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# A Green and Resilient Recovery for Latin America



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# Foreword

**T**he COVID-19 crisis is a warning to us all: we must heal nature in order to heal ourselves. As governments around the world prepare massive stimulus packages to repair the damage of COVID-19 shutdowns, they should be harnessing this opportunity to build stronger, more resilient societies. To carry on as before would be a colossal and costly mistake. We are at a critical juncture. We can continue operating within a fundamental untenable and unequal system or we can seize this moment to transform it.

We can no longer ignore the fact that when disasters strike, it's the most vulnerable who are worst affected, time after time. Just as the world disregarded COVID-19 when it seemed a distant problem, so our climate apartheid, in which the wealthy pay to escape from the worst impacts of climate change, while the poor are left to suffer, will only become bleaker if we continue to turn a blind eye to the effects of climate change on our vulnerable communities.

It is important to understand the links between climate change, health, and inequality. Climate change is intensifying and increasing the number of extreme weather events. Heatwaves can and those most at risk are low income families who cannot afford air conditioning. These are the same groups of people who endure disproportionate levels of pollution from power plants and industrial facilities, and are least likely to get adequate medical care when they fall ill with respiratory diseases.

As the world deals with multiple waves of the pandemic, Latin America has shown that inequality is its achilles heel in mounting an effective response. While the region has made significant progress in overcoming poverty and reducing inequality over the last few decades, it remains one of the most unequal regions in the world. This means not only are the poorest and most vulnerable in society are the most exposed to crises such as climate change, they're also the least able to escape them. Climate related events, just as COVID-19, are expanding the inequality gap, and they continue to grow in frequency and intensity. Latin America will likely come out of this crisis poorer and with higher income inequality, and thus more vulnerable to ensuing climatic events.

In 1998, Hurricane Mitch killed 9000 people in Central America. In Honduras the poorest quintile lost 18% of their belongings, while the richest quintile only lost 3%. In 2020 two hurricanes hit, causing an estimated 20% loss of GDP. The UN concluded in a recent report that our climate emergency is likely to undermine not only basic rights to life, water, food and housing for hundreds of millions of people, but also democracy and the rule of law.

Returning to "business as usual" is not an option. Latin America must focus its efforts on a people-centred recovery that focuses on well-being, improves inclusiveness and reduces inequality. Infrastructure investment is likely to be a key



component of recovery measures in the region – not only because of its job creation potential – but because increasing climate resilience reduces direct economic damages from climate related disasters and minimises the indirect costs created by the cascading impacts caused by the disruption of both critical services and economic activities. Building on its existing natural capital, the region should also integrate more ambitious policies to halt and reverse biodiversity loss and restore ecosystems through the increased adoption of nature-based solutions. Such programs, if designed well, can be financed through private capital resulting from increased climate related disclosures in the financial sector.

Such transformative changes do not mean starting from a blank slate. The UN Sustainable Development Goals provide an overarching guide for ensuring that social development and well-being is fully integrated with environmental objectives. Five years on from the Paris Agreement, we must acknowledge that increasing adaptation is not a sign of defeat, it is a defense against what is already happening. The right investments can deliver a “triple dividend” by averting future losses, spurring economic gains through innovation, and delivering social and environmental benefits to everyone, but particularly to those currently affected and most at risk. Focusing on climate adaptation is not giving up on the fight against climate change. It is a renewed commitment in the fight against inequality. And in Latin America, that means adaptation is a renewed commitment to overcome poverty. COVID-19 has pushed 4.8 million people into extreme poverty in the region. Climate change will bring five million more by the end of the decade. A resilient recovery will help tackle both the social, health, economic and climate crisis, making the region more prosperous, more inclusive and more equitable.



A handwritten signature in black ink that reads "Ki Moon Ban".

Ban Ki-moon  
8th Secretary-General of the United Nations  
Chair of the Board  
Global Center on Adaptation



A handwritten signature in black ink that reads "Patrick Verkooijen".

Prof. Dr. Patrick V. Verkooijen  
Chief Executive Officer  
Global Center on Adaptation

# 1

## A Compounded Crisis

Latin America has made great economic progress in recent decades. It is a continent with open economies that are able to innovate rapidly and to embrace new ideas and opportunities with relative ease. For example, it has been home to some of the most impressive growth of renewable energy, electromobility in public transportation, and biodiversity conservation efforts anywhere in the world. Yet its greatest impediment to progress has been inequality. Despite making substantial progress in the last decade in poverty reduction, and despite the fact that per capita income has increased above OECD averages<sup>1-2</sup>, Latin America still accounts for 14 of the 30 worst GINI coefficients globally<sup>3</sup>. On average the Gini coefficient in the region is 0.46 compared to 0.32 in developed countries (and much higher than countries with similar levels of development, which average 0.36). This was not always so, as this inequality began to become pervasive after the First World

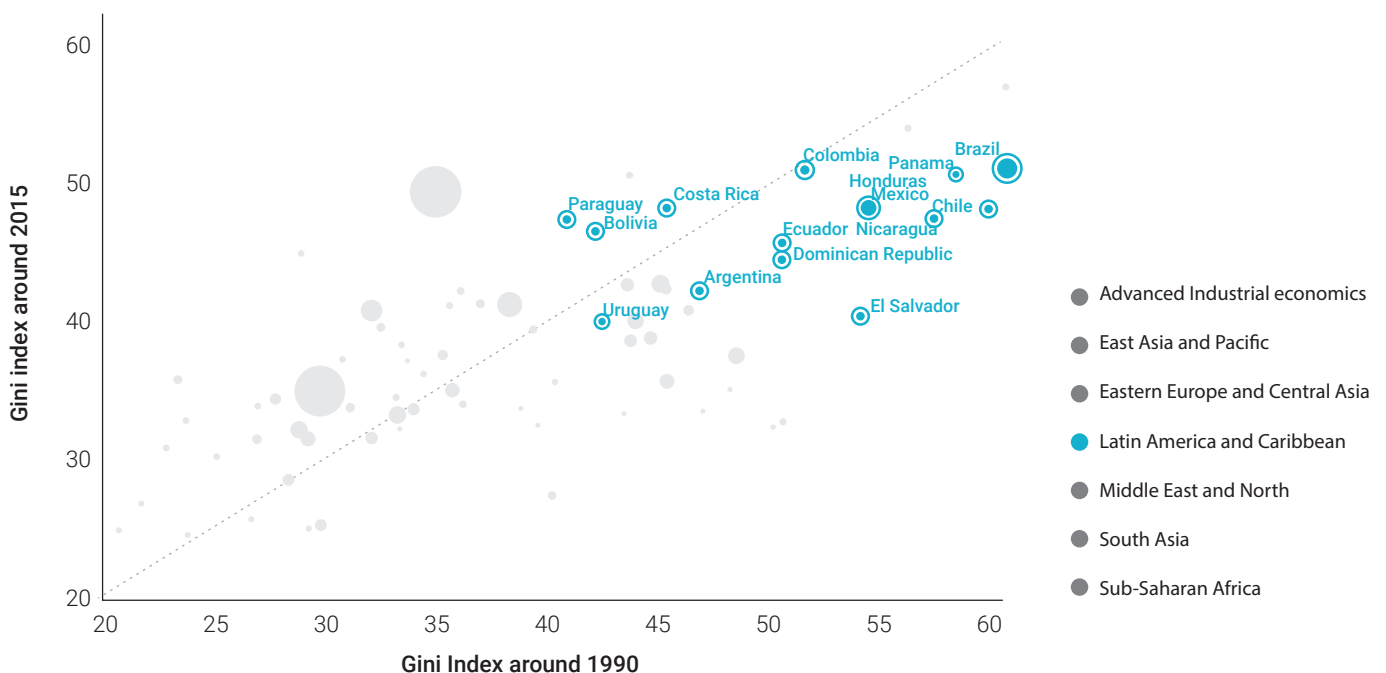
War<sup>4</sup>. But by 2014 the richest 10% in Latin America held 71% of the region's wealth, making it the most unequal continent in the world<sup>5</sup>.

This inequality makes the response to the COVID-19 pandemic more difficult. It is no accident that in a country comparison, six out of the top 20 rates of cases per capita and nine out of the top 20 rates of deaths per capita due to COVID-19 are in Latin America. (Further, this number is possibly underestimated due to the low levels of testing in the region<sup>6</sup>.) Lack of social protection, high levels of informal employment, and the lack of adequate sanitation all contribute to the spread of the disease, hitting lower-income communities the hardest<sup>7</sup>. By the time the pandemic is controlled, the region will have lost many of the economic and human-development gains of recent years. Economies in Latin America will contract between 6 to 14% in 2020<sup>8</sup>, and 4.8 million people will have slipped into

**FIGURE 1 | CHANGES IN GINI COEFFICIENT, LATIN AMERICAN COUNTRIES (1990 vs 2015)**

### Inequality in 1990 vs 2015

A higher Gini index represents higher inequality



Source:

Our World In Data <https://ourworldindata.org/grapher/gini-index-around-2015-1990-2015-countries-vs-gini-index-around-1990-1990-2015-countries>

extreme poverty by the end of the year. We also know that climate change could send an additional 5 million people into poverty by 2030<sup>9</sup>. Income inequality and the consequent vulnerabilities for the poor will therefore continue to rise, and climate-related disasters will only make things worse.

This sudden public-health crisis has also arrived at a time in which several countries in Latin America are reeling from social unrest. Chile, Colombia, and Ecuador have recently experienced violent protests, despite decades of growth and poverty reduction. While the region's middle class has grown in the last two decades (from 22 to 35%, by the World Bank's parameters<sup>10</sup>), the resistance to increased costs of living, in areas such as fuel or public transportation<sup>11</sup>, has showed how vulnerable and sensitive an emerging middle class is to falling back into poverty<sup>12</sup>. Educational opportunities have expanded, with many of those emerging from poverty given the opportunity to enter higher education. But this has also come with rising levels of debt, and with unfulfilled expectations in the realm of livelihood and employment. The pandemic has interrupted this protest cycle, but it may return with renewed force, this time because the looming economic crisis that the pandemic has created.

