On climate and adaptation

1. Adaptation to climate change safeguards people from higher temperatures, rising seas, fiercer storms, unpredictable rainfall and more acidic oceans. Some people are more vulnerable to these effects, such as those living in poverty.

2. Small island developing States are particularly vulnerable without adaptation to storms and sea-level rise. For some of these countries, disaster-related economic losses have already been as high as 200 percent of the size of a national economy.

3. Estimated annual adaptation costs in developing countries are in the range of $70 billion, but could reach $300 billion by 2030. Just 21 per cent of international climate finance goes to adaptation and resilience, about $16.8 billion a year.

4. Globally, a $1.8 trillion investment in early warning systems, climate-resilient infrastructure, improved dryland agriculture, global mangrove protection and resilient water resources could generate $7.1 trillion in avoided costs and social and environmental benefits.

5. Over 60 percent of countries have nature-based strategies in national climate action plans; a similar share has acknowledged that adaptation depends on protecting ecosystems and biodiversity.

6. Better weather data along with early warning and emergency management systems reduce physical damage and economic losses. Universal access to early warning systems can deliver benefits up to 10 times the initial cost.

7. Without adaptive measures, the number of people who lack sufficient water for at least one month per year will soar from 3.6 billion today to more than 5 billion by 2050.

8. Solar-powered irrigation, weather alert systems, new crop varieties and other adaptive measures can help avoid a drop-off in global agricultural yields by up to 30 percent by 2050.

9. Improving health systems could help prevent 250,000 additional climate-related deaths per year from 2030 to 2050, mainly from avoidable causes such as malnutrition, malaria, diarrhoea and heat stress.

11. Worldwide, just 38 percent of small firms have invested in adapting to environmental risks, compared to 60 percent of large firms. During the COVID-19 pandemic, companies able to withstand disruption were five times less likely to lay off employees and more likely to have stable sales.

Sources: GCA (1, 4, 7, 8), IMF (2), UNEP (3), OECD (3), WRI/GCA (5), World Bank (6), WHO (9), ITC (10)