



Finance for Climate Resilience in the Dawn of the Paris Era

By Gwynne Taraska and Shiva Polefka January 12, 2016

In December 2015, world leaders convened in Paris to adopt a historic agreement to limit carbon pollution and adapt to the effects of climate change.¹ The promise of the agreement lies in the fact that it establishes a framework to drive progress, requiring successive national goals to reduce greenhouse gas emissions and prescribing ongoing national submissions on climate resilience.² It defines a new era of multilateral climate action.

Successive national goals, however, are insufficient for the success of the agreement, even if they are increasingly ambitious. Success requires implementation, and implementation requires investment. A fundamental shift in finance flows will be necessary to achieve climate resilience and carbon neutrality on a global scale.

Finance for adaptation to climate change is a particular concern, as it historically has trailed finance for emissions reductions by a large margin. Whereas the private sector provides the majority of global renewable energy investment, there is comparatively limited evidence of private investment in resilience efforts, which partly explains the imbalance.³

In Paris, nations showed an unprecedented recognition of the adaptation challenge. Despite their sometimes marked differences, countries coalesced around a common set of values—that adaptation and adaptation finance should be elevated; that the needs of the most vulnerable regions and populations should be prioritized; and that nonstate actors should be engaged to the greatest extent possible in the global climate effort.

These values are reflected not only in the agreement itself, but also in a wave of commitments from both governments and the private sector. There are therefore grounds for guarded optimism that the Paris era could come to represent a collective pivot toward more adequate levels of resilience finance for the developing countries that are most vulnerable to the effects of climate change.

This brief examines the gap in adaptation finance that must be bridged in order to fulfill the values of the Paris agreement, with a focus on regions such as Southeast Asia that are at particular risk from the effects of climate change. It also discusses new adaptation finance commitments from governments and the private sector; the landscape of existing adaptation finance channels and initiatives onto which these commitments build; and the undiminished role of developed countries—such as the United States, Japan, EU countries, and others—to facilitate an increase in adaptation finance as the Paris era begins.

The adaptation finance gap

The Paris climate summit focused the world's attention on the increasingly severe effects of climate change, which threaten not only the global economy, but also human lives and livelihoods. By 2030, climate change has the potential to drive more than 100 million people into extreme poverty.⁴

The effects of climate change also threaten nature, which is an often overlooked aspect of the climate challenge. Climate change will degrade ecosystems and reduce biodiversity, especially in places where other anthropogenic stressors—such as overfishing, deforestation, and pollution—are already reducing environmental health.⁵ This is particularly problematic given that natural capital, such as forests and coastal ecosystems, provides essential services for resilience, including buffering against storm impacts, purifying and sustaining water supplies, controlling erosion, and sustaining livelihoods for the poorest communities and for many more during economic downturns. In the Philippines, for example—which has cut down more than 70 percent of its original coastal mangrove forests—the few coastal communities that are still protected by mangroves suffered dramatically fewer casualties and property losses than neighboring towns during Typhoon Haiyan in 2013.⁶ More broadly, a regression analysis of 34 hurricanes along the U.S. Gulf Coast found that the presence of healthy coastal wetlands corresponded to the avoidance of an average of \$33,000 in 2004 dollars in coastal property losses per hectare per storm.⁷

In 2010, the World Bank estimated that it will cost developing countries \$70 billion to \$100 billion per year to adapt to a temperature increase of 2 degrees Celsius by 2050.⁸ A more recent analysis from the U.N. Environment Programme found that the cost could reach \$250 billion to \$500 billion per year by 2050 and could double if temperatures increase 4 degrees Celsius.⁹

For comparison, international public finance for adaptation was estimated to be \$25 billion in 2014.¹⁰ When it comes to total private finance for adaptation, there is a lack of data.¹¹ Tracking it is problematic given the difficulty of determining which private investments have improved climate resilience—and the difficulty of disentangling

which investments, or portions of investments, should count as adaptation as opposed to development finance.¹² Incidentally, an even more daunting undertaking would be to determine which private adaptation investments were leveraged by public investments and which should count toward the pledge that developed countries made in Copenhagen in 2009 to increase climate finance for developing countries to \$100 billion yearly by 2020.¹³