The vulnerability of the middle class in Latin America can be explained by the lack of social safety nets—a defining feature of the region. Workers in informal jobs, who make up between 30 to 70% of the workforce even in major Latin American economies like Chile, Costa Rica, Brazil, Argentina, Mexico, Colombia, and Perú<sup>13</sup>, often slip through the cracks of social protection. Social expenditure in the region averages 11.3% of GDP, ranging from 6% for Guatemala to 17% for Brazil. These values are far lower than countries in the OECD, where social expenditure can be as high as 31% of GDP, as in the case of France. The major components of this expenditure are education and health, with only some countries contributing to social protection (in the form of cash transfers) in their total social expenditure, according to the United Nations Commission for Latin America and the Caribbean (ECLAC, 2019). Precarious social protection systems and informal labor markets are the major underlying causes of the Latin American region's weak response to the pandemic. Increasing social protection and addressing inequality will contribute both to a better

response to the pandemic and to the resolution of long-term structural problems in the economies of Latin America<sup>14</sup>. After all, current inequalities and the social vulnerability of the middle class will certainly be amplified due to climate change. Those who have contributed least to the problem of climate change will be hit the hardest, with an estimated 2.6 million people<sup>15</sup> being forced into poverty and 2.5 million jobs lost by 2030 due to climate change (and many more towards mid-century).<sup>16</sup> Indigenous communities, which constitute about 6.5% of the region's population, are most at risk due to their higher levels of poverty and marginalization<sup>17</sup>.

*The asymmetrical distribution of wealth through the global economy reinforces the profoundly unfair reality that those who have contributed the least to the problem at issue tend to feel its greatest effects. Climate change exacerbates social vulnerabilities based on gender, ability, poverty, age, place of birth, indigeneity.*

**Michelle Bachelet, United Nations High Commissioner for Human Rights.**

Unfortunately, COVID-19 recovery packages submitted by governments in the region are not addressing the structural risks that lie ahead. They are smaller than the global average of 3.7% of GDP allocated for these purposes, reaching only 2.4%<sup>18</sup> on average. To be sure, Peru, Brazil, Paraguay, and Chile have spent between 5–9% of GDP in the recovery, but lower-income countries (Honduras, El Salvador, Bolivia, Dominican Republic) have spent only between 0.4 to 2%. Most countries, with a few exceptions like Mexico or Chile, do not have specific measures to promote climate-resilient infrastructure, and only Chile has committed to dedicating a portion of infrastructure spending to climate-related components. Infrastructure spending can generate between 130 to 200 new jobs per million dollars spent. Mexico recently announced a 14-billion-dollar infrastructure plan for the recovery, focusing on logistics and building roads and airports. Chile has announced a 4.5 billion-dollar infrastructure recovery package, of which 30% will be dedicated to adaptation and mitiga-

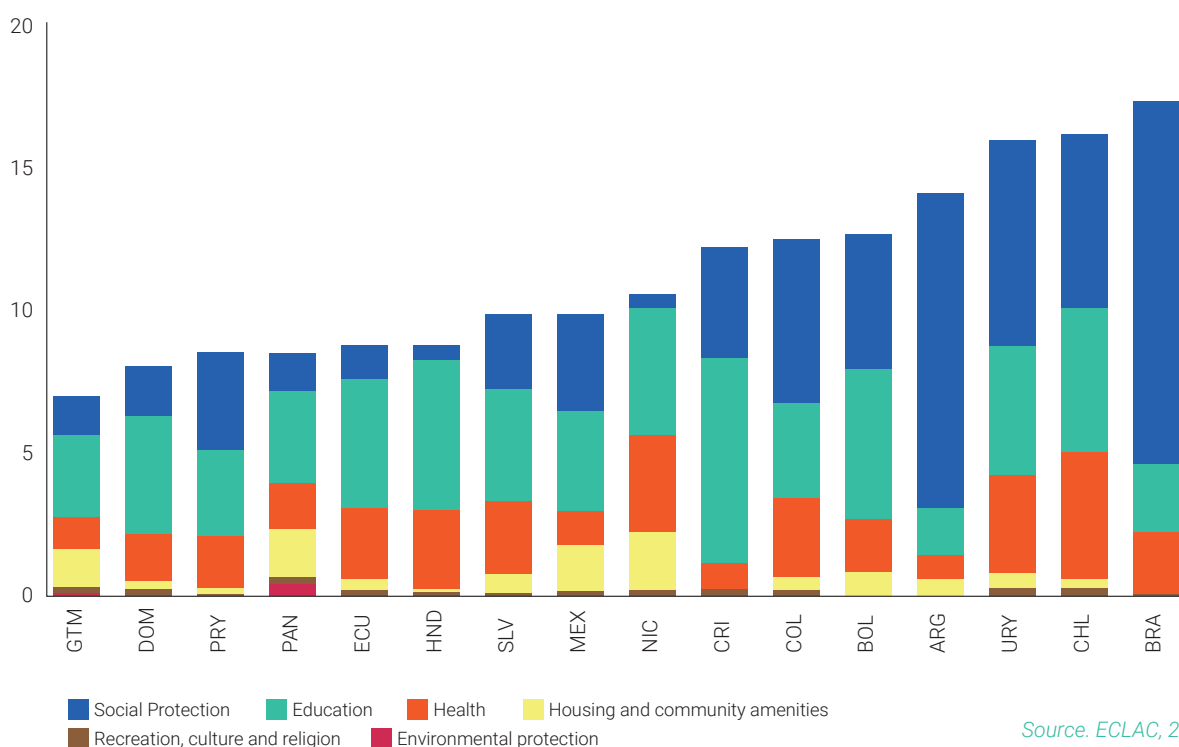
tion projects prioritized based on the recent net zero emission NDC (Nationally Determined Contributions).<sup>19</sup> These include investment in water infrastructure, irrigation, rural water sanitation, desalination plants, and renewable energy.<sup>20</sup> If they are going to build back better, governments need to design stimulus packages that systematically address both infrastructure gaps and climate resilience, with a focus on job creation and social and gender inclusivity.

This will be a decisive decade, which will determine whether we can prevent climate change and make our communities safer. The decisions we take today will shape the climate scenario for decades. Latin America has a historic opportunity to recover from this economic crisis by addressing social inequities through the policy framework of a green and resilient economic recovery. A more resilient recovery for this pandemic requires higher social protection, which will provide climate resilience and disaster resilience too. It requires increased investments to overcome poverty, address the sustainable development goals, and create resilience to protect hard-earned gains. It must be able to mobilize resources and create jobs with shovel-ready projects. Considering how vulnerable the region is to climate change, recovery packages must contribute

to building more resilient infrastructure, and this infrastructure should contribute to systemic resilience. Recovery packages must be inclusive, with a focus on small and medium enterprises, and include opportunities for lower-skilled labor. They must acknowledge that women have borne the brunt of the pandemic, both in terms of job losses<sup>21</sup> and of disproportionately bearing childcare duties while working from home<sup>22</sup>, and be designed to address the gender gap that is widening due to the pandemic. These efforts must also focus on indigenous communities, which have been hit hardest by the pandemic due to their high levels of social marginalization<sup>23</sup>, and which will endure even greater hardship due to the climate crisis<sup>24</sup>.

The evidence from the pandemic is that the poorest in Latin America have fared the worst. Income inequality has limited the effectiveness of the region's response, and the pandemic has in turn contributed to increasing the income gap<sup>25</sup>. If we want to be better prepared for future pandemics and climate change, we must design a blueprint for a recovery that addresses longstanding social inequality and resilience gaps, thereby making the region stronger, better prepared, and more prosperous for all its citizens and peoples.

**FIGURE 2 | SOCIAL EXPENDITURES FOR LATIN AMERICAN COUNTRIES AS A PERCENTAGE OF GDP (ECLAC, 2020)**



Source: ECLAC, 2020.



# 2

## A Vulnerable Region

Latin America is particularly vulnerable to climate change because of the extreme weather events it experiences—and also because of how climate change disproportionately affects lower-income communities. For example, when Hurricane Mitch hit Honduras in 1998, it destroyed 18% of assets in the poorest quintile of the population, while only impacting 3% of assets for the highest quintile.<sup>26</sup> Some of this vulnerability has been mitigated by higher developmental outcomes in comparison to South Asia and Africa, as reflected in the ND-GAIN rating system, which summarizes a country's vulnerability to climate change<sup>27</sup>. Yet Latin America must prepare for substantial challenges, as these gains can also be reversed by intense climate-related disasters. The region is highly susceptible to drought, floods and storms. ECLAC<sup>28</sup> estimates that droughts contribute to a regional economic loss

equivalent to 1% of GDP, mostly due to impacts on the agricultural and manufacturing sectors. The Global Facility for Disaster Reduction and Recovery (GFDRR)<sup>29</sup> estimates that assets at risk due to natural disasters in Latin America represent 1% of GDP. When the activities supported by these assets are included, the impact is much larger (2.03% of GDP).

Table 1 shows that some countries in Central America, South America, and the Caribbean currently have over 3% of their GDP at risk from vulnerable infrastructure, with Honduras and Peru facing the highest risk to wellbeing due to their especially high vulnerability to natural disasters. A comparison to the world average, in the last row of the table, gives a clear picture of why countries in the LAC region are so vulnerable to the fallouts of climate change.





