer-term durability of project outcomes or additional scaling? Risks and the risk context will change over time – new risks may emerge, or some initial risks may become less important.

For innovation risks in particular, a **rapid cycle of learning and adaptation** is desirable. For example, as a novel policy is adopted or a new technology demonstrates market fit, attention needs to move to addressing risks in the process of **scaling** those innovations; alternatively, the world may move on, and new financial challenges or political risks may emerge that require adaptive attention. Clarifying the rationale for pursuing specific innovations at the project **design stage**, justifying the risks involved in relation to the substantial outcomes anticipated, and identifying appropriate mitigation measures all lay the groundwork for subsequent adaptive management.

Annex A: Summary of GEF Risk Appetite Framework, with a focus on Innovation risk

In February 2024, the GEF Council adopted a Risk Appetite that defines three dimensions of risk, each containing three categories (see Figure A1).[11] The accompanying Risk Appetite Statement defines the level of risk appetite associated with each dimension.

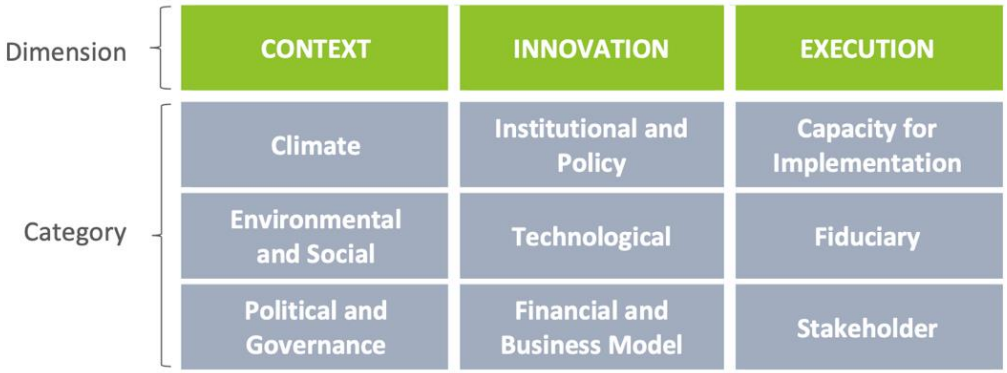

Figure A1. Dimensions and categories of the Risk Appetite Framework

The **Context** dimension captures risk in the operating environment – the extent to which external factors affect the achievement of outcomes from GEF financing and how GEF agencies and countries address them. Such factors include the consequences of climate-related hazards or adaptation and mitigation responses; risks from environmental and social change; and risks related to political context, governance, and security.

The **Innovation** dimension captures risk related to innovative approaches in GEF investments. Innovations are adopted purposefully as part of project or program design with the intention to overcome specific challenges to the achievement of global environmental benefits.[12] As Innovation risk is the primary focus of this brief, the component categories are detailed further in Table A1.

The **Execution** dimension captures institutional capacity, fiduciary, and stakeholder engagement risks. This includes risks relating to the capacity of executing agencies and to financial management and procurement, as well as risks that inadequate stakeholder engagement can undermine the effective implementation of an intervention or the durability of its intended outcomes.

[11] GEF (2024). GEF Risk Appetite. (Council Document GEF/C.66/13).
[12] Donaldson J, Ratner BD. (2023) Leveraging Innovation for Transformational Change, Scientific and Technical Advisory Panel to the Global Environment Facility, Washington, DC.

Table A1. Description of Innovation risk categories (from GEF Risk Appetite Framework)

Risk category	Description
Institutional and Policy	This category covers risk related to innovative approaches adopted by a project or program to address institutional and policy challenges and create an enabling environment for success. This may include **new laws, regulations, market mechanisms or standards that support investment objectives, when there is some degree of uncertainty as to whether these will be adopted or achieve their intended outcomes**. It also captures the **uncertainty of success of activities aimed at reforming informal institutions and behaviors** (values, beliefs, customs, traditions, consumer preferences). It may also include targeted change in organizations and the relationships among them—such as novel efforts to devolve authority from national to local agencies; to empower farmers' organizations or religious, cultural, and civil society advocacy networks; or to tap the influence of industry and trade organizations or other business associations.
Technological	This category relates to the **uncertainty of success from the development or application of technological innovations** applied in projects and programs to support environmental objectives and enable transformation. Examples include harnessing "big data," remote sensing, or artificial intelligence to improve the targeting of interventions or improve service delivery; testing new crop management, transportation solutions, or waste cleanup practices; or piloting novel nature-based solutions to replace more carbon- and resource-intensive infrastructure. It reflects the risk that such technological innovation may not achieve intended environmental outcomes (or not at the pace or scale intended), which may increase for experimental technologies with limited track record, or technical solutions that are untested in the particular context in which they will be applied.
Financial and Business Model	This category captures **risk carried by any financing mechanism that helps mobilize financing by tapping new funding sources or by engaging new financing partners** to support solutions promoted by the project or program. This includes financial mechanisms that: enhance the 'efficiency' of financial flows by reducing delivery time and/or cost; expand the reach of an intervention far beyond the scale of the initial investment; or deepen its impact and durability. This category also covers risk related to the **uncertainty of success from new business models intended to deliver environmental benefits**, for example by restoring ecosystems, reducing waste, or shifting consumer behaviors.

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