

**UNSGSA**

UNITED NATIONS SECRETARY-GENERAL'S  
SPECIAL ADVOCATE FOR INCLUSIVE FINANCE FOR DEVELOPMENT



# Inclusive Green Finance: A Policy and Advocacy Approach

Inclusive Green Finance Working Group  
United Nations Secretary-General's Special Advocate  
for Inclusive Finance for Development

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This note is a key output of the Inclusive Green Finance Working Group (IGFWG) of the United Nations Secretary-General's Special Advocate for Inclusive Finance for Development (UNSGSA).<sup>1</sup> Working group members include senior representatives from the Alliance for Financial Inclusion (AFI), the Center for Financial Inclusion (CFI), and the Sustainable Banking and Finance Network (SBFN).<sup>2</sup>

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<sup>1</sup> Queen Máxima of the Netherlands has been the UNSGSA since 2009 and is a global leading voice on advancing universal access to and responsible usage of affordable, effective, and safe financial services.

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# List of Abbreviations

AFI: Alliance for Financial Inclusion  
ASEAN: Association of Southeast Asian Nations  
BIS: Bank for International Settlements  
CFI: Center for Financial Inclusion  
CGAP: Consultative Group to Assist the Poor  
CSIS: Center for Strategic and International Studies  
DFS: digital financial services  
DNSH: Do No Significant Harm  
EDGE: Excellence in Design for Greater Efficiencies  
EUSFT: European Union Sustainable Finance Taxonomy  
FDIC: Federal Deposit Insurance Corporation  
G2P: government to person  
ICMA: International Capital Market Association  
IFC: International Finance Corporation  
IFPRI: International Food Policy Research Institute  
IFRS: International Financial Reporting Standards  
IGF: inclusive green finance  
IPCC: Intergovernmental Panel on Climate Change  
ISSB: International Sustainability Standards Board  
LMIC: low- and middle-income countries  
MNO: mobile network operator  
MSME: micro, small, and medium-sized enterprises  
NAP: National Adaptation Plan  
NDC: Nationally Determined Contribution  
ND-GAIN: Notre Dame Global Adaptation Initiative  
NFIS: national financial inclusion strategy  
OCC: Office of the Comptroller of the Currency (US)  
PAYGO: pay-as-you-go  
P2P: person to person  
SBFN: Sustainable Banking and Finance Network  
SME: small and medium-sized enterprises  
TCFD: Task Force on Climate-Related Financial Disclosures  
UNSGSA: United Nations Secretary General's Special Advocate for Inclusive Finance for Development

# Overview

Lower-income households are disproportionately hit by climate change, with fewer financial options to address and cope with its impacts.<sup>3</sup> The situation is particularly dire in climate-vulnerable countries. Climate change risks and financial exclusion are closely intertwined: more than four out of five of the world's unbanked adults, totaling more than 1 billion people, reside in the most climate-vulnerable economies.<sup>4</sup> Fifty-eight percent of adults in the most climate vulnerable economies are not financially resilient, compared to 25% in less climate vulnerable countries.<sup>5</sup>

Inclusive green finance (IGF) helps low-income households, small businesses, and vulnerable groups access financial services and products to build resilience and facilitate the financing of climate-smart investments and income opportunities. It is part of the solution to manage the impact of climate change and the transition to green economies – yet it must be embedded in a broader approach and strategy for climate-resilient development that brings together government, civil society, and the private sector.<sup>6</sup>

This technical note presents a policy and advocacy framework for IGF, examining how access to and usage of financial services can build resilience in the face of climate shocks, as well as provide meaningful opportunities to participate in green economic sectors (including, but not limited to renewable energy, transport, waste management, forestry, and infrastructure). A key objective of this work is to elevate the interdependent and amplifying role of financial inclusion in global sustainability efforts and strengthen climate considerations in financial inclusion plans and strategies. The paper also presents examples and opportunities for advocacy on IGF. The overall approach emphasizes the role of financial inclusion to support greater

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<sup>3</sup> IPCC 2022, World Bank GFDRR 2015, US EPA 2021, among others.

<sup>4</sup> Analysis based on Findex and Notre Dame Global Adaptation Initiative (ND-GAIN) Index; most climate-vulnerable countries defined as those with a climate vulnerability index value greater than or equal to 0.41 in the ND-Gain database.

<sup>5</sup> Financial resilience is defined in the Global Findex survey as the ability to access extra money with little to no difficulty totaling 5% of GDP per capita within 30 days in the event of an emergency.

<sup>6</sup> Intergovernmental Panel on Climate Change (IPCC). "Climate Change 2022 - Impacts, Adaptation and Vulnerability (Summary for Policymakers)." 2022. p. 32

resilience building in the face of rising climate shocks, as well as adaptation of livelihood strategies, recognizing low-income households and small businesses are not the primary contributors to rising greenhouse gas emissions.

## I. Twin Challenges: Climate Change Risks and Financial Exclusion

Climate change is one of the most pressing policy challenges of our time, a cross-cutting topic affecting both advanced and emerging markets. As noted by the [Intergovernmental Panel on Climate Change \(IPCC\)](#), human-induced climate change is causing weather and climate extremes in every region across the globe. This is having a profound impact on vulnerable segments of society across low- and middle-income countries (LMICs). Effects include a greater frequency of flooding, wildfires, and crop failures, which destroy ecosystems and damage homes, infrastructure, and business assets.<sup>7</sup> These effects can be destabilizing to the financial sector, with potential systemic consequences.<sup>8</sup>

The greatest drivers of climate change–related increases in poverty are 1.) loss of agricultural yields/crops due to climate change; 2.) health impacts (increases in malaria, diarrhea, stunting); 3.) lost labor productivity due to increased temperatures; and 4.) increases in the frequency and/or impact of natural disasters because of climate change. Looking ahead, the World Bank estimates that climate change will push up to 130 million people into poverty over the next decade and could cause over 200 million people to migrate within their own countries by 2050.<sup>9</sup>

### Financial System Responses to Climate Change Risks

Policymakers and regulators have intensified efforts to use the financial sector to support collective responses to climate change. Authorities have emphasized the

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<sup>7</sup> Perrault and Giraud. 2022.

<sup>8</sup> Network for Greening the Financial System (NGFS). 2020.

<sup>9</sup> Nishio, Akihiko. World Bank. 2021.

potential financial stability risks of climate change and what may be done to mitigate them. The main threats to financial stability are physical risks (decreased value of financial assets and increased insurance liabilities due to floods and storms), liability risks (compensation requested from carbon extractors/emitters by those affected), and transition risks (reassessment of assets in transition to a low-carbon economy; regulatory and technology shifts).<sup>10</sup> Financial policymakers recognize the benefit in having a financial system resilient to the transition to a low-carbon economy and the need for consistent, reliable, and efficient climate disclosure by large, listed companies.

