



## ANNEX 1 CLIMATE RESILIENCE NARRATIVE

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*This narrative has been prepared by the Climate Resilience Network<sup>1</sup> a group of public, civil society and private sector organizations<sup>2</sup> working together under Marrakech Partnership for Global Climate Action (MP). It has been used to advance actions to build a more resilient future at COP 23 and 24, Global Climate Action Summit, Africa Climate Week, Asia-Pacific Climate Week and United Nations Climate Action Summit.*

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### Background

Climate change and extreme events (drought, floods, storms, cold snaps, and heat waves), increased weather variability, and sea level rise are already affecting people, livelihoods, ecosystems and economies. 2017 was not only the hottest year on record but the costliest in terms of damage from severe weather and climate events. With extreme weather in 2018 and 2019 continuing to claim lives and destroy livelihoods there is an urgent need to scale up action and investment into climate resilience across and within sectors.

The IPCC Special Reports on 1.5 Degrees, Land and Oceans have all highlighted the need for urgent action across climate and biodiversity altogether. The 1.5° report identified the need to strengthen the global response to enhance climate resilience of all societies, and action to support the most affected – people living in poverty and those most vulnerable to the impacts of climate change – was a priority.

The facts speak for themselves. 100 million people are already at risk of being pushed into poverty by climate change by 2030, most in sub-Saharan Africa and South Asia. Another 720 million will be at risk by 2050. Yet adaptation action is not keeping pace with the scale of impacts. One estimate<sup>3</sup> is the costs of adaptation in developing countries could be up to USD 300 billion per year by 2030.

There are substantial benefits to be gained from acting now. The Global Commission on Adaptation has estimated that investing USD 1.8 trillion globally in adaptation and resilience from 2020 to 2030 has the potential to generate USD 7.1 trillion in total net benefits.

The overlapping issues of conflict, ecosystem destruction, land degradation, and climate change, is one of the most important development challenges of today and tomorrow. The world's hungry and poor are increasingly concentrated in conflict- and climate-affected regions and by 2030 it is estimated that 80% of the world's poorest will be living in fragile and conflict-prone areas. While in

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<sup>2</sup> UN Climate Resilience Initiative (A2R), Global Resilience Partnership (GRP), Business for Social Responsibility (BSR), Climate Justice Resilience Fund (CJRF), Food and Agriculture Organisation (FAO), Global Adaptation and Resilience Investment (GARI) Working Group, Global Facility for Disaster Reduction and Recovery (GFDRR), ICF, ICLEI - Local governments for sustainability, International Federation of Red Cross Red Crescent, International Institute for Environment and Development (IIED), International Union for Conservation of Nature (IUCN), the Lightsmith Group, Munich Climate Insurance Initiative (MCII), NAAAP Environmental and Climate Justice Program, Red Cross Red Crescent Climate Centre, SwedBio at Stockholm Resilience Center, UNCTAD, UN Environment, United Nations Framework Convention on Climate Change (UNFCCC), Wetlands International, Willis Towers Watson, and World Bank.

<sup>3</sup> From UNEP Adaptation Gap Report 2016.

many places, especially in tropical regions, extreme sea level events that are historically rare, once per century in the recent past, are projected to occur at least once per year by 2050.<sup>4</sup>

The United Nations issued a warning in July 2019, stating that climate crisis disasters are now occurring at the rate of one a week. These disasters, although less harmful than catastrophes such as cyclones Idai and Kenneth in Mozambique and the drought affecting India, cause death, displacement and suffering. Estimates put the cost of climate-related disasters at USD 520 trillion a year, while the additional cost of building resilient infrastructure is only about 3 percent of the total cost, or USD 2.7 trillion in total, over the next 20 years. These facts and figures are summarised in Box 1.

Implementing the Paris Agreement and the Sendai Framework for Disaster Risk Reduction must tackle climate risks for achieving sustainable development. A shared understanding of climate resilience, with its essential capacities and its suite of risk- and sector-and context specific interventions, is essential for formulating and implementing coherent and converging climate actions at scale, hand in hand with mitigation efforts in priority areas.