These impacts have a cumulative effect on economic growth, while the costs of building back contribute to fiscal imbalance. The Global Climate Risk Index has estimated the cumulative climate-related damage in the last two decades to be \$11 billion per year<sup>30</sup>. The damage to energy and transport-related infrastructure averaged \$2 billion a year<sup>31</sup>. This has contributed to an additional annual loss of \$95 billion due to infrastructure disruption both to households and businesses. Nine of the top 20 countries to suffer climate-related losses as a percentage of GDP are in Latin America. On average, then, 1.7% of annual GDP has been lost in Latin American countries due to climate-related disasters these last two decades.

In the Caribbean this figure is larger, reaching almost 3% of GDP. It is no coincidence that mean external debt-to-GDP ratios in the Caribbean are 71%. Countries such as Grenada, Bahamas, and the Dominican Republic

have endured hurricanes in recent years that generate insurance-declared losses that can exceed their entire annual GDP<sup>32</sup>. The countries of the Caribbean are under the threat of more frequent, intense weather disruptions that far exceed those faced by other small island states and continental countries. Their middle-income status also hinders their capability to access development assistance and prevents building back better in preparation for the next natural disaster.

These estimates are usually centered on the economic impacts of flooding on infrastructure and tend to underestimate the other costs of a changing climate, particularly drought and water scarcity. Countrywide analysis also tends to overlook regional extremes within countries, such as those charted by WRI's Aqueduct Water Risk Atlas application,<sup>33</sup> which shows severe stress in particular parts of many countries in Latin America. For instance, Mexico and Chile are among

**TABLE 1 | RISKS TO ASSETS AND TO WELL-BEING AS A PERCENTAGE OF GDP FOR SELECTED LATIN AMERICAN COUNTRIES**  
(FROM [HTTPS://UNBREAKABLE.GFDRR.ORG/COUNTRYTOOL](https://unbreakable.gfdr.org/countrytool))

COUNTRY	RISKS TO ASSETS (%)	RISK TO WELL-BEING (%)
Argentina	0.44	0.78
Bolivia	0.50	1.01
Brazil	0.19	0.30
Chile	0.97	1.79
Colombia	1.37	3.04
Dominican Republic	1.18	1.85
Ecuador	1.94	2.93
El Salvador	2.70	4.15
Guatemala	0.66	2.69
Honduras	2.79	6.00
Jamaica	1.46	2.56
Mexico	0.14	0.25
Panama	0.22	0.44
Paraguay	0.19	0.38
Peru	2.10	5.24
Uruguay	0.06	0.10
Venezuela	0.62	1.00
Latin America Average	1.03	2.03
World Average	0.63	1.07

the most water-stressed at a national level, but certain regions in Chile, Mexico, Peru, Argentina, Guatemala, El Salvador, and Venezuela show extreme water stress, which will become even higher in lower-precipitation climate scenarios. Andean glaciers, which are significant sources of water, have lost extensive mass in the last two decades.<sup>34 35</sup> They are predicted to continue to recede sharply by the end of the century, reaching a 98% reduction of volume<sup>36</sup>, which, when combined with lower precipitation rates, will contribute to severe water scarcity in the future. During drought periods meltwater from these glaciers contributes to most of the water in rivers, reaching 70% of flow in central Argentina<sup>37</sup> and Chile<sup>38</sup>. Climate change studies and projections indicate that runoff will be reduced in Central America, the southern Amazon basin, and countries in the southern Andes, while streamflow will increase in La Plata and the western Amazon basin in the wet season<sup>39 40</sup>. These shifts in the geographical distribution of water associated with climate change will threaten terrestrial biodiversity, as already manifest over the last decade with forest fires and environmental degrada-

tion in the Amazon forest, other ecosystems such as the Yungas, and Mediterranean and temperate forests in Brazil, Argentina, and Chile. Research shows that this can in turn have severe economic effects on cities<sup>41</sup>, alongside with projected impacts on agricultural output in rural areas. Currently, Latin America is a net exporting food-producing region, particularly countries that are high wheat, soy, and maize producers such as Argentina, Mexico or Brazil<sup>42</sup>.

The reality is that the impacts of water scarcity are underestimated in the region. The impact that climate change can have on food security and costs will be profound. Only adaptation policies that promote climate-smart agriculture can mitigate these impacts<sup>43</sup>. Considering that in the last 40 years, agriculture production has contributed to roughly 10% of GDP and 30–40% of jobs in the region<sup>44</sup>, a sustainable and resilient recovery should have a clear focus on climate-proofing food production to maintain and improve productivity, at lower emission rates, and with increased resilience.



## THE ECONOMIC CONSEQUENCES OF CLIMATE CHANGE FOR LATIN AMERICA

If global warming is not kept under 1.5 °C, there will be severe consequences for Latin America—and even more so if warming surpasses 2 °C. While warming might be buffered by cold ocean currents (such as in the case of Chile, Peru, or Ecuador), droughts will be longer and more intense. Projections show that drought duration will extend substantially under warmer conditions. Water scarcity will increase, as will the transmission of infectious diseases such as malaria or dengue<sup>45 46</sup>. In the case of the Caribbean, the frequency and intensity of hurricanes will increase, as will the percentage of time under moderate to severe drought—increasing by as much as 35% if warming exceeds 2.5C.

The World Bank estimates that 2.6% of the region’s population, totaling some 17 million people, will be internally displaced due to climate change, becoming climate migrants<sup>49</sup>. The OECD estimates that unmitigated climate change will cause a loss of 1.6% of Latin America’s GDP by 2050. These developments are also associated with lower tourism demand, health impacts, and reduced agricultural output, among many others. IDB (2020) estimates that the region will suffer climate-related damage worth \$100 billion annually by 2050. Kompas et al (2018)<sup>50</sup> offer an even bleaker picture. If warming exceeds 3°C, Caribbean countries will lose an average of over 10% of GDP in the long run, while GDP loss in South American countries will range from 1.6 to 10% and that of Central American countries will exceed 15% by 2100. Climate change is clearly the single greatest threat to development gains in Latin America and will hinder potential growth and wellbeing for the region as a whole.

**TABLE 2 | SUMMARY OF CLIMATE EFFECTS IN NORTH, CENTRAL, AND SOUTH AMERICA UNDER 1.5, 2, AND 3 °C WARMING<sup>47 48</sup>**

EFFECT	1.5 °C	2°C	+3°C
<b>HIGHEST ANNUAL MAXIMUM TEMPERATURE</b>			
Amazonia	+1.2	2	
Southern South America	1	1.6	+2.4
Central America	1	1.5	
<b>WARM SPELL DURATION (DAYS)</b>			
Amazonia	28	71	
Central America	22	45	
<b>DROUGHT (MONTHS)</b>			
Central America	+5	+8	+19
South America	+1	+3	+8
North America	+1	+1	+3
<b>POPULATION EXPOSED TO WATER SCARCITY (IN MILLIONS)</b>			
Amazon	+6	+6	
Central America	+6	+10	
<b>ANNUAL CASES OF DENGUE FEVER IN LATIN AMERICA BY 2050 (MILLION)</b>	<b>+6m</b>	<b>+6.7</b>	<b>+7.5</b>

# 3

## Adaptation Policies in Latin America

While Latin America has been hit hard by climate-related events and is home to some of the most climate-vulnerable countries in the world, some substantial progress has been made in planning for a changing climate.

Figure 3 shows a summary of the different adaptation measures in NDCs submitted to COP21, which shows that all countries in the region have made adaptation a national priority in policy. The new submissions consider expanded and more specific measures, along with reporting of national and sectoral adaptation programs. The ND-GAIN index on adaptation shows that although some of the most climate-vulnerable countries in the world are in Latin America, higher-income countries in Latin America are better prepared for effective climate action, both through actual adaptation planning and

also better social protection and governance. Lower-income countries, or those with poor governance, have not bridged the gap between exposure and preparedness and remain vulnerable. Readiness, one of the parameters in Figure 4, combines economic, governance, and social factors, and vulnerability considers exposure to climate risks, the sensitivity of sectors to these risks, and the adaptive capacity of countries. Figure 4 shows that while some countries have high risk and vulnerability, they are able to overcome this with good governance. Such is the case of Colombia, Costa Rica, Uruguay, and Brazil. Other countries, such as Venezuela, Haiti, Guatemala, Honduras, or Nicaragua have lower exposure, but lower social, economic, and governance factors contribute to lower readiness and ultimately a worse ND-Gain index.

**FIGURE 3 | SUMMARY OF ADAPTATION MEASURES IN FIRST CYCLE OF NDCs**

COUNTRIES	WATER	AGRICULTURE	HEALTH	BIODIVERSITY	COASTAL ZONES	LAND USE	FORESTS	DISASTER MANAGEMENT	INFRASTRUCTURE	HOUSING
Antigua y Barbuda										
Argentina										
Bolivia										
Brasil										
Chile										
Colombia										
Costa Rica										
Cuba										
Dominica										
Ecuador										
El Salvador										
Granada										
Guatemala										
Haití										
Honduras										
Mexico										
Paraguay										
Peru										
Uruguay										

Source: Derived from <https://unfccc.int/process-and-meetings/the-paris-agreement/nationally-determined-contributions-ndcs/nationally-determined-contributions-ndcs>



FIGURE 4 | SUMMARY OF ND GAIN INDEX AND RESILIENCE ATTRIBUTES

COUNTRY	ND GAIN INDEX	READINESS	VULNERABILITY	EXPOSURE
Antigua Barbuda	94	75	126	126
Argentina	69	94	40	124
Bahamas	66	78	46	126
Barbados	54	60	53	107
Belize	119	132	118	126
Bolivia	127	161	112	107
Brazil	28	105	53	156
Chile	76	31	27	52
Colombia	61	99	61	156
Costa Rica	45	68	66	111
Dominica	94	38	75	46
Dominican Republic	110	107	96	105
Ecuador	108	122	105	173
El Salvador	47	120	106	123
Grenada	111	45	68	50
Guatemala	111	130	109	132
Guyana	116	127	123	66
Haiti	173	186	155	94
Honduras	122	148	113	100
Jamaica	88	94	97	107
Mexico	76	102	55	139
Nicaragua	114	140	108	146
Panama	72	84	78	103
Paraguay	93	124	58	83
Peru	72	71	93	117
Saint Kitts and Nevis	60	53	90	90
St Lucia	63	69	68	54
Saint Vincent and the Granadines	49	51	50	73
Suriname	108	138	76	79
Trinidad and Tobago	90	109	77	66
Uruguay	55	62	57	115
Venezuela	121	185	30	82

Source: Notre Dame Gain Index <https://gain.nd.edu/our-work/country-index/>

# 4

## Investing in Resilient Infrastructure: The Key to a Sustainable Recovery

The COVID-19 crisis and climate crisis share some similarities, with the exception that the climate crisis is unfolding over a much longer time period and has graver consequences<sup>51</sup>. Governments have designed fiscal recovery packages as a response to the pandemic, and public support for a focus on climate remains high<sup>52</sup>. The enormous impact of the COVID-19 crisis on human well-being and health should reinforce the notion that we need a strong response to the climate and biodiversity crisis. Instead, it would make sense to use the investment opportunity newly available from the fiscal recovery packages for COVID-19 to speed up the pace and scale of the shift towards climate-resilient infrastructure and green jobs.

