

GENDERED ANALYSIS OF THE IMPACT OF CLIMATE CHANGE ON POVERTY, PRODUCTIVITY AND FOOD INSECURITY

A TECHNICAL REPORT

This paper was written by Audrey Pirzadeh, José Solórzano, Yutang Xiong, Mohammod Irfan, Stellah Kwasi, Taylor Hanna, Jonathan D. Moyer (Frederick S. Pardee Center for International Futures) and Ginette Azcona, Antra Bhatt and Sara Duerto Valero (UN Women). The team would like to acknowledge the valuable comments and contributions of Tsz Yu Chang, A. Polotu Fakafanua Paunga, Lavinia Palei, Maryanne Mikaere Namakin, Tarota Bwebwetara, Eera Teakai, Takena Redfern, Eretii Timeon, Eribwebwe Takirua, Tannako Baraam, Mauea Wilson, Froline Tokaa, Tumai Laokiri, Tarawaniman Lamti, Faagutu Vaalotu, Dave Carter, Josephine Afuamua, Taiaopo Faumuina, Blanche Sioa, Jordanna Mareko, Maluseu Doris Tulifau, Olive Kaio, Pepe Tevaga, Vaela Devesi, Judy Basi, Francis Sopamana, Cody Yerkovich, and Doris Puiahi. They are also grateful for the excellent research assistance provided by Kathleen Clemens and Asha Meagher; and would also like to acknowledge Serge Kapto, David Bohl and Mohammod Irfan who in addition to the team listed above, were involved in the first phases of the gender-poverty nexus work, of which this paper and its findings partially build upon.

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Disclaimer: The is a draft working paper. All estimates and projections presented are subject to change and revisions. The authors welcome any queries, comments and suggestions. Please email antra.bhatt@unwomen.org and/or Taylor.Hanna@du.edu.

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ACRONYM LIST

APAC	Asia-Pacific
CO2	Carbon Dioxide
CSA	Central and Southern Asia
DICE	Dynamic Integrated Climate–Economy
ENA	Europe and Northern America
ESEA	Eastern and South–Eastern Asia
FAO	Food and Agriculture Organization
FIES	Food Insecurity Experience Scale
FUND	Framework for Uncerntainty, Negotiation and Distribution
GDP	Gross Domestic Product
GTAP	Global Trade Analysis Project
ICT	Information and Communications Technology
IFs	International Futures
LAC	Latin America and the Caribbean
NAWA	North Africa and Western Asia
PAGE	Policy Analysis of the Greenhouse Effect
RCP	Representative Concentration Pathway
SDG	Sustainable Development Goal
SIDS	Small Island Developing States
SSA	sub-Saharan Africa
UN	United Nations
UNDP	United Nations Development Programme
UNHCR	United Nations High Commissioner for Refugees
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EXECUTIVE SUMMARY

Climate change threatens livelihoods with evidence suggesting that it may increase poverty, hunger, conflict, and gender inequality. Already vulnerable regions, like the Asia-Pacific, are particularly threatened due to their heavy dependence on ecosystem services. However, while climate change is expected to have deleterious effects on human development, the magnitude of those effects, especially on the most marginalized women and girls, remains poorly understood. This report seeks to model the gendered effects of climate change on

poverty, productivity, and food insecurity with a focus on the Asia–Pacific region and six priority countries in the Appendix.

We use the International Futures (IFs) model to forecast five scenarios built on assumptions from literature with varying levels of climate change to determine a potential range of impact that climate change could have on development and specifically women that are described in the table below.

SCENARIO NAME	CORE ASSUMPTIONS
No Climate Attributable effect	Socioeconomic development continues, though without effects from climate change to productivity, food security, and inequality. Under this scenario, the Gini coefficient is held constant across time at the country level. This scenario serves as a baseline from which to estimate the climate attributable impact of each of the RCP scenarios presented below.
Current Path (as- sumes a climate attributable effect)	Socioeconomic development patterns follow a similar pattern to the <i>No Climate Attributable Effect</i> world, but with additional impacts from a world where climate change increases average global surface temperatures with representative concentration pathway (RCP) 4.5 along with baseline assumptions about the effect of this on economic growth, food security, and inequality. RCP 4.5 has been associated by IPCC with a higher likelihood of a 2 degree rise in global temperatures.
Worse Climate Path	Socioeconomic development patterns continue but climate change is more intense. In this scenario, average temperature follows RCP 6.0 and the economic, food security, and inequality effects are amplified to highlight a more extreme climate change result. RCP 6.0 has been associated with a higher likelihood of a 3 degree rise in global temperatures.
Current Path + SDG Push	This scenario is drawn from previous work modeling policies that improve SDG outcomes (Hughes et al. (2020)) to explore how developmental costs of climate change modeled in the <i>Current Path</i> scenario can be offset by additional development policy strategies, including policy strategies particularly focusing on gender equality (see Appendix for a full description). ¹
Worse Climate Path + SDG Push	This scenario is drawn from previous work modeling policies that improve SDG outcomes (see Hughes et al. (2020)) to explore how developmental costs of climate change modeled in the <i>Worse Climate Path</i> scenario can be offset by additional development policy strategies, including policy strategies particularly focusing on gender equality.