Efforts to green the financial system have focused on institutional actors and maintaining systemic stability in the face of rising climate risks. Initiatives include financial stability analysis, for example, conducting stress testing of the banking sector to a variety of climate risks. Regulators have supported guidelines for climate-related financial risk management and governance of the banking sector. Efforts have also concentrated on improving corporate disclosure. Created in 2017, the Financial Stability Board's Task Force on Climate Related Financial Disclosures (TCFD) provides guidance to investors, lenders, and insurance underwriters in pricing and disclosing climate-related financial risks.<sup>11</sup> The International Sustainability Standards Board (ISSB) was established at COP26 by the International Financial Reporting Standards (IFRS) Trustees. Its objective was to develop a comprehensive global baseline of sustainability disclosures for the capital markets. The ISSB confirmed in November 2022 that companies are required to use climate-related scenario analysis to inform resilience analysis. They are also using materials developed by the TCFD to guide preparers on scenario analysis.<sup>12</sup>

With regards to investors and instruments, efforts have coalesced around introducing taxonomies – lists of sectors and activities that are eligible to be classified as green or sustainable, and include technical criteria and sustainability safeguards – with the aim of making green activities more attractive and visible to investors. Equally, a growing number of frameworks support the integration of sustainability factors into risk management and investment decisions by insurance companies and pension funds. Ample technical guidance exists to support the structuring of green bonds

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<sup>10</sup> Carney, Mark. 2015.

<sup>11</sup> Task Force on Climate-Related Financial Disclosures (TCFD).

<sup>12</sup> International Financial Reporting Standards (IFRS). 2022.

and structured investment products channeling capital to green and climate-friendly economic activities. One such example is the International Capital Market Association (ICMA) Green and Social Bond Principles which offer instructions on capital raising, issuance, investment, and disclosure on proceeds. ICMA also provides information on green project mapping and serves to enhance transparency, credibility, and integrity of green bonds through an improved information base.

## The Role of Financial Inclusion to Mitigate Climate Risks to Individuals and Households

Along with strengthening institutional responses to climate change, there is a need to address the disproportionate risk faced by households and small business owners who lack access to formal financial services.

Financial inclusion is a key enabler of economic development. An established body of empirical literature demonstrates that formal financial accounts give individuals control over their money and their financial lives, allowing them to effectively smooth consumption, build up assets for the future, and manage shocks.<sup>13</sup> Financial services can also help poor and vulnerable groups access essential services, including in the health, education, and sanitation sectors. Researchers found the spread of mobile money lifted 1 million households in Kenya out of extreme poverty from 2008 to 2014 – the equivalent of 2% of the population.<sup>14</sup>

Rigorous evidence suggests that access to financial services can strengthen the resilience of individuals and households in the face of negative shocks, including those related to climate.<sup>15</sup> For example, in Tanzania, following a rainfall shock, only mobile money users avoided a drop in their consumption. Mobile money users could quickly receive additional remittances for support, helping to replace two-thirds of the losses that they incurred from the shock.<sup>16</sup>

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<sup>13</sup> For a summary of this literature and related discussion, see: El-Zoghbi et al. Consultative Group to Assist the Poor (CGAP). 2019.

<sup>14</sup> Jack and Suri, 2016.

<sup>15</sup> El Zoghbi et al. Consultative Group to Assist the Poor (CGAP). 2017.

<sup>16</sup> Riley. 2018.

Financial inclusion offers opportunities for households and micro-, small- and medium-sized enterprises (MSMEs) to participate in green transition sectors (transport, renewable energy, waste services). Emerging business models drawing on digital financial services (DFS), including pay-as-you-go (commonly known as PAYGO) mobile money-based models for solar electrification, water, and sanitation, are a primary way for low-income consumers to access essential services. PAYGO models have experienced significant growth over the past decade, particularly in Sub-Saharan Africa.<sup>17</sup>

Financial exclusion is significantly higher in countries most vulnerable to climate change. Worldwide, 1.4 billion adults still lack access to the formal financial system.<sup>18</sup> Of these unbanked adults, the vast majority—over 1 billion—live in the most climate-vulnerable countries.<sup>19</sup> Overall, 41% of adults in the most climate-vulnerable countries are unbanked (compared to 11% in less climate-vulnerable countries and 24% globally). Unbanked adults lack the financial products to help them address climate impacts. This includes digital payment accounts, which can be used to disburse social programs after natural disasters, as well as products for resilience and adaptation, including insurance and savings instruments.

Even for those with access to financial services, financial resilience is a significant challenge in climate-vulnerable countries. Of the nearly 3 billion adults living in the most climate-vulnerable countries, 1.7 billion are not financially resilient (i.e., they could not come up with extra money in 30 days with little to no difficulty). In these countries, 58% of adults are not financially resilient (compared to 25% in less climate-vulnerable countries and 41% globally). Overall, 73% adults in the most climate-vulnerable countries are either unbanked or not financially resilient.

This data suggests that financial inclusion is a policy issue that is of extreme relevance for climate vulnerable countries.

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<sup>17</sup> Consultative Group to Assist the Poor (CGAP).

<sup>18</sup> Globally, almost one in two of the unbanked belong to the poorest 40% of households, almost two in three have only primary education or less, and 54% are women.

<sup>19</sup> Analysis based on Findex and Notre Dame Global Adaptation Index (ND-GAIN); “most climate-vulnerable countries” defined as those with a climate vulnerability index value greater than or equal to 0.41 in the ND-Gain database.

## BOX 1 Financial Inclusion in the Most Climate-Vulnerable Countries

4.2 billion people live in the most climate-vulnerable countries, of whom 2.9 billion are adults. Of the nearly 3 billion adults who live in climate-vulnerable countries:

- 41% of adults are unbanked (compared to 11% in less climate-vulnerable countries and 24% globally).
- 58% of adults are not financially resilient (compared to 25% in less climate-vulnerable countries and 41% globally).
- 73% of adults are either unbanked or not financially resilient (compared to 30% in less climate-vulnerable countries and 49% globally).
- 32% of adults are banked and not financially resilient (compared to 18% in less climate-vulnerable countries and 26% globally).
- Over 1 billion adults who live in the most climate-vulnerable countries depend on social networks for extra money.
- 1.9 billion adults who live in the most climate-vulnerable countries do not have any savings.
- 1.7 billion banked adults live in the most climate-vulnerable countries.

