Inclusive Green Finance (IGF) is a holistic approach to policymaking that links environmental sustainability and financial inclusion. IGF is addressing the risks posed by climate change on social inclusion and poverty reduction, as well as environmental risks to the financial system.

Financial inclusion and green finance are often treated as two distinct concepts in academic literature, policy discussions, and financial regulation—until now. But there are considerable overlaps in the goals of financial inclusion and green finance. Combining the two concepts under the umbrella of IGF allows policymakers to focus on a just transition to a resilient and environmentally sustainable economy.

Key target groups for financial inclusion tend to be disproportionately exposed to the risks and impacts of local and global environmental change, while also playing an important role in mitigating environmental change.

Vulnerable groups play a key role in achieving a just transition and without improving their socioeconomic situations, climate mitigation policies may run into fierce opposition. Using the IGF approach, financial regulators and policymakers can enable access to financial services for low-income populations and micro, small and medium enterprises (MSMEs) to adapt to global environmental change, strengthen their resilience, and transition into less resource-intensive and less carbon-emitting activities.
THE ROLE OF FINANCIAL INCLUSION IN ENVIRONMENTAL CHANGE

The linkages between green finance and financial inclusion are outlined as follows:

A. THE ROLE OF FINANCIAL INCLUSION IN ENABLING ADAPTATION

Emerging and developing economies tend to be more vulnerable to the impacts of climate change because of geography, demographic pressures, and limited resources, to invest in adaptation and mitigation measures.

Most of the world’s low-income households live in less-favored agricultural areas and low-elevation coastal zones and are at greater risk from climate change. This unequal exposure to environment-related risks tends to fuel a vicious cycle affecting these vulnerable groups, including their livelihoods and assets resulting in increasing social inequalities.

Adaptation to climate change is multifaceted and requires actions both from the public and private sector. The primary policy of governments in increasing the resilience of vulnerable groups is to weave a social safety net that encompasses a variety of risk transfer schemes. On the other hand, enabling access to financial services through appropriate products and services that are designed to meet the needs of the low-income segment can help empower vulnerable groups to adapt to climate change.

Climate change has deleterious consequences not only for households but also for MSMEs. Empirical evidence shows that climate vulnerability increases financing costs for firms and worsens their access to finance. Such problems are particularly pronounced for MSMEs, which have scarce recourse to capital markets, and often struggle to access financial services.

Financial services can play a key role in empowering vulnerable parts of society to adapt to climate change, but only if they are accessible, useful, and well-designed.

Digital finance is reducing transaction costs and enabling access and the use of formal financial services that can facilitate adaptation. The use of retail payments such as mobile money yields unexpected benefits, such as enabling lending and transfer of cash support between and among families and friends in times of distress, e.g., after natural disasters, which contributes to increasing climate resilience for low-income households and MSMEs. Lower transaction costs allow domestic remittances and government aid to reach affected populations following extreme weather events. Microinsurance can help low-income populations manage climate risks and help build their resilience to the impacts of the changing environment. Digitalization powers access to microinsurance that integrates meteorological information, geospatial data, facilitates premium payments and payouts, and facilitates convenient access to savings and credit.
B. THE ROLE OF FINANCIAL INCLUSION IN ENABLING MITIGATION

While adaptation is a key priority to increase the resilience of vulnerable populations vis-à-vis climate change, it needs to go hand in hand with mitigation measures that reduce global warming. Economic agents at the base of the pyramid are an essential part for global mitigation, even if it is recognized that the bulk of greenhouse gas emissions are not coming from the base of the economic pyramid in the Global South.

MSMEs tend to operate in sectors that are energy-intensive and in need of technological change for climate change mitigation. Millions of small enterprises in agriculture, forestry and fishing, manufacturing and other climate-sensitive sectors can make a difference in reducing their carbon footprint by switching to energy-efficient approaches for lighting, buildings, and refrigeration, using renewable energy sources, using more energy-efficient technology and improving water conservation.

While large corporations and high-income households, which account for a disproportionate share of the historical and current greenhouse gas emissions, usually benefit from financial tools and subsidies provided by governments or the private sector that help them invest in climate mitigation measures, MSMEs and low-income households often are hard to reach, both by governments and traditional financial services providers.

Even when technological change is cost-saving in the medium or long run, many MSMEs do not have the financial tools at their disposal to invest in low-carbon technology, which often requires higher upfront investment while delivering lower operating cost. Here, financial inclusion can make a clear difference.

For instance, pay-as-you-go for solar panels allow low-income households, especially in remote areas, to power their houses and for MSMEs to become less reliant on energy grids for their power needs. The financing of clean cookstove technology to replace traditional stoves is another example where IGF can help to not only reduce greenhouse emissions equivalent to a decade’s worth of global heating but also prevent around 10 million premature deaths before 2050 alone, by improving ambient air quality. The financing of agricultural innovations from seeds to infrastructure and irrigation systems is another example how IGF can help in ecosystems and biodiversity conservation.
C. THE ROLE OF FINANCIAL INCLUSION IN JUST TRANSITION

The economic and social effects of global environmental change may affect inequality between and within countries. Moreover, inequality may also be enhanced by the transition to a low carbon, environmentally sustainable economy.