¹ The SDG Push scenario includes among other interventions increases in girls' education and convergence of female and male wages by 2050. See Appendix. Other seemingly gender-blind development policies, e.g., higher social protection spending, are also game changers for women and girls who are often overrepresented among the poorest. Greater access to water and sanitation is also likely to have a gender boosting effect (See UN Women and UN-Water, 2023).

IFs a fully integrated assessment model that uses a macro-level approach connecting systems representing agriculture, climate, conflict, demographics, education, energy, gender, governance, health, infrastructure, international relations, and technology related submodules to forecast future effects of climate change on the development of 188 countries. There are limitations to this approach as the nuances of individual experiences are not captured, shocks to the system cannot be forecasted and instead are exogenously imposed, sea level rise which is particularly important for small island states is not captured, and the agriculture model is designed at the aggregate making it impossible to account for differentiated effects of carbon dioxide fertilization on crop yields. Taking these into consideration, its important to qualify that the results show one potential range of impact that climate change could have on future development with a gendered lens. The scenarios show that continued advancement towards achieving sustainable development goals is expected, but climate change could significantly slow down progress, push millions of additional women and girls into poverty and food insecurity and leave people behind. Central and Southern Asia and Sub-Saharan Africa are expected to suffer from the greatest damages due to climate change in poverty and food insecurity. The Asia-Pacific region is especially vulnerable to climate change and is forecasted to suffer significantly greater impacts on poverty relative to the world indicating the need for funds targeting adaptation and disaster response capabilities in this region. We also find that ambitious SDG policy interventions can considerably reduce the negative effects of climate change even under the worst conditions.

- In the Current Path scenario, global GDP reduces 0.6% (\$675 billion) in 2030 and 1.3% (\$2.5 trillion) in 2050 due to climate change. In the Worse Climate Path scenario global GDP reduces 3.2% (\$3.7 trillion) in 2030 and 12.1% (\$23.9 trillion) in 2050 due to climate change. Sub-Saharan Africa and Latin America and the Caribbean suffer the highest economic losses due to climate change through mid-century.
- In the Current Path scenario, global inequality increases 1.4% in 2030 and 6.8% in 2050 due to climate change. In the Worse Climate Path scenario global inequality increases 2.1% in 2030 and 9.9% in 2050. In 2030, Northern Africa and Western Asia experience the greatest increase in inequality and in 2050 Europe and Northern America experience the greatest increase in inequality.

- In the Current Path scenario 10.4 million people are pushed into food insecurity in 2030 and 60.9 million people in 2050 due to climate change. In the Worse Climate Path scenario 101 million people are pushed into food insecurity in 2030 and 366.9 million people in 2050 due to climate change. Looking at food insecurity from a gendered perspective, both scenarios project more women than men to be pushed into food insecurity. In 2030, the Current Path scenario projects 5.5 million more women than men pushed into food insecurity and the Worse Climate Path scenario projects about 16 million more women than men. Central and Southern Asia and Sub-Saharan Africa suffer from the highest increases in food insecurity and female food insecurity in the world.
- In 2030, the Current Path scenario projects 23.9 million people to be pushed into extreme poverty (less than \$2.15 per day), 37.3 million people in poverty (less than \$3.65 per day), and 35.6 million people in moderate poverty (less than \$6.85 per day) due to climate change. The Worse Climate Path scenario projects 61 million people to be pushed into extreme poverty, 102.9 million people pushed into poverty, and 107.6 million people pushed into moderate poverty due to climate change. Sub-Saharan Africa and Central and Southern Asia experience the greatest increases in extreme poverty.
- Women already suffer from higher rates of poverty than men, and this gender-poverty gap is projected to persist into mid-century. The largest disparity between men and women is found at the extreme poverty level where in the Worse Climate Path scenario 2.5 million more women than men are pushed into poverty due to climate change in 2030. Most of the women pushed into extreme poverty and poverty will be living in Sub-Saharan Africa and Central and Southern Asia while most women pushed into moderate poverty will be living in Eastern and South-Eastern Asia and Central and Southern Asia.
- SDG policy interventions help mitigate the negative impacts of climate change across indicators even under the worse climate conditions. In 2030, the Current Path + SDG Push scenario projects the world to gain \$1.8 trillion and in 2050 the world gains \$44.3 trillion. The Worse Climate path + SDG Push scenario reduces the negative economic impact of climate change by halving global losses so that GDP declines just \$1.3

trillion in 2030 and by mid-century the world sees gains in GDP of \$19.5 trillion.