By all accounts, however, there is a staggering shortfall in funding for adaptation and a historical dearth of focus on resilience finance compared to finance for the mitigation of greenhouse gas emissions. Of the total climate finance flows tracked by the Climate Policy Initiative, 93 percent went toward mitigation in 2014.¹⁴ A recent analysis from the Organisation for Economic Co-operation and Development, or OECD, estimates that adaptation-specific finance made up only 16 percent of public and leveraged private climate investment in 2014. The OECD attributes the imbalance to the fact that mitigation accounted for the vast majority—90 percent—of mobilized private funds.¹⁵

Spotlight on Southeast Asia

Southeast Asia, with its low-lying archipelagos and immense coastal urban centers, is one of the global epicenters of climate vulnerability and disaster risk. The region is already facing significant climate change impacts—including devastating typhoons, such as Haiyan and Hagupit, which are intensified by unusually high sea-surface temperatures—and is expected to experience a cascade of severe impacts in the coming decades. Greenhouse gases already deposited in the atmosphere from human activities, such as burning fossil fuels and deforestation, will cause further sea-level rise, flooding, drought, ocean acidification, and worsened tropical cyclones. In turn, the region will face increased food and water insecurity; increased prevalence of infectious disease, such as malaria and dengue; damage to agricultural production; destructive wildfires; energy insecurity; and degradation of its bases of living natural resources.

Adaptation focused on coastal areas and the agriculture sector is expected to total approximately \$5 billion yearly by 2020 for Indonesia, the Philippines, Thailand, and Vietnam.¹⁶ Recent research from the U.S. Agency for International Development, or USAID, estimated that by 2050, the effects of climate change could inflict \$18 billion worth of infrastructure damage and reduce economic productivity by \$16 billion annually in the lower Mekong region, which includes Cambodia, Laos, Thailand, and Vietnam.¹⁷

In other words, vulnerability to climate change is a major threat to development in the region, even as parts of the region continue to struggle with widespread poverty.

New developments in resilience finance

A wave of new finance commitments has suggested that the Paris era could conceivably mark a pivot toward more adequate adaptation investment, prioritized toward the most vulnerable and with an engaged private sector.

In the run-up to the adoption of the Paris agreement, for example, many countries and multilateral development banks—including Japan, France, Germany, the Asian Development Bank, the African Development Bank, and the World Bank—pledged to significantly increase public climate finance for developing countries by 2020.¹⁸ In the Paris agreement itself, developed countries reaffirmed their Copenhagen target for climate finance, and all countries agreed to set an increased goal by 2025, a task that is likely to dominate the discussion in coming climate summits.¹⁹

In addition, more than 30 countries have now collectively pledged more than \$10 billion to the Green Climate Fund, which aims to promote low-carbon and climate-resilient development, with the United States and Japan making the largest commitments.²⁰ The fund intends to support adaptation and mitigation evenly and will direct at least half of its adaptation support to countries that are particularly vulnerable to climate change.²¹ It has also established a Private Sector Facility, which will work to leverage private investment at scale.²² The fund approved its first tranche of projects in November 2015, including both mitigation and adaptation projects.²³

Many public commitments in recent months have been geared toward resilience. During the Paris summit, for example, collective pledges to the Least Developed Countries Fund totaled \$248 million, and collective pledges to the Adaptation Fund totaled nearly \$75 million.²⁴ The United States announced that it will double its grant-based adaptation finance by 2020 and pledged \$30 million toward climate risk insurance initiatives.²⁵ That commitment followed a pledge during the June G-7 summit to increase the number of people in vulnerable regions with access to climate insurance coverage by up to 400 million by 2020.²⁶

It is also notable that the private sector has shown increased activity in the international climate effort.²⁷ The Sompo Japan Nipponkoa Group, one of the world's largest property and casualty insurers, aims to provide weather index insurance to 30,000 small-scale farmers in Southeast Asia, including Thailand and Myanmar, by 2025.²⁸ Insurer Swiss Re aims to offer \$10 billion in climate risk insurance by 2020 and has offered \$1.1 billion in insurance coverage to developing countries in the past year.²⁹ Barclays has set and met a target of investing 1 billion pounds in the green bond market and has pledged another 1 billion pounds.³⁰ Deutsche Bank has set a target of 1 billion euros.³¹

Existing landscape of public and private finance for climate resilience

The new pledges and initiatives announced in the run-up to the Paris summit add to a mosaic of existing adaptation finance projects and channels. This section focuses on the landscape of multilateral adaptation funds and the nascent private-sector engagement in international climate adaptation, which indicates how private investment might be expanded in the future.