Source: Analysis based on comparing [Findex](#) and [Notre Dame Global Adaptation Index](#) ; “most climate-vulnerable countries” are defined as those with a climate vulnerability index value greater than or equal to 0.41 in the ND-GAIN database. Population data as reported by the [World Bank](#).

## II. What Is Inclusive Green Finance and How Can It Help?

### Defining Inclusive Green Finance

Inclusive green finance (IGF) is defined as access to and usage of financial services and products that build resilience to the negative impacts of climate change, loss of biodiversity, and ecosystems, and facilitate participation of low-income households, small businesses, and vulnerable groups in the green and low-carbon economy.

The UNSGSA working group's IGF framework focuses on the intersection of financial inclusion and resilience building for households and small businesses in the face of rising climate shocks. The approach also emphasizes the ability of financial services to support the adaptation of lives and livelihoods in response to shifting climate patterns. The working group selected this focus for two reasons. First, existing global policy work has focused on the role of the financial sector to promote climate change mitigation and maintain financial stability in the face of rising climate risks. Second, developing countries face higher climate risks and possess fewer instruments to manage them. It is estimated that MSMEs in developing countries make up 90% of the private sector. Furthermore, emerging markets typically have high levels of self-employment in informal sectors.<sup>20</sup> Climate change will thus have profound impacts on households and MSMEs in developing countries.

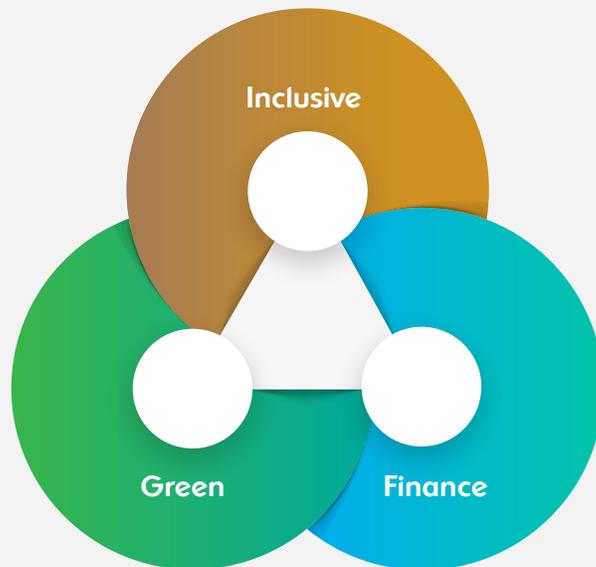
The boundaries of IGF for the UNSGSA working group are as follows:

1. Finance: financial products and services including payments, savings, credit, and insurance;
2. Green: financial products and services related to the impacts of climate change, the loss of biodiversity, degradation of ecosystems, and the transition to a green economy;
3. Inclusive: these products allow households, small businesses, and vulnerable groups to adapt in the face of growing climate risks, thereby supporting their resilience and helping them benefit from green finance products and emerging opportunities in green economic sectors.

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<sup>20</sup> Center for Strategic & International Studies (CSIS). 2021.

Figure 1: Boundaries of Inclusive Green Finance



- Focusing on low-income households, small businesses and vulnerable populations
- Responding to climate change, supporting positive impact on ecosystems and biodiversity
- Formal and informal financial tools to manage risks, smooth consumption, and make investments

Source: Center for Financial Inclusion

## How Can Financial Products Support Climate Change Objectives?

To support a more granular understanding of IGF, it is useful to understand how financial products support specific policy objectives related to addressing climate change. As described above, financial services help vulnerable segments smooth consumption, build up productive assets, and respond to shocks.<sup>21</sup>

<sup>21</sup> Consultative Group to Assist the Poor (CGAP). 2014.

Examples include index-based agricultural insurance, which provides a cushion during a poor harvest season, and digital financial services to quickly send and receive domestic remittances following a hurricane or flood.

Policymakers are beginning to examine more specific roles of financial services to support climate objectives, including adaptation, resilience building, mitigation, and transition. While the focus of the paper is on resilience and support for adaptation, the following framework, developed by the Center for Financial Inclusion, outlines how financial services support these main climate change pathways.

**Table 1: How Financial Services Support Climate Change Pathways**

Pathway	Role of Inclusive Financial Services	Examples of Inclusive Financial Solutions
Mitigation	Support adoption of low-carbon technologies and practices that can improve local environmental conditions for households and communities.	<ul style="list-style-type: none"> <li>• Installment plans to pay for solar lighting systems</li> <li>• Financing of “clean” cookstoves that utilize gas or electricity</li> </ul>
Resilience	Support the financial resources needed to reduce vulnerability, to manage through, and recover from climate-related shocks.	<ul style="list-style-type: none"> <li>• Weather/livestock index insurance</li> <li>• Easy-access savings</li> <li>• Social protection payments for food or wage security</li> </ul>
Adaptation	Support necessary changes to their lives and livelihoods in response to longer-term climate-related events.	<ul style="list-style-type: none"> <li>• Financing to farmer producer groups for high-value crop diversification and value chain linkages</li> <li>• Financing for weather-proofing homes</li> </ul>
Transition	Support significant reductions in vulnerabilities and shifts to new livelihoods in response to and in anticipation of climate events.	<ul style="list-style-type: none"> <li>• Financing/remittances for migration</li> <li>• Financing for vocational training</li> <li>• Long-term savings</li> </ul>

Source: Center for Financial Inclusion

There exist some examples of inclusive financial products and services that support these impact pathways. PAYGO financing models for services such as solar power have been able to facilitate access to essential services, attract investment and have reached significant scale. However financial services that support resilience, adaptation, and transition are more nascent. There are promising examples of weather index insurance, but scalability appears to still depend on some level of subsidy. While new financial services will be needed to help people build resilience, access to basic financial services like secure savings and remittances continues to play a fundamental role in helping people respond effectively to a climate-related shock. To support adaptation investments and new technologies where required, financial systems will need to be re-oriented to support longer term and often riskier investments, with support from improved data, risk management and, in many cases, subsidies.

## **How Inclusive Green Finance Works Together to Achieve Broader Objectives**

Financial sector policymakers and supervisory authorities balance several mandates, including safeguarding financial stability and integrity, and overseeing price stability through monetary policy. Financial sector deepening (including financial inclusion) has increasingly come under the auspices of financial sector regulators over the past decade. Regulatory actions promoting financial inclusion, such as licensing of non-bank mobile money actors, and infrastructure investments, including interoperable payment systems, fall under the remit of central banks and financial supervisory authorities, often in close coordination with relevant line ministries (finance, telecommunications, etc.).