- SDG policy interventions not only reduce the negative impacts of climate change on food security but improve conditions beyond a No Climate attributable effect scenario. The Current Path + SDG Push scenario mitigates the impacts of climate change lifting 141.9 million people out of food insecurity in 2030 and 203.4 million people in 2050. In the Worse Climate path + SDG Push scenario, the effects of climate change are mitigated so that 69.5 million people are lifted out of food insecurity in 2030 and by mid-century the number of people pushed into food security reduces to 3.8 million.
- SDG policies have the potential to help alleviate climate induced poverty as well. The Current Path + SDG Push scenario projects improvements in extreme poverty so that by 2030 3.7 million people are lifted out of extreme poverty in spite of climate change and 45.2 million people are lifted out by 2050. The Worse climate path+ SDG Push scenario reduces the number of people pushed into extreme poverty because of climate change by 32.8 million people in 2030 and 87.3 million people by mid-century.
- Under the Current Path scenario, the goal of no extreme poverty by 2030 will be not achieved. Instead, the global goal will need another 181 years from today to be achieved, at the current rate of progress. The goal is achieved sooner, 97 years from today, under a scenario where the Current Path remains but is mitigated by an SDG Push intervention that includes policies and programmes committed to closing gender gaps and empowering women and girls.
- With targeted policies on female development, SDG interventions help alleviate female poverty even under the worst climate conditions. In the *Worse Climate Path + SDG Push* scenario, the number of women pushed into poverty due to climate change is reduced 73% at the \$2.15 threshold (from 158.3 million to 43.3 million), 75% at the \$3.65 threshold (from 309.7 million to 78.8 million), and 81% at the \$6.85 threshold (from 422 million to 79.6 million).

- Under the Current Path scenario, the goal of reaching zero extreme poverty among women and girls by 2030 will be not achieved. Instead, the global goal for females will need another 175 years from today to be achieved, at the current rate of progress. The goal is achieved sooner, 95 years from today, under a scenario where the Current Path remains but is mitigated by an SDG Push intervention that includes policies and programmes committed to closing gender gaps and empowering women and girls. A worse outlook is projected for the goal of eliminating food insecurity among females. At the current rate of progress, in a Current Path scenario, it will take another 231 years from today to eliminate food insecurity among females globally. An SDG Push package of interventions will ameliorate the situation and shorten the time to 165 years from today.
- The Asia-Pacific region is projected to endure higher rates of poverty due to climate change relative to the world. While the world experiences a 9.1% increase in extreme poverty in 2030, the Asia-Pacific region sees a 18.1% increase under the Worse Climate Path scenario. Women in the Asia-Pacific region are especially vulnerable to climate change as female extreme poverty is projected to increase 17.1% in the Worse Climate Path scenario compared to 9.3% at the world level.

To reduce the risk of climate change, policies need to address barriers to adaptation with a focus on vulnerable groups like the island states of the Asia-Pacific region, low-income households, and women and girls. In areas that are heavily dependent on the environment for income, mostly through agriculture and fishing, polices will need to support the adaptation capabilities of communities to changing conditions and aid in implementing sustainable practices that mitigate future impacts of climate change. Investments in improving the socioeconomic standing of women are necessary to increase the resilience of household and reduce extreme forms of poverty. A focus on agriculture and improving access to food for low-income households will be critical in addressing hunger and undernutrition across the world.

INTRODUCTION

Climate change threatens livelihoods with evidence suggesting that it may increase poverty, hunger, conflict, and gender inequality. The Asia-Pacific (APAC) region is especially vulnerable to climate change with many small island nations facing coastal erosion, saltwater intrusion, and rising ocean temperatures all of which threaten human wellbeing. However, while climate change is expected to have deleterious effects on human development, the magnitude of those effects, especially on the most marginalized women and girls, remains poorly understood.

This report seeks to model the gendered effects of climate change on poverty, productivity, and food insecurity across the globe, with a special focus on the APAC region, and six priority countries: Indonesia, Philippines, Solomon Islands, Samoa, Tonga, and Kiribati. We model the effect of climate change on poverty by sex and age by creating five scenarios built off assumptions in literature to model varying levels of the impact of climate change. To evaluate the effects of climate change we

examine GDP, GDP per capita, Gini Index, food insecurity, and poverty at three thresholds. Research has shown that the impact and coping strategies of communities to climate change is not gender-neutral, women already in more vulnerable socioeconomic standings as compared to men, are more susceptible to experiencing the effects of climate change. To evaluate the impact of climate change on women we examine the age-sex poverty gap and gender gap in food security (Azcona et al., 2022).

This report is structured to begin with background literature on the effects of climate change with a focus on the APAC region and the associated gender dynamics. Next, the methodology is explained along with the model used to forecast the scenarios, keeping in mind the variables which are available in the International Futures Model. The subsequent section presents model results of the impact of climate change on global development by sex followed by a focus on model results for the APAC region. The final sections discuss and summarize the results in a conclusion.

BACKGROUND

The increasing frequency and severity of extreme weather conditions threaten livelihoods around the world in direct and indirect ways. Shifting and unpredictable weather patterns in seasons, increasing average temperatures, drought, flooding, tropical cyclones, hurricanes, and rising sea level are some of the climate change events that continue to jeopardize lives, infrastructure, housing, sources of food, income, and basic services for many families thus exacerbating their risk to increased poverty, hunger, conflict, and gender inequality. While the impact of climate change is present globally, some regions and certain communities are already experiencing disproportionate effects.