Concentrations of greenhouse gases in the atmosphere, being the result of very long-term trends, have been largely unaffected by the economic downturn. It is still very probable that we will endure temperatures far outside human experience over the next few decades. Therefore, stronger action on mitigation, resilience and adaptation will be necessary<sup>53</sup>. The world could avoid 0.3°C of global warming by the middle of the century if governments invest in a strong green recovery<sup>54</sup>.

There is a clear opportunity to invest in climate-resilient infrastructure to improve adaptation, avoiding further losses and reaping net benefits. The Global Commission on Adaptation estimates that \$1 trillion of investment is needed globally between 2020 and 2030 to make infrastructure more climate-resilient<sup>55</sup>. The benefits of such investments are estimated to be four times the cost. The World Bank estimates that investing in resilient energy, water, and transportation infrastructure would cost \$3 to 13 billion a year until 2030 for Latin America, with 3% incremental costs as compared to non-resilient infrastructure. These investments would yield a \$700 billion net benefit by 2030. Spending in re-

silient infrastructure, therefore, brings something like a 4-to-1 benefit-to-cost ratio. Delaying these investments, on the other hand, would cost \$16 billion a year in infrastructure and economic activity loss.<sup>56</sup>

Overcoming poverty in the region requires an integrated approach. One way to see this is in terms of implementing the Sustainable Development Goals. Capital investments are needed to achieve them, including in electricity, transport, water and sanitation, irrigation, and coastal protection. The scale of these investments varies by a factor of 1 to 4 (or from 2% to 8 % of GDP), depending on the ambition of the goal and the

*It would be short-sighted to go back to the economy of yesterday with its problems of growing inequality. We should look forward and take the opportunity to build a bridge to something better: a world that is fairer and more equitable; greener and more sustainable, smarter and above all more resilient.*

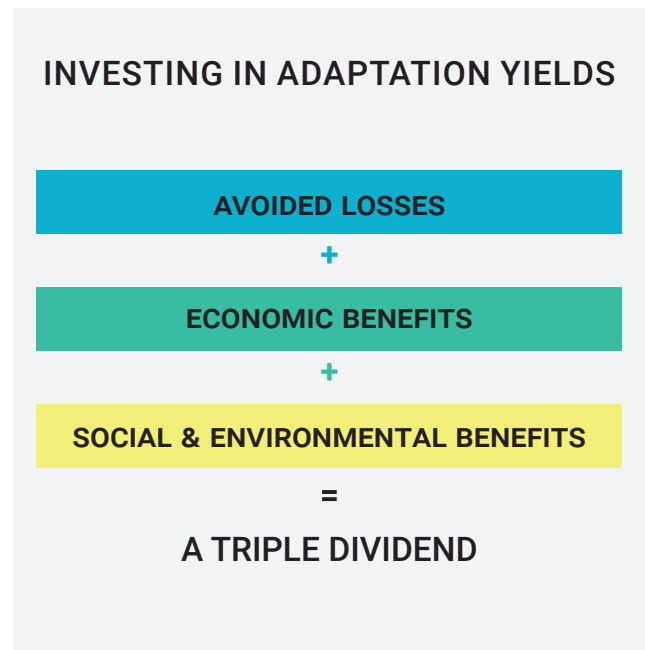
**Kristalina Georgieva,**  
Managing Director, International Monetary Fund.

technologies adopted. While global spending on new infrastructure to achieve the SDGs typically equates to 4.5% of GDP per year in developing countries (Figure 5), investment needs in the case of Latin America vary between (143-579 billion a year) to achieve selected SDGs (clean water, improved food security, flood protection, greater mobility)<sup>57</sup>.

In the wake of the COVID-19 pandemic and the enormous recovery packages needed to address its impacts, there are several governments, multilateral institutions, and think tanks calling for the need to push for a resilient recovery, addressing the climate

change crisis together with economic and social and environmental impacts. A recent ILO-IDB report<sup>58</sup> shows that with properly designed measures, there is the potential to create 15 million net jobs in Latin America in sectors such as sustainable agriculture, forestry, clean energy, manufacturing, while also ensuring the jobs are good quality and that those who lose out in the transition are protected and supported. Recovery plans can stop the climate emergency while also boosting growth, tackling inequality, and making progress towards the SDGs.

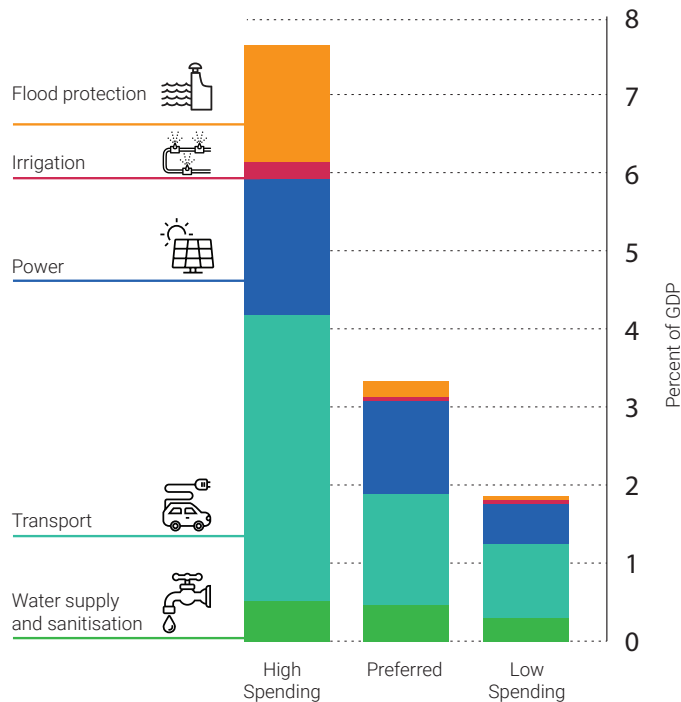
The key message is that investing in climate-resilient infrastructure is both good business and good development policy. It delivers the so-called “triple dividend” by avoiding losses, reducing risks to existing infrastructure, and safeguarding non-market benefits.



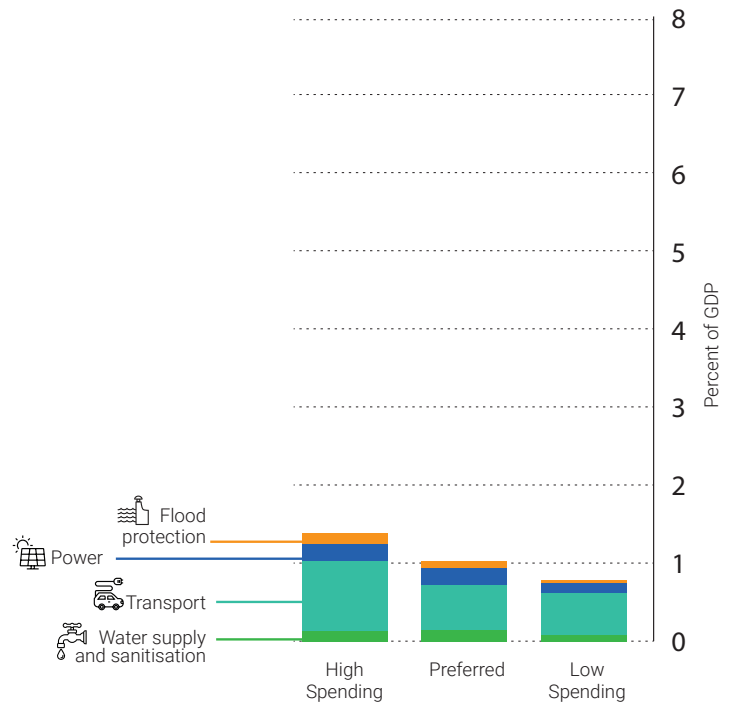
**FIGURE 5 | INFRASTRUCTURE INVESTMENT NEEDS FOR LATIN AMERICA AND THE CARIBBEAN (FROM LIFELINES REPORT, WORLD BANK, 2019)**



**Infrastructure investment needs for Latin America and Caribbean, by scenario**



**Infrastructure maintenance needs for Latin America and Caribbean, by scenario**



Source: From Lifelines Report, World Bank, 2019.