The forced decline of carbon-intensive parts of the economy can cause transitional unemployment and “stranded workers” who may not be easily re-employed. A just transition sits in the intersection of social and environmental risks and financial stability; a failure to address the social dimension of the transition can result in a failed or delayed transition.

IGF plays an important role in the transition to enable investment opportunities and alternative employment. It can help businesses, especially MSMEs, to develop in areas that are aligned to climate and sustainability goals and help them build their resilience to the impacts of environmental change. Financial services targeted at displaced workers and those that are affected by environmental change help to realize new opportunities and livelihoods.

Most importantly, IGF can empower those at the base of the pyramid to become drivers of a just transition.

The linkages between financial inclusion and green finance are summarized in Figure 1. By threatening assets and livelihoods, climate change and environmental degradation can have adverse impacts on vulnerable groups, contributing to social inequities and tensions. Social inequity and exclusion limit the capacity of vulnerable groups to protect themselves and adapt to the changing environment.

At the same time, low-income households and MSMEs have limited capacities and resources to reduce their environmental footprints or transition into less resource-intensive activities, thus, they contribute more than needed to activities that are harmful to the environment. At the same time, the physical impacts of (unmitigated) climate change, as well as disruptions caused by a disorderly transition, pose material risks to financial stability. Likewise, worsening social inequity and tensions may undermine the customer base of financial institutions and affect the repayment of loans, or lead to a disorderly transition.

Moreover, social inequality and stagnant income by lower-income groups and attempts by policymakers to address these problems through easier access to credit could compromise financial stability. Thus, regulators and policymakers can focus on enabling a just transition to a resilient and environmentally sustainable economy and ensure financial stability by addressing social and environmental factors through financial regulation.

FIGURE 1: THE LINKS BETWEEN CLIMATE CHANGE AND ENVIRONMENTAL DEGRADATION, VULNERABLE GROUPS, SOCIAL INEQUITY AND TENSIONS, AND FINANCIAL STABILITY

Source: AFI and SOAS (2020)
These are mostly regulatory enablers that lead to subsequent and more targeted policy interventions such as the following:

> Regulatory interventions enabling digital finance support scaling of financial services such as microinsurance that are meant to help low-income communities build their adaptive capacities and cope with economic shocks following catastrophic climate events.

> Financial regulations can enable market entry for service providers that will make low carbon technologies such as solar energy and solar cookstoves accessible to low-income populations. Financial regulators can adjust risk weights to incentivize lending for green projects. Environmental and social risk management (ESRM) policies can help to ensure that environmental and social risks are considered in financing decisions and steer away from resource-intensive or high carbon-emitting activities. ESRM guidelines were issued in Nepal, Paraguay, Brazil and Bangladesh. In the Philippines, the ESRM guideline is integrated into its Sustainable Finance Framework, while in Pakistan, the ERM guideline is included in its Green Banking Guidelines.

> Financial regulators can provide guidance and leadership in establishing mechanisms to enable lending to climate-sensitive sectors such as the Central Bank of Armenia’s initiative in setting up the Armenia Insurers’ National Agency (AINA) and the Central Bank of Nigeria’s guidance in paving the way for the Anchor Borrowers’ Program.

In AFI’s approach to IGF, promotion and prevention policies are included, and to some extents, so are protection policies such as guarantee schemes that help de-risk lending to climate-sensitive sectors.

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**FIGURE 2: THE NEW IGF POLICY FRAMEWORK**

<table>
<thead>
<tr>
<th>MARKET-SHAPING POLICIES</th>
<th>DIRECT INTERVENTIONS</th>
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<tr>
<td><strong>ADAPTATION TO ENVIRONMENTAL CHANGE &amp; ENHANCING RESILIENCE</strong></td>
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<tr>
<td>Implement regulatory enablers for mobile money, microinsurance and other resilience-supporting (digital) financial services.</td>
<td>(Digital) cash transfers to disaster affected.</td>
</tr>
<tr>
<td>Enact ESRM guidelines that incorporate environmental and social risks.</td>
<td>Subsidies or guarantees for credit to invest in adaptation / resilience-enhancing activities.</td>
</tr>
<tr>
<td>Awareness-raising and capacity building measures for financial institutions.</td>
<td>Directed credit / sectoral credit targets.</td>
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<tr>
<td>Green finance taxonomies for MSMEs and smallholder farming.</td>
<td></td>
</tr>
<tr>
<td>Consumer protection, awareness-raising and capacity-building measures for vulnerable end-users</td>
<td></td>
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<tr>
<td><strong>MITIGATION OF ENVIRONMENTAL CHANGE</strong></td>
<td></td>
</tr>
<tr>
<td>Regulatory enablers for Pay-as-you-go solar and water.</td>
<td>Subsidies or guarantees for credit to invest in new resource-efficient / low-carbon practices / technologies.</td>
</tr>
<tr>
<td>Prudential rules that incentivize credit to green MSMEs or sustainable agriculture.</td>
<td>Directed credit / sectoral credit targets.</td>
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<tr>
<td>Enact ESRM guidelines that incorporate environmental and social risks.</td>
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<tr>
<td>Awareness-raising and capacity-building measures for financial institutions.</td>
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<tr>
<td>Guidance and incentives for inclusive green FinTech innovation.</td>
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In using this new IGF policy framework, it is also important to note that gender is integral to policymaking, be it in financial inclusion or green finance, as women are disproportionately affected by the impacts of social inequalities and tensions, as well as the changing environment.