Preliminary research shows that the impact and coping strategies of communities because of climate change is not gender neutral and depends heavily on socio-economic wellbeing. In regions where women are largely engaged in subsistence and informal activities, they spend significant hours a week undertaking productive activities like agriculture, weaving and other handicraft, small-scale informal trade, and other unpaid domestic work. Yet, society tends to negate their productive and social labor efforts (Emberson-Bain 1998). Women and children are the most at-risk groups and the factors that heighten their vulnerability to climate change risk compared to men include their limited access to assets and credit, gender-based differences in use of time (women are often the primary caregivers of children and spend disproportionate amounts of time on unpaid domestic labor), and limited access to decision-making and inclusion in policy discussions (Azcona et al. 2022; Fruttero et al. 2023; World Bank Group 2021). The United Nations High Commissioner for Refugees (UNHCR) estimates that women and girls comprise half of internally displaced or stateless persons worldwide (Azcona et al. 2022). Increased climate migration and refugee crises will only entrench disparities, and the norms and

dynamics that promote factors of exclusion and greater instability in crises situations (World Bank Group 2016). Climate change could therefore likely extenuate the suffering of at-risk groups like women and children.

Literature suggests that women and girls could be harmed by climate change in many other ways, including, extreme heat leading to greater risk of maternal health and birth complications (Ha et al. 2017; Kuehn and McCormick 2017), an increase in gender-based violence in the aftermath of natural disasters (Daalen et al. 2022), as well as increases in early and forced marriage (Azcona et al., 2023). Flooding often begets infrastructure challenges, and disruptions to reproductive and maternal health services. In Pakistan, where the catastrophic flooding that began in mid-2022 has killed over 1,700 people and affected nearly 33 million people, disruptions in maternal health services impacted an estimated 650,000 women (Azcona, Bhatt, Brauchle et al., 2023). Higher temperatures and changes in rainfall have been associated with differing educational outcomes for the population generally and for women specifically (Maccini and Yang 2008; Randell and Gray 2019), increases in child marriage and adolescent birth rates, as well as worsening water and fuel collection burdens (Duerto-Valero and Kaul, 2023). Women and girls, especially in poor households or rural communities, are often dependent upon resources from the natural world for food, water, and fuel, and so may be especially affected by loss in biodiversity (Alvarez and Lovera 2016; Bechtel 2010) and by growing water scarcity (Azcona et al. 2022, 2023; Regassa, Givey, and Castillo 2010; World Health Organization 2014).

Climate change is also expected to negatively affect agricultural yields and production. All countries are expected to record a marked drop in agricultural yields. This would have a direct effect on access to quality food as well as food prices in the region. Changes in agricultural production directly impact human welfare in many countries (Anbumozhi et al. 2012) and agriculture (including fishing) forms an important part of the economies of the six countries evaluated here. An increase in floods and droughts would not only make farming unpredictable and difficult but would also affect yields. As a result, food prices will hike making it harder for more people to have access to food thus increasing the risk of hunger in the region, impacting women and girls disproportionately. Women are more likely than men to experience food insecurity, and the gender gap is growing. Moderate or severe food insecurity among adult women rose during the pandemic from 27.5 per cent in 2019 to 31.9 per cent in 2021. Among men, it increased from 25.7 to 27.6 per cent, enlarging the gender gap from 1.8 to 4.3 percentage points (Azcona et al., 2022). In 2022, the global gender gap narrowed from 3.8 percentage points in 2021 (28.6 per cent and 24.8 per cent for women and men, respectively) to 2.4 percentage points in 2022. This respite could be short-lived, however, if crises continue disrupting local and global food supply chains, agricultural productivity and food prices. Without significant progress, close to one in four women and girls (23.5 per cent) will be moderately or severely food insecure by 2030, putting the world far away from ending hunger (Azcona, Bhatt, Fortuny Fillo et al., 2023).

Increased hunger would drive increases in malnutrition. Research shows that undernutrition will be the largest health impact of climate change (FAO 2020). Since 2014, the number of undernourished people has been increasing in the world and this has been linked to progressively extreme weather conditions and the growing number of conflicts as a result of climate induced stress. Access to quality and affordable food is therefore important to avoid hunger and malnutrition. Currently, the world's poorest cannot afford a healthy and nutritious diet and a healthy diet is far more costly than the international poverty line of \$2.15 per day (FAO 2020). Women in food-insecure households face a higher risk of anemia. In 2019, 571 million women of reproductive age (15–49) were anemic, nearly one in three (UN Women, 2022).

In terms of geography, the APAC region with its extensive low-lying coastlines and many small island countries is the most disaster-prone region in the world. Developing countries in the region include some of the most at-risk countries from imminent climate change disaster despite accounting for very little of the share of global cumulative CO2 emissions. Between 1952 and 2020, Indonesia, Philippines, Samoa, Tonga, Kiribati and Solomon Islands have on average contributed a cumulative 0.2% of global CO2 emissions, with nearly all the emissions coming from Indonesia and Philippines (Ritchie, Roser, and Rosado 2020, 2). The Pacific region has small island developing states (SIDS) that are particularly extremely vulnerable to the effects of climate change and have been described as the "frontlines of climate change" (Thomas et al. 2020). According to the World Risk Report of 2021, the Solomon Islands and Tonga are some of the highest disaster risk countries worldwide (BEH 2021). In Tonga, 100 per cent of the population has experienced at least one disaster in the past 12 months, and 93 per

cent have experienced at least 3 (Duerto-Valero et al, 2023). See the Appendix for factsheets on each of the priority countries: Indonesia, Philippines, Solomon Islands, Samoa, Kiribati, and Tonga.