Green finance is a recent addition to such policy priorities. The Sustainable Banking and Finance Network (SBFN) notes that as of November 2021, 41 emerging markets had launched over 200 sustainable finance frameworks including national roadmaps, policies, regulations, guidelines, disclosure requirements, and green finance taxonomies. Faced with these multiple objectives, it is useful for policymakers to understand how green finance and financial inclusion work together to support broader objectives, including financial stability, resilience, and competitiveness.

## Financial Stability

A stable financial sector can effectively and efficiently allocate resources, assess and manage financial risks, and support price stability in the value of real and financial assets, thereby also contributing to monetary stability. It remains stable during periods of increased financial stress and deteriorating market conditions, helping maintain a full level of employment.<sup>22</sup>

While literature on the nexus between financial inclusion and financial stability is relatively thin,<sup>23</sup> several studies have demonstrated that financial inclusion contributes to financial stability. Financial inclusion promotes risk diversification through a wide and varied deposit base and greater verification of risk profiles in loans, thereby supporting stability.<sup>24</sup> Inclusive finance increases the economic participation of all businesses and households in the economy and thus provides a broader set of tools to manage asset price fluctuations and financial risks including those associated with climate change.

As described above, climate shocks can affect financial sector stability by destabilizing households and businesses and increasing credit and market risks for banks. While current empirical links between green finance and financial stability are nascent, green finance can support financial stability by reducing environmental and climate risks in private-sector activities and the financial sector. The Bank for International Settlements (BIS) emphasizes that the financial sector can drive private-sector investment in climate change-related new technologies, creating new economic opportunities and supporting a positive re-evaluation of a large range of asset classes.<sup>25</sup>

## Resilience

Inclusive green finance strengthens the resilience of vulnerable groups in the face of unexpected challenges. For example, randomized field experiments in Burkina Faso and Senegal found that women who bought index-based agricultural insurance had higher average yields and were better able to manage food insecurity and

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<sup>22</sup> World Bank. 2022.

<sup>23</sup> Chihak et al. World Bank. 2016.

<sup>24</sup> Melecky and Han. World Bank. 2013.

<sup>25</sup> Luiz. Bank for International Settlements (BIS). 2017.

income shocks.<sup>26</sup> Mobile money also facilitates risk sharing by making it easy for people to send transfers to family or friends who have suffered shocks. In Kenya, for example, mobile money (M-Pesa) increased financial resilience and savings, particularly for female-headed households (Jack and Suri 2016).<sup>27</sup>

In addition to strengthening individuals' resilience to climate change, green lending is associated with lower credit risk and increased resilience of banks' own portfolios.<sup>28</sup> Businesses that perform better on environmental factors also tend to perform well overall. This association is increasingly recognized through lower cost of capital and the growing market for sustainability-linked loans. For example, insurance providers are less inclined to cover risks in businesses that have poor systems for managing environmental risks, which in turn translates into lower value for private equity investors. Development finance institutions and private equity investors are increasingly embedding green expectations into requirements for MSMEs seeking finance.

## Competitiveness

Financial inclusion can also create additional economic opportunities, thereby supporting competitiveness. Financial sector deepening, as measured by private credit/GDP, has a positive correlation with growth and employment.<sup>29</sup> Expanding financial inclusion, which supports financial sector deepening, can work to ensure that households and small businesses have access to new green opportunities, while supporting the expansion of green sectors overall. Research by the International Finance Corporation (IFC) found the Paris agreement is expected to open up \$23 trillion in economic opportunities for climate smart investments in emerging markets between 2016 and 2030. Highlighted sectors include green buildings, electric vehicles, public transport infrastructure, climate-smart water, renewable energy, sustainable agriculture, and solid waste management.<sup>30</sup> Financial services can help households and SMEs invest in climate resilience and participate in these green sectors.

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<sup>26</sup> Delavallade et al. International Food Policy Research Institute (IFPRI). 2015.

<sup>27</sup> Jack and Suri. 2016.

<sup>28</sup> Zhou et al. 2022.

<sup>29</sup> Pasali. World Bank. 2013.

<sup>30</sup> International Finance Corporation. 2016.

## Potential Consequences of Green Finance on Financial Inclusion

Over the past five years, regulators across the globe have coalesced around a common framework for how the financial sector can manage climate risks and support an acceleration of investment in green sectors. This framework emphasizes the role of banks in managing physical and transition risk through a combination of disclosure requirements, financial risk management, governance guidelines, and, in certain jurisdictions, prudential regulation (e.g., green loan ratio requirements, climate-adjusted value at risk adjustments, etc.).

Reducing the exposure of banks to climate risks may have unintended consequences on financial inclusion.<sup>31</sup> Financial service providers will only serve clients when risk-adjusted returns are positive. The window of profit decreases as climate risks increase. Climate shocks destroy collateral needed to secure loans. Clients with high physical risk exposure, for example smallholder farmers and low-balance savers on modest incomes, may be the first clients to be excluded as financial sector providers comply with regulatory policy on managing climate risks. An example may be smallholder farmers being unable to invest in climate-resilient agriculture as banks reduce exposure to drought-affected communities. In addition, assets vulnerable to climate risks can become uninsurable or can only be insured at a high premium.

The risk of financial exclusion may be exacerbated by efforts to accelerate the transition away from emitting sectors. To comply with heightened disclosure requirements, as well as manage reputational risk around financing greenhouse gas emissions, banks may reduce financing to existing clients, including smaller businesses, which may require financing for activities not considered green. Transaction costs at banks will increase to serve such clients due to increased climate-related disclosure and related due diligence. In certain instances, this will increase the cost of financing for end borrowers. In addition, smaller enterprises may be unable to afford climate-related assessments and certifications needed for green certification. Closely linked, investors may divest from climate-vulnerable sectors, which can ultimately reduce livelihood opportunities for low-income people and MSMEs.

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<sup>31</sup> These potential consequences and how to mitigate them are explored at greater length in a forthcoming paper by CGAP.

Regulatory guidance on climate-related financial risk management may be designed to reflect the operations of and risks posed by large financial institutions in a given market. Recent analysis in *Science* argues that climate risk guidance by the US Office of the Comptroller of the Currency (OCC) and the Federal Deposit Insurance Corporation (FDIC) has focused on big banks, without adequate consideration of how guidelines will affect community banks. While intermediating only 15% of total industry loans, they play important roles in financing rural and underserved communities.<sup>32</sup> These smaller institutions often face higher compliance costs given their more limited outreach and smaller loan sizes. In addition, they may not always have the capacity or guidance on how to contextualize these requirements into their operations. As such, capacity building can be considered both for regulators to tailor guidelines for smaller institutions and for financial service providers themselves to support effective compliance with emerging guidelines.