### Box 1. Facts and Figures on Resilience and Adaptation

#### Without action the impacts of climate change are predicted to:

- Affect the poorest and most vulnerable especially in LDCs and SIDS.<sup>5</sup>
- Impact 80% of the world's poorest will be living in fragile contexts by 2030.<sup>6</sup>
- Reduce agriculture yields by up to 30% by 2050 affecting smallholder farmers the most.<sup>7</sup>
- Increase food prices by 20% for billions of low-income people.<sup>8</sup>
- Increase the no. of people who lack sufficient water<sup>9</sup> from 3.6 billion today to 5 billion by 2050.<sup>10</sup>
- Force hundreds of millions of people in coastal cities from their homes, with a total cost to coastal urban areas of more than USD1 trillion each year by 2050.<sup>11</sup>
- Substantially increase the risk to SIDS critical transportation infrastructure from marine flooding as early as in the 2030s.<sup>12</sup>
- Put an extra 100 million people at risk of being pushed into extreme poverty 2030, and 720 million by 2050.<sup>13</sup>
- Double the number of people in non-conflict areas needing humanitarian assistance by 2050 costing USD20 billion p.a.<sup>14</sup>
- Increase the cost of climate-related disasters to a total USD 2.7 trillion over the next 20 years yet the cost of making infrastructure resilient is about 3% of this.<sup>15</sup>

#### Yet with action and a just transition it is estimated that:

<sup>4</sup> IPCC. 2019. Special Report on the Ocean and Cryosphere in a Changing Climate

<sup>5</sup> IPCC. 2012. Special Report on Managing the Risks of Extreme Events and Disasters to Advance Climate Change Adaptation.

IPCC. 2018. Special Report on Global Warming of 1.5°C

IPCC. 2019. Special Report on Climate Change and Land.

IPCC. 2019. Special Report on the Ocean and Cryosphere in a Changing Climate

Global Commission on Adaptation. 2019. Adapt Now: A Global Call for Leadership on Climate Resilience.

<sup>6</sup> OECD 2018, States of Fragility 2018, OECD Publishing, Paris.

<sup>7</sup> Porter et al. 2014. "Food Security and Food Production Systems." World Bank. 2013. Turn Down the Heat: Climate Extremes, Regional Impacts, and the Case for Resilience. Washington, DC.

<sup>8</sup> Nelson, C.C., et al. 2014. "Climate Change Effects on Agriculture: Economic Responses to Biophysical Shocks." Proceedings of the National Academy of Sciences of the United States of America 111: 3274-3279.

<sup>9</sup> Defined as being without water for at least one month per year

<sup>10</sup> UN world water development report 2018: nature-based solutions for water.

<sup>11</sup> Hallegatte, S., Green, C., Nicholls, R.J., and Corfee-Morlot, J. 2013. "Future Flood Losses in Major Coastal Cities." Nature Climate Change 3(9): 802-806.

<sup>12</sup> Monioudi, I.N., Asariotis, R., Becker, A. et al. Reg Environ Change (2018) 18:2211-2225. Climate change impacts on critical international transportation assets of Caribbean Small Island Developing States (SIDS): The case of Jamaica and Saint Lucia.

<sup>13</sup> Hallegatte, S., Bangalore, M., Bonzanigo, L., Fay, M., Kane, T., Narloch, U., Rozenberg, J., Treguer, D., Vogt-Schilb, A. 2015. Shock Waves: Managing the Impacts of Climate Change on Poverty, World Bank Climate Change and Development Series, World Bank Group.

<sup>14</sup> IFRC. 2019. Cost of Doing Nothing: The Humanitarian price of climate change and how it can be avoided.

<sup>15</sup> Global Commission on Adaptation. 2019. Adapt Now: A Global Call for Leadership on Climate Resilience.

- Spending USD 4 billion over four year on early warning systems in developing countries with a benefit cost ration of between 4 to 36.<sup>16</sup>
- Implementing effective disaster-risk actions would result in a 90% decrease in people needing international humanitarian assistance by 2050 following climate-related disasters<sup>17</sup>.
- Investing USD 1.8 trillion in adaptation and resilience from 2020 to 2030 can generate USD 7.1 trillion in total global net benefits.<sup>18</sup>
- Mangroves will continue to protect 18 million people from flooding every year reducing losses by USD 82 billion. Benefits from their preservation and restoration are about 10 times the cost.<sup>19</sup>
- Limiting warming to 1.5°C relative to 2°C can avoid the inundation of lands home to about five million people, including 60,000 people currently residing in SIDS.<sup>20</sup>
- 30% of GHG emissions can be avoided by making food and agriculture systems more sustainable and resilient<sup>21</sup> including reducing food loss and waste (produce about 8% of global emissions).<sup>22</sup>
- A transformation to healthier diets and sustainable food systems can reduce emissions, avert up to 11 million deaths p.a., lift 820 million people from undernourishment and 680 million people from obesity - avoiding USD 4.5 trillion p.a. in costs from this double burden.<sup>23</sup>