Existing economic vulnerabilities due to geographical remoteness, small markets, dependence on natural resources and agriculture, limited infrastructure, densely populated coastal towns, and poverty exposes the region to even greater risk from climate change. Furthermore, nearly two decades of unequal economic performance and high population growth have increased inequalities in the region. The range of existing challenges present risk factors that will likely interact to magnify the impact of climate change, including for women and children. First, the remoteness and geographical characteristics of the regions could mean that large proportions of the population will be trapped with no means to escape extreme weather conditions such as floods, hurricanes and typhoons thereby resulting in loss of life, while sea level rise is already prompting migration and large numbers of climate refugees. In addition, dependence on its natural resources for fishing and other agricultural activities will be negatively impacted in multiple ways; rising water temperatures could gradually lead to the extinction of some marine species (WEF 2020), erosion of fertile layers of soil could lead to large swathes of land becoming unfit for agriculture, increases in temperatures and aridity are affecting agricultural yield and worsening the use of pesticides and other harmful practices, thus giving way to worse levels of pollution and affecting human health and biodiversity loss; and the alteration of rain patterns is affecting the quality of drinking water sources, irrigation sources, and ecosystem production. Many countries in APAC also rely on cash crops such as oil palm, coffee and rubber, which not only deplete land from its nutrients, but also are substantially affected by increases in temperature. As a result, climate change is likely to contribute to further land transition and biodiversity loss to maintain yields. Furthermore, the destruction of existing limited infrastructure in some areas, accompanied by the limited capacity to adapt, could exacerbate a dire poverty and inequality situation in the region.

As women are disproportionately represented among the poor and in precarious jobs, are less likely to own productive assets and participate in environmental decision-making, their capacities to cope with the effects of climate change may be limited. Since the APAC region is likely to suffer significant challenges from climate change, women in the APAC region are particularly at risk. Women in the region have lower levels of access to financial services, land ownership, as well as news and information to help weather climate change-related crises (UN Women 2022b). The COVID-19 pandemic has already set back recent progress and exacerbated previous gender inequalities, resulting in greater losses in income and formal employment for women than for men (UN Women 2020, 2022a). There is a need to better understand and measure the nexus between gender and the environment in the APAC region (Serrao et al. 2019).

Women and girls are also critical to building resilience. Women have been found to show greater concern about environmental risks and often make up the majority of membership in grassroots environmental organizations (Buckingham 2010). Women have been extensively involved in and effective at political organizing around climate issues – particularly indigenous women. In the year 2003, protesters led largely by Indigenous Adevasi villagers and women, were able to shut down a Coca Cola plant in Plachimada, Kerala, that was damaging the earth by extracting vital water resources (Azcona, Bhatt, Brauchle et al., 2023).

Women's representation and leadership has been associated with lower carbon emissions at a national level (Ergas and York 2012; McKinney and Fulkerson 2015) and building resilience to climate effects on a community level (Aipira, Kidd, and Morioka 2017; Singh, Tabe, and Martin 2022). Research shows that women are particularly adept at navigating sensitive transboundary issues, and this is evidenced by women's leadership around the water crisis, globally (Azcona, Bhatt, Brauchle et al., 2023). Women will likely play a leading role in promoting the transition to renewable energy (Allen, Lyons, and Stephens 2019) and improving technological innovation to respond to climate change (Loarne-Lemaire et al. 2021).

METHODOLOGY

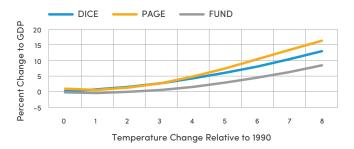
Models that forecast the future of poverty rely on two inputs: overall economic activity (as measured by GDP, household consumption or something related) and its distribution (as measured by the Gini coefficient for income inequality, the ratio of economic activity across income thresholds, or something similar). To model the effects of climate change on poverty, we pursue a multi-pronged approach outlined below. The climate scenarios we rely upon are the representative concentration pathways (RCPs) which capture different longterm trends in temperature and precipitation change at a country level (van Vuuren et al. 2011). The scenarios are forecasted using International Futures (IFs), a fully integrated model that connects systems representing agriculture, climate, conflict, demographics, education, energy, gender, governance, health, infrastructure, international relations and technology related sub-modules and has been developed over many decades led primarily by Barry Hughes (2019).