## DIVIDEND 1: AVOIDING LOSSES

This is in contrast to the traditional ex-post, loss-centered approach for risk disaster management. It focuses on benefits from saving lives, reducing losses and promoting effective recovery from disasters. The Caribbean region is highly exposed to climate hazards such as hurricanes and tropical storms, causing floods, landslides, and storm surges, which climate change will only increase. IFRC (2003) reports that after the landslides that affected the communities of Orosi de Cartago in Costa Rica in 2002, causing at least 7 deaths, destroying 17 houses, damaging aqueducts, telephone lines and power lines, and requiring hundreds of people to be evacuated, an early warning system was implemented. Nine months after the first disaster, a new landslide of the same measure occurred, but this time it was matched by a quick and effective response<sup>59</sup>. Preparing for the next disaster prevents losses. In another example, the Atacama region in Chile was hit by a landslide in 2015. This halted mining operations and set the city of Copiapó back almost a century in terms of water sanitation, as the drinking and wastewater treatment system collapsed. Estimated economic impacts surpassed \$1.5 billion. But two years later, when new flooding occurred, containment measures were in place and the impact was mitigated, preventing the loss of lives<sup>60</sup>.

It is not enough, however, to rely solely on this approach. Given the benefits only materialize when disaster strikes (which is not easy to measure due to difficulties in predicting when the next disaster is going to happen and its intensity), there is a need to rely on long term probability functions. But this usually goes against the decision-making horizons of politicians and private investors<sup>61</sup>. Moreover, this approach can fail to account for other related benefits such as economic impacts and co-benefits that may accrue, leading to an underestimation of the benefits of resilience.



## DIVIDEND 2: UNLOCKING ECONOMIC POTENTIAL

Increased resilience reduces the background risk from potential future disasters. This can have immediate and significant development benefits, even if disasters do not occur for a long time. Key benefits include economic gains from positive risk-taking (e.g., entrepreneurship and innovation); investments in productive assets (e.g., in small-scale agriculture); extending planning horizons (e.g., for building up savings); and an increase in land values. All this leads to job creation, rising incomes, greater productivity and overall economic growth<sup>62</sup>.

Investment in flood protection constitutes a typical example. Most Latin American countries are highly disaster-prone. The risks of extreme weather events and disasters create an ever-present background risk. As a result, risk-averse households and firms typically avoid long-term investments in productive assets, entrepreneurship is restricted, and planning horizons are shortened, which lead to lost development opportunities. Risk reduction or management can have immediate and significant economic benefits<sup>63</sup>. Lowering flood risks in urban areas lowers financial costs, increases security, and makes investments that would otherwise be too vulnerable to climate risks more reliable<sup>64</sup>. In Santiago, Chile, for example, the local water provider Aguas Andinas invested \$150 million in water storage and source diversification to reduce the risk of service interruption that has arisen due to unseasonal rain in the Andes Mountains. Investing in distributed energy resources to improve energy resilience in the Caribbean will reduce uncertainty in the private sector, which has been impacted by recent hurricanes<sup>65</sup>. Improved, decentralized solar energy with battery storage allows for operations costs lower than the current fossil-fuel facilities in the Caribbean islands. As Rosenberg and Fay (2019) note, these investments need to be accompanied by complementary policies such as land-use planning to prevent people from settling in flood-prone areas, nature-based solutions to increase water storage and decrease runoff, and early-warning systems and communication about residual risk.

Agriculture is another example. Extreme heat has highly adverse effects on the yields of staples like maize, wheat, coffee, and cocoa, which are very important for food security and trade in Latin America<sup>66</sup>. Farmers in Ecuador are growing maize at higher altitudes as a response to drier climate conditions, contributing to food security and achieving better yields<sup>67</sup>. Risk management tools should also be considered. Evaluations of the Mexico government's CADENA program indicate weather-indexed insurance not only helps to compensate for drought losses, but also directly increases the productivity of small-scale farmers<sup>68</sup>. These investments enable banks to loan to smallholder farmers, showing this second dividend is crucial for the sector. Costa Rica, Brazil, and Panama are excellent examples of countries that have been able to reverse deforestation and increase forest cover<sup>69</sup>. Since removing cattle subsidies and making changes to forestry law in 1996, forest cover increased from 25% to 52% of these countries. Now they are implementing agroforestry techniques that recover degraded lands to plant vanilla, cocoa, and bananas, increasing carbon capture and the land's resilience<sup>70</sup>. These investments have decreased risk and allowed agriculture to flourish in otherwise degraded and barren lands. All in all, a key benefit of more resilient infrastructure is the provision of more reliable services, which crowd in investment and economic development. This has a positive effect not only on business opportunities but also households, which can improve their productivity and access better livelihoods.

## RESILIENT WATER SUPPLY IN SANTIAGO

Santiago's water supply has been historically deemed as very reliable. Wastewater is treated, and the sludge that is generated is used to improve degraded soils, and ultimately agriculture lands. Water is supplied from the Mapocho and Maipo Rivers which have decreased water flow between 72 and 83% vs historical levels, due to a historical "megadrought". Unseasonal heavy rains the Andes Mountains have caused increased turbidity events that have caused halting water production, and impacted water distribution in the city. These events in which water turbidity in sources rises to 3000NTUs over 12 hours have risen from only 6 in between 1990 and 2007, to 28 the last 5 years.

These threats have forced Aguas Andinas, the local waterworks company, to consider climate change adaptation to be essential to its mission to provide safe drinking water. Early on it started deploying an early warning system that allows operational responses to protect water treatment. It later invested in diversifying water sources to face water scarcity and turbidity

events, and later invested in underground tubes that connected water reservoirs directly to the water treatment plant. Finally, to increase operational independence it invested in huge water storage tanks that allow the company 11 to 34 hours of time to reestablish water production in case of these turbidity events. In all, these investments total 150 million dollars, and are fully functional.

In the future the company has identified 500 million dollars in new investments to allow increase water efficiency, decrease operational losses, and improve wastewater reuse. These and previous investments are necessary to prevent economic losses due to loss of drinking water. The World Bank estimates that Chile losses an annual average of 2 billion dollars in economic activities due to utilities interruption. Investing in a resilient water infrastructure will make Santiago better prepared for a changing climate. It is possible due to a water pricing scheme that allows agreed investments to be transferred in water prices, which is enforced by a Superintendencia for Sanitary Services (SISS).



### DIVIDEND 3: GENERATING ENVIRONMENTAL AND SOCIAL CO-BENEFITS

Investments in environmental protection are also yielding important development benefits. A study by Waldron et al. (2020) on the economic impacts of expanding protected areas by 30% shows that the benefits outweigh the costs by a factor of at least 5 to 1<sup>71</sup>. The financial assessment indicates higher overall revenues than for non-expansion, amounting to an extra \$64 billion–\$454 billion/year by 2050. The economic analysis (only forests and mangroves) shows an avoided-loss value of \$170–\$534 billion/year by 2050, largely reflecting the benefits of avoiding the flooding, climate change, soil loss and coastal storm-surge damage that occur when natural vegetation is removed. Moreover, the expansion of protected areas outperforms non-expansion in mitigating the economic risks of climate change and biodiversity loss and would increase by 63%–98% the area recognized as Indigenous Peoples' and local communities' land-based nature stewardship contribution.

Reduction of social inequality is another key co-benefit for Latin American countries. Improving urban architecture with better electric public transport increases access to services and work and education opportunities, as well as improving quality of life and reducing the journey times and energy needs for millions of workers<sup>72</sup>. In countries like Peru, where 41% of the population of the Amazon region is poor, the climate mitigation and adaptation strategy seek to implement a clear assignment of land-use rights for primary forest land, improved participation of native communities in conservation and sustainable forest management and increased economic attractiveness of forestry activities triggered by the sustainable management of forest concessions and commercial plantations<sup>73</sup>. In Ecuador, where more than 20% of the population suffers from chronic malnutrition, the decarbonization strategy seeks to achieve an increase in the food intake per capita of 30% between 2015 and 2050, while reducing GHG emissions from agriculture by almost 10% by 2050<sup>74</sup> and reducing water requirements. Although the nature of the co-benefits varies, they all materialize even in the absence of a disaster.

The COVID-19 pandemic further underlines the need to push for a resilient recovery that realizes social and environmental co-benefits for Latin America, which despite more than a decade of steady progress, is still struggling with environmental degradation, social, gender and ethnic inequalities, skills gaps, insufficient social protection, and a large informal sector<sup>75</sup>. Better governance is also key to realizing these co-benefits, as we see that weak governance is a key factor driving higher environmental degradation and poor productivity in Haiti in contrast to the Dominican Republic<sup>76</sup>.

# 5

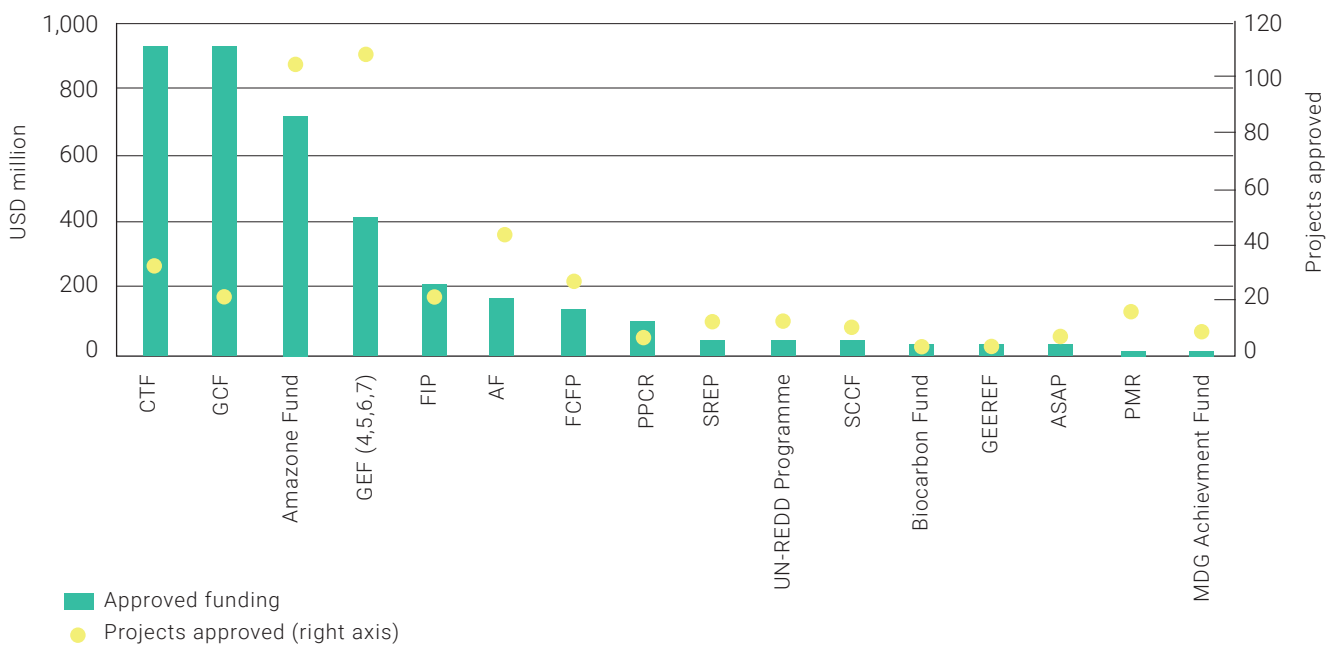
## Channeling Investment for a Resilient Recovery in Latin America