The potential unintended consequences of climate finance on financial inclusion is a new and evolving area of policy. For example, recent World Bank research found that in Brazil, introducing a policy requiring systemically important banks to incorporate environmental risks in their capital adequacy assessments led to a lending reallocation away from exposed sectors.<sup>33</sup> More research and data are needed on the extent to which these unintended consequences are materializing and in response to which policy drivers (e.g., disclosure requirements, reputational risk, regulatory guidance). Dialogue between policymakers, market actors, and standard-setting bodies is needed to further understand pain points and to develop common coordinated approaches, particularly with regards to international standards, and to highlight emerging best practice that enables forceful action on climate change while avoiding potential undesirable knock-on effects on financial inclusion.

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<sup>32</sup> Perrault and Giraud. 2022.

<sup>33</sup> Miguel et al. 2022.

### III. Opportunities for Advocacy Around Inclusive Green Finance

Through a series of facilitated discussions and exchange of technical and analytical material, the UNSGSA IGF working group has chosen three priority advocacy areas for the IGF agenda. For each area, the working group members have provided several country cases and lessons learned as well as the current global trends in inclusive green finance. The working group also consulted the UNSGSA reference group when selecting and prioritizing these advocacy pillars.

**Table 2: Overview of Advocacy Agenda**

Advocacy Area	Objective and Description
Information and Data	<ul style="list-style-type: none"> <li>• Research and evidence: produce dedicated IGF demand- and supply-side data; define a research agenda that provides a deep-dive analysis on IGF and its importance to economic development, including research on potential unintended consequences of green financial sector policy on financial inclusion.</li> <li>• Taxonomies: incorporate the perspective of inclusive finance in green finance taxonomies, including consideration of how to ensure/enable participation for MSMEs.</li> <li>• Use cases: discover examples of targeted financial products, public vs. private interventions, and their benefits/impact at the micro level.</li> <li>• Green investment opportunities: unlock opportunities that build resilience and create incomes for vulnerable groups.</li> </ul>
Integration of IGF at the country level including in defined national strategies or plans	<ul style="list-style-type: none"> <li>• Support integrating IGF at the country level including national level dialogue, coordination, and links with defined national strategies or plans. Examples include:               <ul style="list-style-type: none"> <li>• National financial inclusion strategies (e.g., Bangladesh, Fiji, Philippines, Solomon Islands)</li> <li>• Sustainable banking principles (e.g., Nigeria, Ghana, Mongolia)</li> <li>• Sustainable finance roadmaps (e.g., Sri Lanka)</li> </ul> </li> </ul>

Advocacy Area	Objective and Description
International regulatory/ enabling environment for inclusive green finance and global public goods	<ul style="list-style-type: none"> <li>• Advance financial-sector regulatory frameworks that incorporate IGF through raising awareness and generating commitment to action with global regulatory bodies, while giving consideration to the trade-offs and unintended consequences of climate action on inclusive finance, including adverse impacts on vulnerable groups.</li> <li>• Encourage countries to work with global regulatory bodies to develop and regularly update standards, define related global public goods, and disseminate guidance on IGF. Regulatory tools here include disclosure requirements, taxonomies, risk management guidelines, supervisory practices, prudential rules, and regulatory enablers for green sectors (e.g., PAYGO solar, green buildings, etc).</li> </ul>

## Information and Data

The objective of this advocacy area is to develop a comprehensive set of analytical tools and build the evidence base to support the advancement of IGF in emerging markets. This includes producing data and research to assess the status of IGF, gaps and opportunities, advancing products and use cases which are effective in supporting IGF, developing inclusion-informed taxonomy tools, and mapping and estimating investment and income opportunities across green sectors for households and MSMEs.

## Research and Evidence

Improving the availability of data is an important entry point for policymakers to understand the scope and magnitude of IGF issues facing their respective jurisdictions. Improved data also supports prioritizing IGF amidst competing policy objectives. To date there has been limited cross-country demand and supply data available on the intersection of green and inclusive finance data in common survey instruments such as Findex or the International Monetary Fund’s Financial Access Survey. Data could provide information on the type and frequency of climate risks facing households and MSMEs and what tools (both financial and non-financial)

they employ to manage risks. Data could also probe participation in key green sectors of the economy and how livelihood strategies are adapted in the face of adverse climate impacts and the transition to low-carbon economies. A recent report highlights AFI member efforts at collecting and analyzing data at the intersection of financial inclusion and green finance. Key themes include data to support climate risk management amongst MSME segments, measuring funding for IGF, and measuring the provision of IGF products.<sup>34</sup>

Certain Findex questions are relevant to IGF, notably around coping with shocks, and could be built upon. Examples include financial resilience, i.e., the percentage of adults in developing economies who could access emergency money within 30 days without much difficulty. One Findex survey question particularly relevant for climate risks is the number of adults who would depend on family and friends to come up with extra money in an emergency. Climate disasters often affect whole communities, which limits the ability to rely on social networks given that everyone is facing a similar shock at once.

National financial inclusion strategies that incorporate IGF have drawn on bespoke surveys, for example in the case of Fiji, which included [demand-side survey work](#) incorporating resilience modules. Other industry efforts to date have been one-off efforts, for example [A survey conducted by the MIX](#) on microfinance institutions offering green financial products. Survey results from Kenya incorporating IGF are to be published shortly.

A dedicated research agenda on IGF can be informed by existing industry efforts in related topics. There is emerging evidence related to climate change's impact on credit risk and the cost of credit within different industries, countries, and real estate markets. Examples include academic and policy studies looking at the impact of climate change on the cost of [mortgage credit](#), [corporate credit](#), and [different asset classes in the United States](#) (municipalities, commercial real estate and utilities). This research, however, does not differentiate based on company size, income, and access to financial services.

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<sup>34</sup> Alliance for Financial Inclusion (AFI). 2021.

While donors and research organizations in the financial inclusion sector have begun to study resilience mechanisms of the poor,<sup>35</sup> deeper engagement on this agenda, with an emphasis of resilience strategies in the face of climate shocks, is warranted. Closely linked, synthesizing existing research efforts on disaster-risk financing could support a research agenda for IGF, including in supporting the efficacy and design questions for government-to-person (G2P) payments after climate disasters.