First, we model the general effect of changing temperature on value add across the economy as embodied in so-called "damage functions". Damage functions establish a relationship between changing patterns of temperature relative to 1990 levels and overall economic output operationalized on a country-basis. There are three main models that have established damage functions: DICE, FUND, and PAGE (Diaz and Moore 2017). These functions are intended to capture a very broad range of climate effects in a single relationship and have been widely used to assess climate financing and more broadly the economic cost of future climate change. These relationships are built up from micro studies into the effects of multiple pathways on economic production (Tol 2009). Figure 1 highlights the relationship between changing patterns of temperature and economic production using various damage function approaches. For this report we take the quadratic relationships outlined in the DICE model (Nordhaus 2018). This relationship shows a non-linear increase in climate effects driven by changing temperature. For a 2 degree rise in temperature change relative to 1990, a 1.3 per cent reduction in GDP is seen. The effect of this

damage function in IFs is to proportionally reduce the annual flow of value-add measured across sectors including agriculture, energy, manufacturing, materials, services, and information and communications technology (ICT).)

FIGURE 1

DICE, FUND, and PAGE relationships between temperature change and reduced GDP (image taken from (Diaz and Moore 2017))



Source: UN Women and the Pardee Center for International Futures using IFs v. 7.97.

Next, we further capture the effect of changing climate patterns on **agriculture production** (in the aggregate) by modeling baseline relationships between changing patterns of temperature and precipitation, as captured in the RCPs (van Vuuren et al. 2011). In addition, we modeled the effect of carbon fertilization on crop yields using the equation below.² These model results directly change household consumption for the poor and in turn increase food insecurity.

$$\textit{ENVYLCHG}_{r,f^{\square}} = (\left(\frac{\textit{CO2}\,\textit{Fert}_t}{100}\right) + 1 * \left(\left(\frac{\textit{DeltaYClimate}_{\textit{R,t}}}{100}\right) + 1\right) + 1) - 1) * 100$$

The direct effect of atmospheric carbon dioxide assumes a linear relationship between changes in the atmospheric concentration from a base year of 1990 and the percentage change in crop yields (Pardee wiki, 2023).

2 Carbon fertilization is the process whereby carbon in the atmosphere aids in plant growth. This is a significant uncertainty in this analysis and more recent agricultural research shows that the effects are different across alternative crop types. IFs represents crop types as a single category, so this was not further analyzed in this report.

To model the effect of climate change on inequality, base results for this analysis come from a recent paper by Paglialunga et al (2022) that shows a 1% change in temperature driving a 0.5 percentage point change in the Gini coefficient on a 100–point scale. We used values from this relationship in the model.

$$Gini_{c,y} = Gini_{c,y} + abs \left(\frac{TempC_{c,y}}{if(TempC_{c,base} = TempC_{c,base})} - 1 \right) * elasticity$$

Where Gini is the Gini coefficient for income inequality, abs is the absolute value, TempC is the country level temperature, subscript c is for country, y is for year, base is for base scenario value.

We created a Current Path scenario that attempts to model a likely path forward given current trends in temperature change. In addition, we created a Worse Climate Path scenario that attempts to capture the impact of high temperature change and tipping points which increase the effect of climate change on economic outcomes, agricultural systems, and inequalities. To do this we drew from literature that quantified the additional impact of climate change tipping points on economic production, showing that if all tipping points were reached the economic costs would be an additional 25% of GDP (Dietz et al. 2021). We also increased the coefficient connecting temperature change and inequality as well as the relationship between climate change and agricultural production. In addition, the Worse Climate Path scenario includes simulated climate shocks on the caloric coefficient of variation applied to

low, low-middle, and upper-middle income countries, increased fertility rates, a heightened gender wage gap and increased female food insecurity (See Annex 1 for full list of parameters in each scenario). To the potential impact that progress on gender equality and development policies could have on the negative effects of climate change, we used an SDG Push scenario (B. B. Hughes et al. 2020). This scenario includes policies that target investments in social protections (e.g., increases in government welfare transfers), governance, digital distribution and innovation, and a green economy. Addressing gaps in girls' education and closing the gender pay gap are also included in the package (See Appendix for full list of parameters). All policies are applied on top of the Worse Climate Path and Current Path scenario assumptions. This allows us to capture the potential impact that development policy could have on mitigating the negative effects of climate change.

A No Climate attributable effect scenario is used in this analysis to serve as a base using which we can measure the impact of each climate scenario. All pathways from climate to development (economy, inequality, and agriculture) are turned off in this scenario. By comparing the Current Path and Worse Climate Path scenarios to the No Climate attributable effect scenario, we can capture the climate-attributable effect of each scenario, in other words, the impact of each scenario that we can attribute to climate change alone. All policy interventions in the climate scenarios begin in 2024. Table 1 describes the various scenarios, including the No Climate attributable effect counterfactual scenario.