Sustainable finance is a challenge in most of Latin America, with the lion’s share of the financing for mitigation efforts coming from multilateral institutions. Mitigation activities, including forest protection and reforestation, have received US\$3.2 billion from multilateral climate funds, six times as much adaptation (\$0.5 billion), with the largest contribution coming from the Green Climate Fund<sup>77</sup>. Brazil (\$1,254 million) and Mexico (\$685 million) have received 49% of all climate finance approved in the region, followed by Chile, Colombia, and Argentina<sup>78</sup>. Figure 6 shows a summary of the international climate funding in Latin America, showing that the Clean Technology Fund (CTF) and the Green Climate Fund (GCF) contribute the most. Similarly, multilateral development banks (MDBs) have provided substantial amounts of climate finance for Latin America. In 2019, \$3.65 billion was provided by the World Bank<sup>79</sup> for adaptation, and

\$4.85 billion for mitigation, for a total of \$8.5 billion in climate finance, under the parity mechanism to which MDBs have committed to. They contribute to substantial climate finance in the form of climate co-benefits. However, this funding had nearly no private co-finance. Globally, this has been identified as a problem<sup>80</sup>.

Financial systems related to climate action across Latin America have reached different levels of development. As of September 2020, Brazil, Chile, Colombia, and Mexico lead the region in relation to sustainable finance markets, with green bonds issuance and active dialogue with investors and financial institutions on sustainable practices (domestic ones and/or international frameworks)<sup>81 82</sup>. However, many others, especially in the Caribbean, still lack the frameworks and capabilities that can direct capital flows towards climate action.

**FIGURE 6 | CLIMATE FUNDS SUPPORTING LATIN AMERICA SINCE THEIR CREATION.**



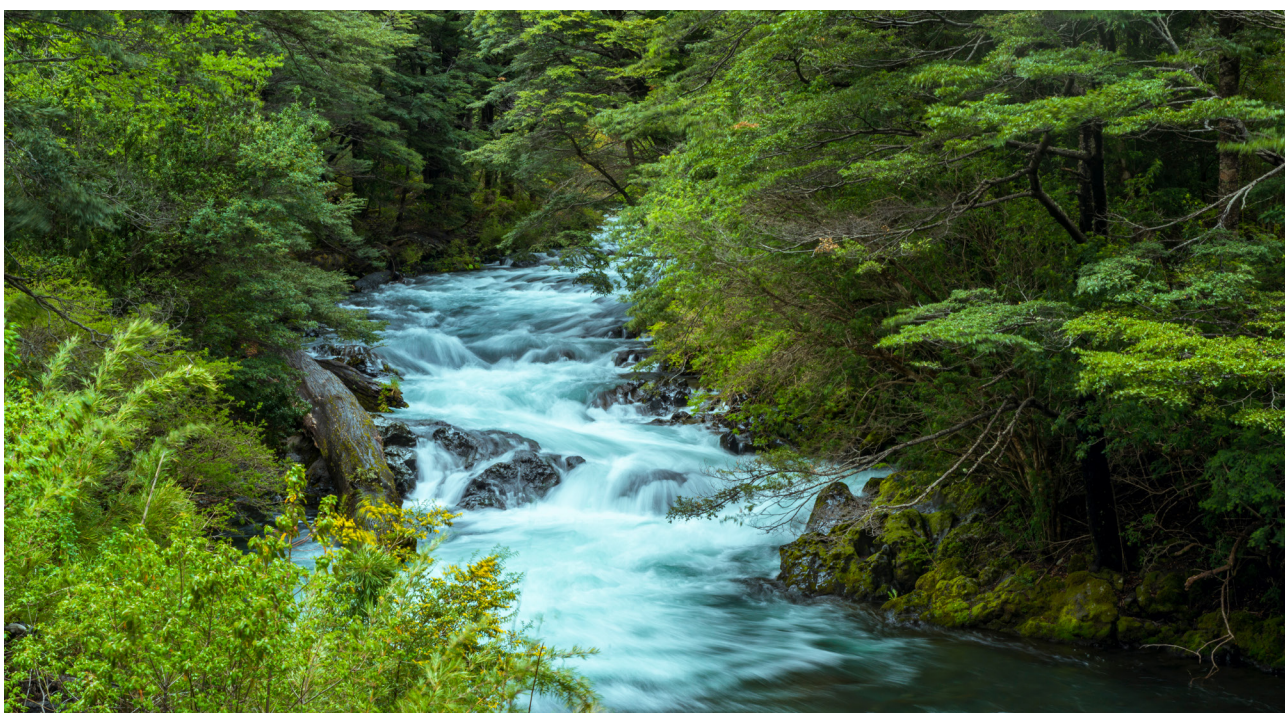
Source: Watson Ch. and Schalatek L. (2020)



According to IDB<sup>83</sup>, regional governments in Latin America must spend about \$77 billion by 2030 to meet their climate change goals. Public investment can only cover about a quarter of that, while an even smaller share will come from multilateral banks. The rest will have to come from private sector investors. The private sector has a relatively low presence in the region, but it is increasing. Regarding climate risk management, a recent survey among 78 financial institutions in Latin America and the Caribbean<sup>84</sup> (holding 54% of the total assets managed by the banking sector in the region) revealed that 38% of banks incorporate guidelines on climate change in their strategy; 24% have a policy on climate risk evaluation and disclosure; and 41% do not have any mechanisms for climate risk management. At the level of specific countries, according to IDB et al (2020), in Colombia, only 31% of financial institutions have methodologies to assess the implications of climate change and 20% have used some form of scenario analysis; in Chile, only 8% of banks, 25% of asset managers, and no insurance or pension funds have used methodologies for climate-related risks ; and in Mexico, only 14% of banks and 29% of asset managers have undertaken forward-looking assessments of environment-related risks, while other financial institutions are incorporating qualitative assessment of exposure to environmental risks. Key reasons behind low climate risk management in the region are a lack of knowledge of the financial impacts of climate change

and limited national expertise, with only 32% of banks in Latin America reporting having especially dedicated teams to oversee climate risks<sup>85</sup>. The private sector needs to be more proactive in financing climate action, as initial evidence for Chile suggests that ESGs (environmental, social, and governance-based instruments) have fared better than their conventional counterpart<sup>86</sup>. Countries that adhere to the Helsinki Principles and the Network for Greening the Financial System have made more progress. The current climate change framework law under discussion for Chile has incorporated articles that require mandatory climate-related financial disclosures aligned with the Task Force on Climate-Related Financial Disclosures (TCFD)<sup>87</sup>.

Emerging markets, in general, face major challenges in financing climate action. Beyond the above-mentioned economies, ESG risks may be greater due to market and social structures being less resilient and ecosystems more vulnerable due to weaker regulation and enforcement<sup>88</sup>. Countries often have weaker institutional and financial sector capacity, which makes implementing sustainable finance frameworks more challenging. At the same time, local financial institutions often underestimate the benefits of sustainable finance, are wary of its perceived regulatory and compliance burdens<sup>89</sup>, or hold negative perceptions about the trade-offs between profits and sustainability.



The challenges behind the mobilization of private finance for climate action have become more acute in the COVID-19 context. There is an urgent need to mobilize private capital and to use it efficiently. Most Latin American countries face a relatively high debt despite low spending, and face balance-sheet pressure—a situation that the COVID-19 crisis will only accentuate. Hence the need to embrace finance instruments that do not require fiscal budget involvement or, at least, minimize it. The pandemic has also demonstrated the importance of strengthening the role of national and international development banks<sup>90</sup>. Given the catalytic role they can play in supporting both better public and private investment and in scaling up and reducing the cost of finance, national authorities should seek to reform, strengthen, or even create effective national development finance institutions. The need to embark on a triple-dividend recovery is urgent in order to capture all possible co-benefits.

## **POLICY OPTIONS FOR UNLOCKING INVESTMENTS AND MOBILIZING FINANCE AT SCALE FOR A RESILIENT RECOVERY**

**Promotion of market transparency and adoption of appropriate frameworks for climate risk management and exposure assessments.** These are conditions for companies and financial intermediaries accessing public lending programs. Investors will invest more readily in climate-aligned public projects if they involve a relatively straightforward procedure. In this realm, the constitution of the National Sustainable Finance Board led by the Ministry of Finance and the Vice Presidency of the Republic of Ecuador with the collaboration of Andean Development Corporation (CAF) and UNEP; and the Public–Private Green Finance Board of Chile, led by the Ministry of Finance, are good examples to be followed.