Direct interventions, on the other hand, support the private sector in making financial resources available to low-income populations to build their resilience, adapt to the changing environment and reduce their environmental footprints.

Unlike market-shaping policies, these interventions reflect deliberate efforts of the government to address environmental change through financial sector policies. Provision policies and some protection policies under AFI’s approach fall under this category. For instance, smallholder farmers can benefit from subsidized credit to climate-proof their business. In addition, monetary and financial authorities can adapt existing facilities to support post-disaster recoveries and help affected populations and economies.

Refinancing facilities of central banks were utilized to support post-disaster recovery in countries frequented by natural disasters, such as Vanuatu, Fiji, Sri Lanka, Philippines and Bangladesh. Interest subsidies and discounts were also offered in these dedicated lending facilities to support post-disaster recovery.

Similar to direct interventions for adaptation, central banks can adopt policies to support the transition to low carbon development, for instance through preferential rates or subsidized loans and the use of dedicated lending facilities for green projects. The following are a variety of policies used by central banks to increase access to financial resources for low carbon projects:

> **Bangladesh Bank** has used refinancing facilities to subsidize credits for low carbon technologies, such as solar power, biogas and waste management project. It also mandated the allotment of five percent of loan disbursements for green lending.

> **The State Bank of Pakistan** has offered concessional loans for solar and wind projects at a minimal interest rate of two percent per annum through its refinancing facility.

> **Nepal Rastra Bank** has required commercial banks to allocate 10 percent of their portfolio for green projects, while the Reserve Bank of Fiji has required commercial banks to hold two percent of deposits and similar liabilities for lending to renewable energy.

> **The Central Bank of Egypt** has required 20 percent of a bank’s credit portfolio to be allocated for MSMEs, which includes renewable energy and at an interest rate lower than the prevailing market price.

In this new IGF policy framework, it is also important to note that gender is integral to policymaking, be it in financial inclusion or green finance, as women are disproportionately affected by the impacts of social inequalities and tensions, as well as the changing environment.

**The Role of IGF in Sustainable Recoveries**

The COVID-19 pandemic has highlighted the global economy’s vulnerability to natural disasters but also opened opportunities to spur financial inclusion through digital finance revolution.

Governments are leveraging previous efforts on financial inclusion to channel emergency support to low-income populations through branchless banking networks and other digital channels. Financial networks between individuals and between the government and its constituents can be useful to build resilience and in post-disaster recovery efforts. However, meaningful recoveries only happen when everyone, especially the most vulnerable, have access. If they are left out of recoveries, it will only exacerbate inequalities in income, education, gender and location.

Post-disaster recovery also brings opportunities for more sustainable policies. IGF policies can help enable MSMEs to play an important role in green recoveries and in creating jobs for the future.

For instance, as part of COVID-19 response, the Bangladesh Bank increased its forex denominated refinancing facility called Green Transformation Fund by infusing an additional capital of €200m to the existing $200m to support export-oriented manufacturing businesses, including the MSME-dominated leather and textile industry, to replace assets or upgrade processes to greener technologies.
CONCLUSION

Climate change and environmental degradation can have a substantial impact on vulnerable groups at the base of the economic pyramid. By threatening the livelihoods and assets of vulnerable groups, climate change and environmental degradation can worsen social equity and contribute to intra-society conflicts and tensions. Social inequity and exclusion from economic opportunities not only limit the capacity of vulnerable groups and MSMEs to protect themselves from the effects of environmental change and boost their resilience, but it also limits the scope for effective mitigation strategies.

IGF, although not a panacea, can play an important role in supporting vulnerable groups adapt to global environmental change and strengthen their resilience. Likewise, IGF can facilitate mitigation action of vulnerable groups while supporting their economic opportunities. Without empowering households at the base of the pyramid and enhancing the business opportunities of MSMEs, a just transition to a low carbon, environmentally sustainable economy will be impossible to achieve.

Central banks and regulators can:

> Mainstream sustainability considerations in their monetary and prudential frameworks, addressing social and environmental factors.
> Consider how market-shaping policies and direct interventions can help promote IGF, building on existing policy examples.
> Consider gender-sensitive and intersectional lens when developing IGF policies, as financial exclusion is more prevalent among women, minorities, rural and low-income households and these vulnerable groups are also disproportionately affected by climate change.
> Define products and services that are considered green to assist in further policy development and in data collection to measure IGF progress.

Harnessing the synergies of green finance and financial inclusion through strategic collaboration and cooperation within and among governments and stakeholders can lead to the creation of more resilient and sustainable low carbon economies.

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