## Taxonomies

Taxonomies of eligible green and sustainable activities have become a key instrument to allow actors in the financial services industry and regulators to differentiate “green” from “conventional” financial products. A green taxonomy is a classification system for identifying activities of investments that can move a country towards meeting specific targets related to environmental objectives.<sup>36</sup>

Prominent national regulatory surveys—such as those collected in China from the largest banks—build on those taxonomies to show national trends for green finance. They also give some indications of the related credit risk of green financial products. SBFN reports that over 27 countries have provided definitions or examples of a taxonomy (catalog or guidelines of eligible sustainable finance assets) although they often remain quite high-level.<sup>37</sup> As of December 2022, 10 emerging markets—Bangladesh, Brazil, China, Colombia, Georgia, Indonesia, Kazakhstan, Mongolia, South Africa, and Sri Lanka—have published comprehensive taxonomies for green and/or sustainable finance. The Association of Southeast Asian Nations (ASEAN) has published a regional taxonomy to support members in developing national taxonomies that support regional goals and collaboration. Two countries, Georgia and Bangladesh, have gone beyond their green finance taxonomy green finance taxonomy. Georgia has published a social taxonomy and Bangladesh has published a sustainability taxonomy.

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<sup>35</sup> McKay and Zetterli, 2021.

<sup>36</sup> International Capital Market Authority (ICMA). 2021.

<sup>37</sup> Sustainable Banking and Finance Network (SBFN). 2021.

## BOX 2 SBFN Learnings on Green Taxonomies

In 2022, SBFN undertook in-depth research and benchmarking into taxonomy trends in emerging markets. The following were key trends:

- Taxonomies are becoming multipurpose, flexible instruments to direct capital towards countries' sustainable development priorities. They are also becoming an essential tool in a country's sustainable finance framework.
- Taxonomies provide a common understanding of what projects can be labelled environmentally and socially sustainable for investment purposes, to complement other measures to promote sustainable finance.
- They allow for a range of uses, from reporting of taxonomy-aligned activities to structuring financial products and managing investment portfolios.
- Most taxonomies are in the early stages of development and implementation, and countries are experimenting with different needs, goals, and development processes.
- The principle of Do No Significant Harm (DNSH) is used in most taxonomies, either to qualify all activities of the taxonomies or only for transition activities. DNSH refers to the concept that achieving one taxonomy objective should not come at the expense of any of the other taxonomy objectives, whether environmental or social. There are some links with traditional do-no-harm approaches used by development finance institutions and responsible investors.
- Most taxonomies also include minimum social safeguards (minimum standards and expectations) around labor, communities, and human rights.

In green taxonomies, financial inclusion could be included in the context of:

- Managing risks through social safeguards, and
- Enhancing the overall outcomes of green investments by designing for financially inclusive outcomes. In the context of social taxonomies, financial inclusion could be included as a priority, and green considerations should be incorporated as environmental safeguards.

Source: SBFN

Many jurisdictions look to the European Union Sustainable Finance Taxonomy (EUSFT) of 2020 as a key reference in this space. It provides detailed environmental criteria to achieve a green label, covering wide-ranging investments including steel plants, building renovations, and energy (e.g., fossil gas, nuclear). The European Banking Authority oversees its applicability for commercial banks, including through the obligation of banks to disclose a green asset ratio and related indicators.<sup>38</sup> It is considered one of the world's primary tools to support the redirection of capital flow from the financial sector to a low-carbon economy, in support of the Paris Agreement.

Most taxonomies are not written with reference to how financing can support climate change adaptation or resilience in the face of climate shocks, nor do they differentiate for emerging markets, which may have a higher portion of MSMEs in their economic structure. Emerging markets that have developed taxonomies have employed varying approaches that reflect individual country context and are not uniformly aligned with the EUSFT. Sri Lanka aligned with common ground taxonomy, while Indonesia aligned with approaches advanced by ASEAN. Mongolia's taxonomy is aligned with China, while Georgia and Bangladesh developed a more unique approach. This suggests that a single approach for taxonomy development may not be appropriate.

An advocacy agenda could help clarify the impacts of taxonomy principles on households and MSMEs, discuss the role of proportionality in their introduction, and discuss how to make them more inclusive in their design. The experiences of different emerging market countries—in aligning with EU guidance or developing more bottom-up approaches—can inform this advocacy work. Considerations to make taxonomies inclusive include:

1. Embed inclusion in the overall purpose of the taxonomy to align all stakeholders;
2. Ensure that initial research into local green finance opportunities considers MSMEs, women, households, and marginalized groups as both providers and

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<sup>38</sup> European Banking Authority (EBA). 2020.

users of business products and services that have climate and environmental benefits;

3. Include appropriate representative groups in the consultation processes for taxonomy development, e.g., microfinance providers, MSME business associations, women entrepreneurs etc.
4. Test proposed technical criteria and taxonomy rules with MSMEs and microbusinesses to understand capabilities and cost implications and create tiered approaches if needed;
5. Include social safeguards linked to inclusion criteria; and
6. Embed impact metrics at category level that will help assess the effectiveness of taxonomy implementation in increasing rather than eroding inclusion.

## Financial Products and Use Cases

While ample grey literature exists, there are limited rigorous studies assessing the scope and efficacy of different green financial products and services and their role in broader resilience strategies of low-income segments. Furthermore, a host of issues, including underdeveloped digital and financial infrastructure, and sub-optimal regulation, can impede the delivery of IGF products, particularly those relying heavily on technology. An advocacy agenda could encourage policymakers, technical partners, and think tanks to develop tools to evaluate how to successfully bring IGF products to market. Such frameworks could include assessing key success factors, including infrastructure, product, and delivery channel design, and encouraging targeted measures to promote consumer uptake.

Closely linked, there is no systematic review of obstacles and support mechanisms for the development of IGF products. For example, these may include the role of fossil fuel subsidies or import taxes that may slow the uptake of IGF products (e.g., electric panels or vehicles), even if such products are subsidized and incorporate blended finance mechanisms.

## Inclusive Green Finance Potential

To assess and prioritize the importance of different inclusive green finance products, it is important to get credible estimates of investment and income opportunities related to adaptation and key sectors that form part of the transition to a climate resilient economy (including transport, infrastructure, energy, and housing). Examples of such work include analytics done by the IFC on climate investment opportunities across sectors, or the industry development and outlook of the PAYGO solar industry. However, no comprehensive estimates of inclusive green investment and climate-resilient income opportunities for households and small businesses exist to date. An estimated monetary value of inclusive green investment opportunities and needs for households and small businesses can prove to be a powerful advocacy tool to influence policymaking. Over the medium term, these estimates can act as rallying points to channel investment towards IGF.<sup>39</sup>

## Integration of IGF at the Country Level, Including in Defined National Strategies or Plans

More jurisdictions are beginning to incorporate IGF as a policy area to address both financial inclusion and climate change and to link it with financial stability and sustained economic growth. Accordingly, there is an emerging trend among countries to link financial inclusion and climate change at the national strategic level, either in National Financial Inclusion Strategies (NFIS) or other financial sector strategies<sup>40</sup>, such as Sustainable Banking Principles, Sustainable Finance Roadmaps, Microfinance Action Plans and Financial Sector Development Strategies. At the same time, more countries are relying on digitally disbursed cash transfers to support affected communities after a climate shock and more broadly for payments across social protection programs.