**Preparation of resilient infrastructure pipelines and green/sustainable taxonomies and/or standards.** Resilient infrastructure project pipeline development and better taxonomies and standards for a common language and understanding are key for the prioritization of public investments and the preparation of financial instruments. They provide information to investors about projects that match their priorities. For green bonds they serve as the foundation for bond issuers and investors to evaluate projects and as-

sets as to their eligibility for classification as “green” or “climate friendly”. In Latin America, examples of this are the supporting actions led by FELABAN (the Latin American Federation of Banks),<sup>91</sup> the case of the green bonds of Chile, and the frameworks prepared by Colombia and Mexico. Promotion of systematic resilience assessments for any public investment project and program, including those developed under PPP frameworks (as in the case of Jamaica), is also useful. In the post COVID-19 recovery context, Chile’s government is also moving towards classification of recovery projects against ESG criteria.

**Banking development at both the national and international levels.** Development banks due to their risk mitigation role can deploy a range of instruments to mitigate and reduce the costs of financing. They can help Latin America mobilize the volume of finance needed, bring down the cost of capital, and manage risk. This can be done effectively by reducing the scale of their lending and focusing on better-aligned risk structures (fewer loans and more guarantees and concessional finance) and internal incentives to attract private finance. The need for de-risking investment instruments and enabling flows into new green and inclusive sectors and asset classes can help unlock significant investment opportunities. This can have a major impact on the ability of Latin American countries to embark on a triple-dividend recovery.

**Instruments for greening budgeting and for prioritizing public policies with the highest impact.** Domestic budgeting aligned with climate needs is another option for forging the right enabling environment to align international and private financial flows. Tools for assessing and driving improvements in the alignment of national expenditure and revenue processes with climate and other environmental goals, and for improving the understanding of effective fiscal multipliers in unlocking green jobs growth, are also important. Latin American countries need to make progress on adopting this approach. This can include the setting up of the OECD Green Budgeting Framework<sup>92</sup> or the UNDP National Climate Budget Tagging System<sup>93</sup>. In addition to specific climate goals, the latter can also include poverty and gender considerations, highlighting the extent to which climate spending reflects policies to address the particular climate risks related to poverty and gender inequality<sup>94</sup>.

## OPTIONS FOR INSTRUMENTS FOR CLIMATE ACTION FINANCING

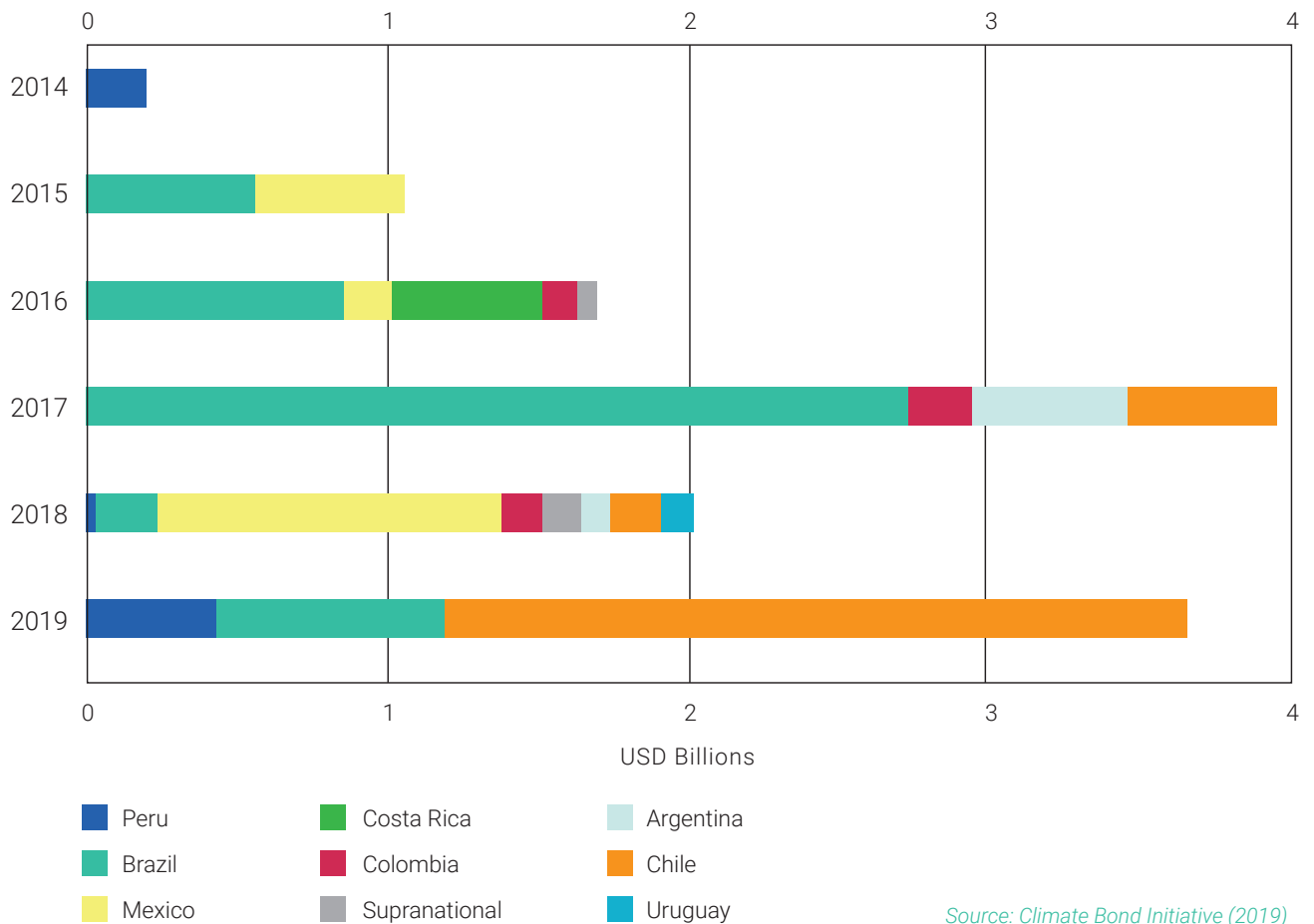
**Green bonds:** Green bonds are becoming an important source of sustainable finance for several Latin American countries. During 2019, the region issued close to \$5 billion in green bonds, bringing the region's overall historic total to \$13.6 billion. Even so, these bonds account for just 2% of the global green bond market. They are targeted at sustainable infrastructure and low-carbon transport system projects. Brazil is the largest market for labelled green bonds, followed by Chile and Mexico. However, there are significant differences in issuer types between countries: Brazil is dominated by non-financial corporates, Chile by sovereign deals, Mexico by development banks, and Argentina by local governments. Peru and Colombia have already

indicated potential sovereign deals<sup>95</sup>. Figure 7 shows the recent trends in issuing green bonds in Latin America. Funding conditions are often oversubscribed, and in the case of Chile, allow record-breaking low interest rates.

Although green bonds are becoming mainstream in the region, some countries still face the challenge of going beyond financing for mitigation and public sector projects. More broadly, a new generation of financial tools should be developed to embrace adaptation, private sector projects, and bankable projects portfolio from local communities. This generation should incorporate physical risks and reflect those risks in the financing conditions, rewarding actions that prevent risk.

FIGURE 7 | GREEN BOND ISSUANCE IN LATIN AMERICA 2014–2018 (CBI, 2019)<sup>96</sup>

2018 - Country diversity rises      2019 - Already a record year



Source: Climate Bond Initiative (2019)



**Instruments managed by Central Banks:** Central Banks can use different tools to incentivize investment in resilient infrastructure, including preferential refinancing rates, differentiated capital requirements—something equivalent to a “brown penalizing factor”—and higher capital requirements for loans to non-resilient projects.

**Debt-for-Climate Swaps:** These are based on the debt-for-nature swaps of the 1980s. Already-pledged climate funds from bilateral development partners would be used to purchase a portion of the debt of participating governments, reducing their debt levels and associated debt-servicing obligations<sup>97</sup>. Governments would then be obligated to redirect funds that would have been used to service this debt to climate change adaptation activities. Crucially, debt would be purchased by bilateral institutions at a discount or ‘haircut’. That is, the liabilities and cash flows as-

sociated with financing the required climate change adaptation activities would be less than the liabilities and cash flows associated with the original debt. Importantly, this would have the effect of generating new fiscal space for small states, which usually face very high levels of public debt, with debt-service obligations occupying the available fiscal space, and solvency concerns that limit access to new financing to meet adaptation needs<sup>98</sup>.

**Sovereign Wealth Funds and Pension Funds:** Global pension funds alone hold more than \$40 trillion in assets, according to the Thinking Ahead Institute. In the case of Latin America, recent surveys show that climate considerations are typically not taken into account in portfolio analysis, and a growth in financing can be achieved by shifting pension fund investments towards adaptation and resilience.



# 6

## Towards a Resilient Recovery

As countries seek an economic recovery that addresses the SDGs, increases resilience, and creates new jobs, evidence is mounting that a climate-resilient pathway is the best choice for the future. Allowing current warming trends to continue will mean that 2.5 million jobs will be lost by 2030 due to heat stress alone. A recent ILO-IDB report shows that a resilient recovery for Latin America will yield 15 million net jobs by 2030<sup>99</sup>. These new jobs will come from sustainable agriculture, forestry, and clean energy, along with manufacturing and construction. Climate-resilient and low-emission agriculture will double jobs in agriculture by 2030. This transition will increase jobs regionally by 4% by 2030. In some regions in Central America and Brazil this will reach 5.5%.

Public employment programs can contribute to creating jobs in the recovery, by focusing on public works that are labor-intensive (such as maintenance, forestry, and land and environment improvements) or on labor-intensive conventional infrastructure. These types of employment can be used help restore ecosystems that have been damaged or destroyed, including reforestation, forest protection, slope protection, and soil and water conservation, among others. Nature-based solutions can be implemented using these employment programs. All these interventions will contribute to a more resilient region.