Although the Green Climate Fund has dominated the recent discourse on multilateral climate cooperation, there are many funds geared toward adaptation that are potential channels for the \$100 billion yearly in climate finance that developed countries aim to mobilize by the year 2020.³² For example, the Global Environment Facility, or GEF, administers both the Least Developed Countries Fund, which has supported the development and implementation of National Adaptation Programmes of Action for the least-developed countries, and the Special Climate Change Fund, which supports adaptation projects in developing countries that are not members of the least-developed countries bloc.³³ The Pilot Program for Climate Resilience, to take another example, is an initiative of the Climate Investment Funds that supports adaptation in developing countries and aims to scale up private-sector engagement.³⁴ There are several other multilateral adaptation channels, including the Adaptation Fund, established through the Kyoto Protocol, and the Adaptation for Smallholder Agriculture Programme, an initiative of the International Fund for Agricultural Development.³⁵

Anecdotal evidence of private-sector interest in international resilience finance has emerged over recent years. In the agricultural sector, for example, a project by the Pilot Program for Climate Resilience to train farmers in Nepal to avoid climate-induced yield reductions has attracted the investment of agribusiness.³⁶ The Private Sector Initiative database of the U.N. Framework Convention on Climate Change, which currently lists more than 100 case studies of private investment in adaptation, notes several other examples of companies, such as Unilever Tea and Nestlé, investing in farmer training.³⁷

In the water sector, corporations are also investing to protect themselves against the threat of scarcity. The Coca-Cola Company, with bottling plants in South and Southeast Asia, has invested in projects to guard against drought in Thailand and Vietnam, budgeting \$500,000 yearly for watershed conservation in those countries.³⁸

Insurance initiatives have recently proliferated to address climate-induced loss and damage. As a result, the percentage of losses in developing countries that are covered by insurance has increased to more than 10 percent.³⁹ The Sompo Japan Nipponkoa Group, for example, has developed weather index insurance for rice farmers in Thailand that covered 4,300 rice farmers in 2014.⁴⁰ Another initiative is the partnership between Japan, the World Bank, and insurers to provide catastrophe risk insurance to vulnerable Pacific island countries.⁴¹

Also notable is the recent rise of green bonds. In 2014, the green bond market tripled to \$36 billion and was expected to reach \$50 billion to \$70 billion in 2015. The proceeds have funded both mitigation and adaptation activities, including the agriculture and water sectors. Green bonds are now issued by both development banks and the private sector.⁴²

The promise and limits of private resilience finance and the role of governments

When it comes to the role of private finance in climate resilience, there are two pieces of conventional wisdom that are at odds. On the one hand, it is said that the private sector is poorly suited to drive resilience, given that clean energy projects, rather than adaptation initiatives, are likely to show a clear return on investment.⁴³ At the same time, it is asserted that the private sector is naturally suited to drive resilience as it seeks to protect itself against the risks of climate change and capitalize on the opportunities presented by the new focus on climate resilience displayed by the public sector.⁴⁴

The reality is more complicated than either of these claims. Private-sector engagement in international climate resilience could certainly be scaled up and is necessary to close the vast gap in resilience finance. It is insufficient, however, to close the gap on its own.⁴⁵

Private finance is not equally drawn to all sectors or regions. Nations struggling with basic development needs—which are the nations to which the Paris agreement seeks to target resilience funding—are unlikely to have the capacity to attract and absorb private-sector finance.⁴⁶ The Pilot Program for Climate Resilience, which prioritizes funding toward the most vulnerable and least-developed countries, is receiving only 1 percent of its co-financing from the private sector, which the program attributes to the challenging business environments in those countries.⁴⁷

In addition, the World Bank points out that it can take 10 years to 15 years for new insurance markets to become commercially viable, underscoring the importance of support from governments and multilateral efforts, even as innovative and affordable insurance becomes a key measure for decreasing climate vulnerability and a growth opportunity for insurance firms.⁴⁸

Industrial countries with financial capacity—such as the United States, Japan, and EU countries, as well as major economies that are expanding international infrastructure investments, such as China—therefore have a critical role and ongoing responsibility with respect to increasing, strengthening, and coordinating their support for resilience in the world's climate-vulnerable regions.

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