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<sup>39</sup> Within monetary estimates, emphasis should be on adaptation and resilience. While there may be “mitigation co-benefits,” the primary focus is on securing sustainable income opportunities for households and small businesses, opening new ones, and reducing the cost of managing climate related shocks and impacts.

<sup>40</sup> Alliance for Financial Inclusion (AFI). 2020.

The UNSGSA is strategically positioned to further promote this trend and support countries' efforts to implement green initiatives at the national level.<sup>41</sup> This may include:

1. Integrating green finance into national financial inclusion strategies;
2. Integrating IGF into national financial sector strategies;
3. Integrating IGF into tools and policies;
4. Integrating IGF into social protection programs.

### Integrating Green Finance into National Financial Inclusion Strategies

A survey conducted in 2020 by Alliance for Financial Inclusion indicates that 13 countries have linked climate change and financial inclusion in their national financial inclusion strategies, including those described in the table below.

**Table 3: Examples of Countries that Included Green Initiatives in their NFIS**

Country	Method
Sri Lanka	The NFIS, launched in 2020 by the Ministry of Finance with the support of the World Bank, mentions green finance under SMEs.
Bangladesh	Bangladesh's first NFIS, launched in April 2022, includes green finance as one of its key pillars. It sets specific targets for the inclusion of women and populations affected by climate change.
Fiji	Fiji's third NFIS, launched in May 2022, aims to develop and implement guidelines for inclusive green finance, including definitions and taxonomy.
São Tomé and Príncipe	São Tomé and Príncipe's NFIS 2021-2025 includes IGF as one of its four strategic pillars, with measures including regulating mandatory collection of IGF data in financial institutions, introducing climate risk management into reporting frameworks, and targeted subsidies to encourage institutions to introduce green financial products.

Source: Alliance for Financial Inclusion

<sup>41</sup> Common reference points for all those strategies, policies and programs related to climate risks and transition paths are updated Nationally Determined Contributions (NDCs) and National Adaptation Plans (NAPs), and any other related national strategies or plans addressing climate change and loss of biodiversity, particularly in relation to adaptation. Albeit fewer than 30 countries currently have fully developed and updated their NAPs, according to the 2021 NAP progress report.

## Integrating IGF into National Financial Sector Strategies

Certain countries have linked financial inclusion and climate change in other national financial sector strategies besides their NFIS – for instance, Morocco developed a National Roadmap for Aligning the Financial Sector with Sustainable Development. This roadmap discusses risk-based governance for social and environmental risks, sustainable financial instruments, and financial inclusion as a driver of sustainable development.<sup>42</sup>

Among countries that have integrated inclusive green finance into their national strategies, there have been several common success factors, which are in line with the UNSGSA's approach and experience:

- Focusing on data to inform evidence-based policy choices and monitor progress
- Having an actionable plan or strategy
- Putting in place a functioning coordination mechanism between relevant government agencies, institutions, and the private sector to implement the plan or strategy
- High-level political buy-in from country leadership

## Integrating IGF into Tools and Policies

There are several good country-level examples of how countries are building inclusive green finance considerations into national tools and policies.

### **Policy: Ensure that green taxonomies are inclusive**

#### Example: The Mongolian Green Taxonomy

The Financial Stability Commission of Mongolia approved the Mongolian Green Taxonomy in 2019, following the release of its Sustainable Finance Roadmap. The

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<sup>42</sup> Alliance for Financial Inclusion (AFI). 2020.

taxonomy aims to provide a “nationally agreed classification framework of activities” that contribute to the country’s development policies and strategies for economic growth, environmental balance, and social stability. At the same time, it recognizes the potential contributions of and support to households and small businesses in alignment with national goals for climate change mitigation, adaptation, pollution prevention, resource conservation, and livelihood improvement in the context of green finance.<sup>43</sup>

**Policy: Allow for higher loan-to-value ratios for green home loans for low-income households and/or energy efficiency investments for small businesses**

**Example: Innovative green building certification program (EDGE) by IFC**

Certain climate-smart investments may reduce future energy or utility costs, which in turn frees up cash flow to support higher up-front investments and respective loans. Examples include green mortgage loans (mortgages that finance energy-efficient homes) and energy-efficiency investments for small businesses, where such savings may warrant higher loan-to-value ratios. The green building certification system EDGE (Excellence in Design for Greater Efficiencies), created by the International Finance Corporation (IFC), provides calculation examples for loan-to-value adjustments based on expected utility bill savings. Green mortgages are a win-win as banks book lower-risk loans, while buyers enjoy increased purchase power to pay for features that lower utility bills.<sup>44</sup> Governments can also stimulate green building growth by providing property tax incentives, height bonuses, and expedited permitting.<sup>45</sup> In Vietnam, for example, EDGE aims to help developers reduce their buildings’ energy and water consumption by 20% while lowering greenhouse gas emissions.<sup>46</sup>

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<sup>43</sup> The Financial Stability Commission of Mongolia. 2019.

<sup>44</sup> Green Finance Platform. 2021.

<sup>45</sup> Green Finance Platform. 2021.

<sup>46</sup> International Finance Corporation (IFC). 2015.

## **Policy: Building out the digital payments infrastructure for inclusive green use cases**

### **Example: P2P/G2P systems for PAYGO solar lighting**

Digital payments, both person-to-person (P2P) and government-to-people (G2P), play an important role in increasing the resilience of low-income households, small businesses, and vulnerable populations to climate risk. In Mozambique, following a flood shock, mobile money improved welfare by allowing rural villagers to increase consumption expenditure by 47.7% in one year compared with non-users.<sup>47</sup> Digital payment platforms are especially useful for smallholder farmers, a population particularly exposed to climate shocks, to address climate disasters such as drought, floods, and soil erosion. Small business can also benefit from P2P by saving on transaction costs for sales, purchases and salary payments and investing in more climate-resilient technologies instead.<sup>48</sup>

They also facilitate innovative green use cases like PAYGO solar lighting products that assist climate-vulnerable populations. In the case of PAYGO solar lighting, it is estimated that around 401 million people have benefited from improved access to clean energy through off-grid solar lighting products since 2010. In so doing, 94 million metric tons of CO<sub>2</sub> emissions have been avoided by PAYGO solar lighting products.<sup>49</sup>

## **Policy: Ensuring tiered sustainability disclosure requirements**

### **Example: Bank Indonesia's tiered guidelines**

Since 2019, financial service providers must submit a sustainability report or a Sustainable Finance Action Plan that describes their plan for implementing sustainable finance.<sup>50</sup> Tiered sustainability disclosure requirements have been put in place to ensure that smaller financial institutions serving low-income households and small businesses are not at a disadvantage refinancing themselves or attracting capital because they cannot comply with climate or sustainability related disclosure requirements.