Before the pandemic, investment in adaptation, however, was still low compared to mitigation. It should now be prioritized. Climate-proofing developmental gains is crucial for economic growth and the eradication of poverty. The Global Commission on Adaptation has shown that investing in resilient infrastructure, agriculture, and sanitation, or simply protecting coastal ecosystems, can yield \$7.1 trillion in benefits by 2030. Waldron et al (2020) show that expanding global conservation efforts to protect 30% of the land and ocean

by 2030 can boost global economic output by \$1 trillion a year, mostly due to increased tourism, agricultural productivity, forestry output, and recovered fisheries<sup>100</sup>. Latin America's rich biodiversity frequently experiences pressure through the expansion of economic activity, but multidecadal efforts in conservation have allowed 24% of the land, and 17% of the ocean, to be protected under International Union for Conservation of Nature (IUCN) conservation categories.

*Focusing on climate adaptation is not giving up on the fight against climate change. It is a renewed commitment in the fight against inequality.*

**Ban Ki Moon, Co-Chair, Global Commission on Adaptation.**

Latin America faces difficult social-inequality challenges, which the pandemic may increase, together with an increasing pressure over fiscal balances due to the cost of recovery packages. Fiscally strapped countries will be pressed to spend on cash transfers and tempted to delay spending in much needed infrastructure. However, countries should seize the opportunity to implement more structural reforms to build back better towards a greener, more inclusive, and more resilient economy, creating a bridge for a better tomorrow.

As a recent OECD report emphasizes, one path that should be urgently prioritized is environmental tax reform and tax policies to tackle inequality<sup>101</sup>. Tax reforms should not be regressive; they should tackle inequalities and externalities. Tax on property belonging to the richer segments of the population, tax on capital gains, elimination of fossil fuels subsidies, and carbon taxes should be at the core of a tax reform.



# 7

## Recommendations for a Resilient Recovery for Latin America



**A resilient recovery must reduce inequality.** Before COVID-19, the region was already one of the most unequal in the world. This inequality not only contributes to making government responses less effective, it is at the heart of many of the recent social revolts. Informality in the job markets has kept people out the reach of unemployment benefits, cash transfers, or other forms of social safety nets. Afro-descendants and indigenous communities, which account for a third of the region's population but for two-thirds of the poor<sup>102</sup>, and migrants are more likely to slip through the cracks of government job programs. Under a scenario of no action, Latin America will likely come out of the crisis poorer and more unequal, as economic activities in which higher-income workers are involved have been less affected by the pandemic. These workers are more likely to work from home and have access to an educational system that is better prepared to teach remotely. Lower-income workers, especially women, have been the most affected by the pandemic, and are more likely to have spent their pension fund savings. The Latin American region will likely be more vulnerable to climate change as extreme poverty rises. COVID-19 will contribute to an additional 4.8 million people earning less than 1.9 dollars a day this year. Climate change will almost certainly contribute an additional 5 million by 2030. Recovery efforts need to address this inequality.

In the short term, emergency employment programs should be inclusive, and focus on lower-income workers, women, and Indigenous and migrant communities. Cash transfer programs should target those that are most marginalized. In the medium to long term, once the recovery path is well established, governments can implement structural reforms for tackling inequality, such as taxes on property of the richer segments of the population and tax on capital gains. In addition to improving social cohesion and governability, these measures will reduce fiscal imbalance and help to finance social programs.



**Stimulus packages should focus on direct benefits to people, and address infrastructure gaps to meet the Sustainable Development Goals with shovel-ready projects that mobilize investments and create jobs.** Climate change is a risk amplifier. This becomes even more relevant considering that the effects of Covid-19, in terms of lower economic activity, lower employment, and wages, affect the most vulnerable, accentuating inequality. This situation is now is even more troublesome, since a second wave of contagion has already begun in the northern hemisphere with the onset of winter. All this underscores the urgency of developing better health services and improving access to these services.

On the other hand, since it is a region that eagerly adopts new technologies and ideas, Latin America has the resourcefulness to create a resilient recovery that will

reduce inequality, create jobs, and build back better. Public employment programs can contribute to creating jobs in the recovery, focusing on public works that are labor intensive, such as maintenance, forestry, land and environment improvements, or labor-intensive conventional infrastructure. These types of employment can be used help restore ecosystems that have been damaged or destroyed, including reforestation, landscape protection, and soil and water conservation. Green jobs can also be generated by focusing on the clean-up of riverbeds, hillside and ravine debris accumulation, and shrub and trash clearing to prevent forest fires. Employment programs for forest management in urban-rural interface areas with a high fire risk can be an opportunity to make surrounding communities safer and better prepared for the next forest fire season. Nature-based solutions can be implemented using these employment programs, and they do not require skilled labor. These packages should make special efforts to include disadvantaged populations such as indigenous people, Afro-descendants, persons with disabilities, and excluded youth.

**Invest in resilient infrastructure and reap the benefits of protecting the paybacks they produce.** Investments in infrastructure need to be climate-proofed in order to make our countries safer, now and in the future. Doing so would cost between 3 to 13 billion dollars per year by 2030 but would achieve a net benefit of 700 billion dollars.



As part of their recovery packages, many Latin American countries are planning infrastructure spending, but these must contribute to addressing adaptation and resilience challenges, unlocking the triple-dividend benefits, and focusing on energy and water infrastructure. Moreover, these projects should not generate technological lock-ins or contribute to maladaptation. In addition, as mentioned above, governments can generate temporary or long-term employment programs addressing territorial risks and improve the quality of life for surrounding populations, leaving the country better prepared for future natural disasters. Public participation can make these projects more effective and in turn deliver collective benefits.

**Leverage the financial system to mobilize private capital towards resilience.** We need to mobilize financial markets towards climate adaptation action by internalizing climate risk. The challenge to increase the proportion of global finance going to adaptation is more acute for Latin American countries, whose governments face a structural fiscal imbalance, a situation that the COVID-19 crisis is only accentuating. The private sector tends to ignore the climate risk, which is beyond its decision-making horizon. Efforts must be made to make that risk visible. Countries need therefore to unlock large amounts of capital, especially private capital, to finance a resilient recovery. Governments need to strengthen national development finance institutions to increase their capacity and effectiveness. They need to collaborate with international development banks due to the key role they play in catalyzing public and private investment and de-risking investment instruments, thereby reducing the cost of finance. They need to promote increased market transparency and adoption of appropriate frameworks for climate risk disclosures. Governments can prepare a pipeline of resilient projects aligned with commonly accepted taxonomies and standards, which can contribute to the prioritization of investments and the preparation of financial instruments and provide information to investors about projects that match their ESG priorities. Governments should also explore new in-



struments for climate action financing, such as debt-for-climate swaps, or deepen the use of climate bonds, which allow lower capital costs for resilient investments.

**Accelerate the development of nature-based solutions and of green resilient infrastructure.** Nature-based solutions should be a central part of a triple-dividend resilient recovery. Supporting the 30% conservation target that the UN Convention on Biological Diversity has proposed for 2030 will contribute to a healthier, wealthier, more resilient planet. Increasing marine protected areas, including no-take zones, allows the recovery of fisheries. This will increase productivity, benefiting fishing communities that can sell their products at a premium. Protecting coastal wetlands and mangroves allows increased resilience to natural disasters, both climate- and earthquake-related. Healthier coastal ecosystems can provide sustainable food sources for coastal communities, prevent erosion and flooding, and make communities less vulnerable to sea level rises.



Latin American countries stand out for their rich biodiversity. Several countries have already embarked upon sustainable development paths, with biodiversity conservation being a central part of them. The region can position itself as a global leader in nature-based projects by generating a portfolio of bankable projects of sufficient scale. These projects bring several benefits. Beyond sustaining valuable ecosystem services and being carbon sinks that can generate income, they also reduce the risk of disasters, are sources of food and water, and support sustainable tourism activities. All these impacts are of direct benefit to local communities and Indigenous Peoples. Incorporating ancestral or traditional knowledge from these communities can make investments in resilience more effective. Key steps for Latin American countries to develop a bankable portfolio of projects include: to further sensitize the business sector to nature-based options, making visible their benefits; to reach out to the financial community so that project developers identify the revenue streams generated by the nature-based solutions component and incorporate them into the project's financial structure; to advance the development of clear and easily replicable assessment methodologies; and to engage local communities from the very beginning of project development and ensure the participation of the poorest and most vulnerable.



**Improve governance and public policies aligned with strengthening resilience and addressing structural challenges.** Governments need to ensure that they have strong institutional frameworks and good governance. Indeed, countries need stronger economic institutions to better assess the challenges created by the pandemic and implement structural reforms for tackling inequality, taking action on climate, and leveraging digitalization. Governments need to consider progressive tax reforms to tackle inequalities and externalities. Taxes on the property of richer segments of population, tax on capital gains, and addressing externalities should be at the core of tax reforms. These will reduce fiscal imbalance, incentivize investments in resilient infrastructure, and help to finance social programs. They can also improve social cohesion and governability, as one of the key reasons for social unrest in many Latin American countries are the social, economic, and environmental inequalities that characterize the region.



### **MDBs and the IMF must walk the talk on climate finance during the recovery.**

While there is a lot of discourse around climate commitments and how countries must design and implement green recoveries, there is limited evidence that development policy loans carried out by MDBs are bringing the climate co-benefits that are promised. Large cash transfers are helping solve liquidity issues for central banks, but there is little follow up to see if countries are carrying out business as usual, or genuinely building resilience. Also, joint World Bank Group and IMF climate change policy assessments have only been carried out in a handful of countries and need to increase. Article 4 consultations by the IMF need to take the next step when incorporating climate change and bring recommendations that allow fiscal space for investing in much-needed resilience.

# EndNotes

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