TABLE 1. Scenario components broken down by key issue areas

Scenario Name	Economy	Inequality	Agriculture	Gender	Hunger	Development Interventions
No Climate attributable effect	None—GDP at MER increases by 207.8% from 2024–2050.	Remains flat.	None—yields grow by 16.8% from 2024–2050.	None	None	None
Current Path (IFs RCP 4.5)	Nordhaus (2018) DICE Model.	1% change in temperature drives a 0.5 percentage point change in the Gini coefficient on a 100-point scale, which translates to a 6.4% increase by 2050. (Paglialunga et al, 2022)	IFs medium agriculture effect	Reduced fertility rate and improved labor sex wage gap	Improve the distribution of calories	None
Current Path + SDG Push (IFs RCP 4.5)	Nordhaus (2018) DICE Model	1% change in temperature drives a 0.5 percentage point change in the Gini coefficient on a 100-point scale (Paglialunga et al, 2022)	IFs medium agriculture effect	Reduced fertility rate and improved labor sex wage gap	Improve the distribution of calories	SDG Push interventions See, Appendix (Hughes et al, 2021)
Worse Climate Path (IFs RCP 6.0)	Nordhaus (2018) DICE Model; Dietz et al (2021) tipping points	Paglialunga et al (2022), high coef- ficient value	IFs highest agriculture effect	Reduced fertility rate and improved labor sex wage	Improve the distribution of calories	None
Worse Climate Path + SDG Push (IFs RCP 6.0)	Nordhaus (2018) DICE Model; Dietz et al (2021) tipping points	Paglialunga et al (2022), high	IFs highest agriculture effect	Reduced fertility rate and improved labor sex wage	Improve the distribution of calories	SDG Push interventions See, Appendix (Hughes et al, 2021) Investments promoting SDGs

International Futures

These relationships are operationalized using IFs which includes a recursive dynamic computable general equilibrium model structure to forecast long-term patterns of economic growth (Burgess et al. 2022; B. B. Hughes 2019; B. B. Hughes and Narayan 2021; Moyer et al. 2022). It is structured with a Cobb-Douglas production function (1928), Solow residual (1956), six capital sectors along with labor by skill level both initialized using GTAP data (Global Trade Analysis Project 2018). All financial flows are tracked following a social accounting matrix (SAM) (Keuning and de Ruuter 1988) which includes an inputoutput table (Adam 1995).

$$GDP_{c,t} = \sum^{S} [CDA_{c,s,t=1} * TEFF_{c,s} * CAPUT_{c,s} * KS_{c,s}{}^{AlphaS_{c,s}} * LABS_{c,s}{}^{(1-AlphaS_{c,s})}]$$

Where TEFF, KS, LABS and CAPUT are sector specific values of total factor productivity, capital, labor and capacity utilization. CDA is a scaling factor computed in the base year to make model computations consistent with historical data. Subscript c is country, s is economic sector, t is time (Moyer et al. 2022).

IFs forecasts the Gini coefficient for income inequality to capture trends in long-term patterns of the distribution of within-country resources. The approach computes the area under the equality curve (Gastwirth 1972) where the x axis measures the portion of population and y the portion of income. It uses two categories of labor broken down by skill and initialized using GTAP data (Global Trade Analysis Project 2018). The household earned income levels are calculated in the SAM and are driven by the labor share of value added across the six sectors represented in the production function. The formulation modifies earned income to calculate disposable income by augmenting or decrementing the former by government transfers for welfare and pensions, taxation income (consumption tax as well as pension tax), remittances, and returns on household investment.

$$GINIDOM_{c,t} = F(HHINCDIS_{c,t,ls}, HHPOP_{c,t,ls})$$

Where GINIDOM is the domestic gini coefficient for income inequality, HHINCDIS is household disposable income and HHPOP is the household size. Subscript c is country, t is time, and Is is labor by skill level.

The **poverty** module (B. B. Hughes et al. 2009; Moyer et al. 2022) uses inputs from the economic growth module and inequality modules. IFs forecasts poverty by

first taking disposable income, described above, and allocating it to either consumption or savings driven by three factors. First, the model adjusts the consumption/savings ratio based on long-term changing patterns of country development. As GDP per capita of countries rise they slowly increase their share of savings relative to consumption. Next, the model adjusts consumption and savings shares in response to changing demographic age structure because both young and old consume a larger share of disposable income than does the working-age population. Finally, the model adjusts patterns of consumption/savings based on signals sent from sectoral prices and interest rates. Both signals are driven by equilibrating mechanisms connected to underlying inventory stocks.

IFs model uses a structural approach to estimate poverty rates at different per capita household consumption levels (represented in inflation and purchasing power adjusted currency) that draw on a log-normal distribution of household income (Bourguignon 2004; Shorrocks and Wan 2008). Base poverty rate values are initialized using data from PovcalNet (World Bank 2021), which are originally survey based. Changes in the Gini coefficient for household income affect the horizontal shape of the commonly log-normal distribution of household income (B. B. Hughes et al. 2009 see Chapter 4). Levels of household income and consumption are changed by dynamics of the economic module and are described above.