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<sup>47</sup> Batista and Vicente 2022.

<sup>48</sup> Alliance for Financial Inclusion (AFI). 2022a.

<sup>49</sup> Global Off-Grid Lighting Association (GOGLA). 2022.

<sup>50</sup> PricewaterhouseCoopers (PWC). 2021.

## Integrating IGF into Social Protection Programs

As described above, government cash transfers play an important role in meeting immediate needs after a financial shock, and in reactivating markets and supporting economic recovery. In response to the COVID-19 pandemic, social protection systems expanded significantly around the globe, with nearly 4,000 different measures to respond to its economic impact. Between 2020-2021, cash transfers alone reached 1.4 billion people (one out of every six people worldwide).<sup>51</sup> There are also important linkages between cash assistance and financial inclusion. Programs are increasingly using the digital deployment of transfers, leveraging mobile money accounts and digital public infrastructure such as telecommunications connectivity and interoperable payment systems to operate.

**Table 4: Examples of Countries that Utilized G2P Platforms for Social Protection After Climate-Induced Natural Disasters**

Country	Method
The Philippines	After Typhoon Haiyan, Mercy Corps partnered with a mobile bank and a mobile network operator (MNO) to send cash to individuals through the MNO's agent network (2013).
Fiji	After Tropical Cyclone Winston, the government provided recipients of existing social protection programs with rapid cash support using the M-PAiSA electronic payment platform without the involvement of any traditional bank (2016).
Togo	The Novissi program used geospatial and demographic data to identify climate-vulnerable households using a predictive algorithm. The G2P program has spurred the creation of over 170,000 new mobile money accounts, fostering both financial inclusion and the expansion of the social safety net (2020).

Source: Alliance for Financial Inclusion

<sup>51</sup> Gentilini et al. 2022.

While there is a growing number of G2P use cases supporting recovery from a natural disaster, operational challenges remain. For instance, in the aftermath of the devastating floods in Pakistan in July 2022, emergency relief through G2P payments was disrupted because of middlemen who charged a higher fee to enable access to the G2P payments. In response to Typhoon Haiyan in the Philippines, recipient targeting was an issue because standardized indicators did not reflect the nuances of debt and vulnerabilities. An individual was excluded from G2P relief funding since she had used credit to buy fish cages before the typhoon struck and was therefore seen as less vulnerable than her neighbors who did not have these assets. The typhoon destroyed her boat, leaving her saddled with debt and income loss and no relief funding.<sup>52</sup>

## The International Regulatory Environment for IGF and Global Public Goods

Global advocacy could support green regulatory frameworks to incorporate an inclusion lens. At an initial stage, this would mean working with international organizations and collaborative platforms for government to begin discussing financial inclusion and green finance together. These entities could then commit to developing frameworks that address the intersection between these pillars. Emphasizing the benefits for key sectors across the economy, e.g., enabling MSMEs to participate in green sectors, or making farmers and food production more resilient, can support this shift. Success metrics could include the number of global dialogue platforms (working groups, committees, etc.) for climate finance that have explicit emerging market representation with a focus on linking green finance and financial inclusion.

Over the medium-term, advocacy work could center on enabling existing regulatory tools to green the financial system with an inclusive perspective. For example, corporate disclosure requirements should be proportional to firm size, given the important role MSMEs play in emerging markets. Risk management guidelines could explicitly integrate financial inclusion. A key element of this will be right-sizing taxonomies to support the economic structure of emerging markets, notably the

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<sup>52</sup> Miller and Venkatesan. 2022. Brown 2015.

distinct needs of MSMEs. A medium-term output of this work could be international regulatory guidance on integrating IGF into existing green finance regulations.

Regarding green opportunities, advocacy can promote an enabling environment for green economic sectors, for example climate-resilient agriculture, PAYGO solar, green housing, and transportation. The objective would be to promote responsible market development and increase opportunities for households and MSMEs to participate in green sectors and climate-resilient income opportunities. Key elements of the enabling environment include regulation supporting responsible financial innovation, adequate physical and digital public infrastructure, and digital and financial education to encourage uptake of green and climate-resilient sector solutions. Investments in public goods for resilience could include data solutions for green finance products, satellite and water catchment infrastructure, and open finance arrangements to support IGF solutions. This work would also support governments in developing relevant sectoral strategies and consider the introduction of fiscal tools, such as tax breaks, to facilitate market development. These measures collectively serve to improve the business case for investing in inclusive green and climate-resilient sectors.

## Unintended Consequences

Global advocacy could support work on the potential unintended consequences of climate risk policy from financial regulators and financial exclusion. Policymakers are in the initial stages of developing frameworks mapping how financial-sector climate policy impacts the continued availability of finance for low-income segments and small businesses (see page 13 for a full discussion). As described above, these populations are at high risk of suffering financial shocks due to climate change. At the same time, MSMEs may find it difficult to comply with corporate disclosures or green certifications imposed by banks considering heightened regulatory requirements.

To date there is no comprehensive data on these potential unintended consequences. Research projects that develop frameworks and data will be particularly useful given this work's relative nascency.<sup>53</sup> In parallel, identifying financial institutions in emerging markets that can share experiences and provide local contexts will prove important.

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<sup>53</sup> A forthcoming research project from CGAP will examine this issue in greater detail.

# Conclusion

As climate events become more frequent and with disproportionate impacts on the poor, the UNSGSA IGF working group emphasizes that the future of the financial inclusion agenda will be in climate-vulnerable countries. Overall, more than four out of five of the world's unbanked adults, totaling more than 1 billion people, reside in the most climate-vulnerable economies. Households and MSMEs need financial inclusion to address and manage climate risks as part of larger livelihood strategies emphasizing resilience building and adaptation. Unfortunately, however, financial exclusion is highest in countries most vulnerable to climate risks.

Integrating IGF at the country level (including in defined national strategies or plans), advancing IGF data and research, and incorporating IGF in the regulatory agenda (both global and national) offer three credible areas of cooperation for both international and national stakeholders (policymakers, standard-setters, donors, regulators, financial service providers, and market facilitators). In addition, greater dialogue and cooperation is needed between global leaders at the forefront of climate-change policy and financial-sector leaders advancing financial inclusion agendas. While many open questions remain, the availability of evidence shows us that IGF needs to be part of the solution as we transition to climate-resilient economies, and in parallel develop tools to help the most vulnerable build resilience in the face of climate risks.

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