## What is needed to build climate resilience?

Building climate resilience involves the capacity of all actors (governments, communities and businesses) to anticipate climate risks and hazards, to absorb the shocks and stresses and to adapt or reshape and transform development pathways in the longer term. Climate resilience can be achieved by implementing five broad sets of interventions and tools<sup>24</sup>:

1. **Climate risk governance** structures and processes require the inclusion of immediate and long-term considerations of risk into climate policies and practices as well as risk measures within and across sectors.
2. **Risk monitoring and early warning systems.** Climate risk assessments and risk monitoring together with early warning and early action (EWEA) systems and forecast-based financing as well as technical and human capacity building, particularly at local levels, are essential.
3. **Vulnerability reduction and climate adaptation measures** within and across sectors including the implementation of climate-resilient agricultural good practices, along with the improved management of climate-proofed infrastructure and operations, and nature-based solutions, ecosystem, conservation of biodiversity and land restoration.
4. **Risk sensitive and/or shock-responsive adaptive social protection schemes and risk transfer mechanisms** such as climate risk insurance, adaptive social protection and other measures to tackle the underlying causes of vulnerability.
5. **Emergency preparedness and response** including contingency planning, risk management coordination and the capacity to respond across and within sectors.

<sup>16</sup> Hallegatte, S. 2012, A cost effective solution to reduce disaster losses in developing countries. World Bank

<sup>17</sup> IFRC. 2019. Cost of Doing Nothing: The Humanitarian price of climate change and how it can be avoided.

<sup>18</sup> Global Commission on Adaptation. 2019. Adapt Now: A Global Call for Leadership on Climate Resilience.

<sup>19</sup> TNC. 2018. The Global Value of Mangroves for Risk Reduction

<sup>20</sup> IPCC. 2018. Special Report on Global Warming of 1.5°C

<sup>21</sup> IPCC. 2019. Special Report on Climate Change and Land.

<sup>22</sup> FAO. 2017. Save Food for A Better Climate: Converting the food loss and waste challenge into climate action.

<sup>23</sup> EAT Lancet Commission. 2018. Healthy Diets from Sustainable Food Systems: Food Planet Health.

<sup>24</sup> Including Climate change mitigation co-benefits.

Reshaping and transforming for climate resilience encompasses transformation and the recognition that people have the ability to change the climate with how they care for the Earth and the life it supports.

### **How to support climate resilience building together?**

To address the needs of the most at-risk populations, cross-sectoral and sectoral action by public and private and community stakeholders is urgently required in five areas:

1. **Including local contexts and the perceptions of climate risk of the most vulnerable people** in global and national decisions, policies, plans and interventions related to resilience.
2. **Operate at the wider landscape as a system in which current and future risks originate and manifest**, combining in-depth knowledge of ecological features and dynamics with socio-economic and governance context to identify integrated, adaptive and flexible cross sectoral solutions.
3. **Raising understanding, awareness and advocacy** from global to local levels of the importance of building climate resilience for the successful implementation of the Paris Agreement in line with other global policy processes and the overarching Sustainable Development Goals (SDGs).
4. **Promoting climate resilience information, knowledge, and practices** as well as **available technologies and innovation** to facilitate and scale-up actions to build climate resilience.
5. **Mobilising targeted resources, investment, technology and institutional and human capacity** for vulnerable countries and especially the most vulnerable and more marginalised within those countries to develop their capacities for climate resilience, and promote equitable development that benefits all, especially women, youth and people living with disabilities.
6. **Analysing and tracking progress** towards building climate resilience within and across sectors, along a shared set of targets/indicators from existing global policy processes, in line with the SDGs - especially SDG 13.1 target on resilience.

We need continued efforts, through partnerships, blending climate change adaptation, mitigation and disaster risk reduction and emergency preparedness and response, with supporting policies, technologies, practices and long-term finance across and within sectors to bridge humanitarian, environmental, development and peace-building approaches for achieving better resilience to climate variability and extremes.