For modeling poverty by age, the target pattern follows that of high-income countries, where there is generally more poverty among young individuals and less poverty among those above 60 years of age. In terms of sex ratios of poverty, the goal is to eliminate poverty among females in excess of that among males. The article presents a modeling logic that utilizes a reference age-group and computes the poverty gender difference based on variables such as educational attainment, wage ratio, crude birth rate, and public welfare payment. The analytical function is obtained through regression using global cross-sectional data, and the model incorporates country shifts over time. The article also discusses the computation of poverty rates by sex within each age group and the calculation of poverty shortfalls using a poverty gap index. Additionally, the model allows for the estimation of the percentage of people living in poverty at different poverty threshold levels. The demographic module in IFs is a standard cohort component model using data from the United

Nations Population Division (UNPD) (2019). Fertility is driven by levels of infant mortality, contraception use, GDP per capita, and average levels of education (B. B. Hughes 2019). Forecast include 21 mortality categories by age and sex that are driven by both multiple and cause specific distal and proximate drivers (B. Hughes et al. 2011; B. B. Hughes et al. 2011; Sellers 2020). Migration assumptions are exogenously imposed from the UNPD medium variant projections.

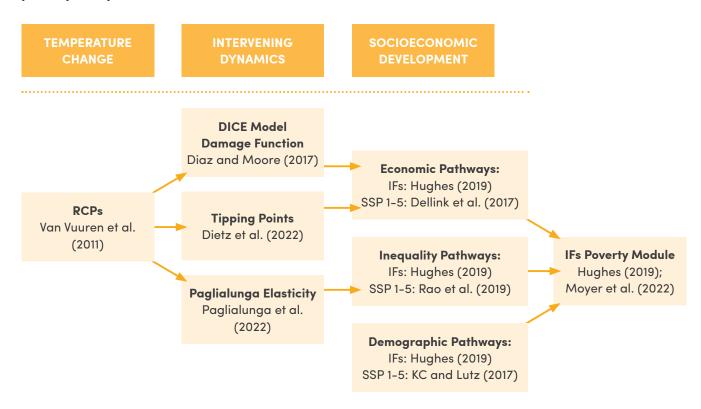
IFs also includes measures of malnutrition for children and for the population, as well as a measure of food insecurity. The Food Insecurity Experience Scale (FIES) is a measure created by the FAO designed to reflect how individuals and households experience food insecurity and is derived from a series of survey questions about food access. Unlike standard measures of malnutrition and undernutrition, the FIES is also disaggregated by gender, allowing a greater understanding of food insecurity for women and girls in particular. The FIES is

forecast in IFs using population malnutrition as well as a sex-disaggregated Human Development Index (HDI) measure, which is further connected to the rest of the model via its constituent components (including GDP per capita, health through life expectancy, and educational attainment).

We represent the effect of changing temperatures on future patterns of economic production through damage functions (Bretschger and Pattakou 2019; Diaz and Moore 2017; Neumann et al. 2020; Nordhaus 2018; Tol 2009; Wouter Botzen and van den Bergh 2012). The RCP temperature trajectories are used to measure median temperature change relative to pre-industrial levels using a 10-year moving average (Moyer, Pirzadeh, Irfan et. al 2023.). These then feed into three different pathways of socio-economic development: socio-economic, inequality and demographic pathways which are the main drivers of poverty in the International Futures model (Figure 2).

FIGURE 2

Temperature, intervening dynamics, and socioeconomic development pathways used in the poverty analysis



Source: Moyer, Pirzadeh, Irfan et. al 2023. How many people will live in poverty because of climate change? A macro-level projection analysis to 2070.

Comparison to Other Endeavors Quantifying Future Impacts of Climate Change

This study has taken a top-down approach to modeling future impacts of climate change on various aspects of human development, the main outcome variable being poverty and food insecurity. Our projections show a range in the number of people pushed into extreme poverty in 2030 of 23.9 to 61 million. Other endeavors have attempted to model the same, the main piece in this space coming from the World Bank (Hallegatte et al. 2016), however their approach differs from that which we have taken. Hallegatte et al (2016) conduct a bottom-up approach using micro-simulation techniques that draw upon household level consumption data to model poverty from 2014 to 2030 finding that up to 122 million people could be pushed into extreme poverty in 2030. Using these techniques, they can forecast the pathway of low-income individuals in terms of health, food security, adaptability, and employment that are then weighted to represent entire populations in a country. This allows for the capture of nuances at a micro-scale accounting for household level differences that the IFs modeling approach does not capture.

Another study in this space is the flagship publication "The State of Food Security in the World" released by the Food and Agriculture Organization (FAO) in 2022. Their approach extrapolates recent trends in supply of food, population, and inequality in food access to forecast future rates of food insecurity to 2030. Both of our modeling approaches include the impact of the recent pandemic which has already set back progress towards achieving zero hunger in 2030. The FAO finds that up to 8% of the world population could still be undernourished in 2030. Our approach to modeling food insecurity directly connects climate change via changing patterns of temperature and precipitation which are linked to agricultural production and income. We use the Food Insecurity Experience Scale (FIES) as the main indicator to measure food insecurity in this report, a new index which captures hunger, nutrition, eating habits and frequency for a more holistic perspective on the experience of food insecurity (FAO 2022). Our model projects that up to 24% of the world population could still be experiencing food insecurity in 2030.

THE EFFECT OF CLIMATE CHANGE ON DEVELOPMENT

Forecasts of the five scenarios used in this report are presented at the global level and by UN SDG region in this section. The behavior of each scenario is discussed with an analysis of the climate-attributable effects. First, GDP is presented, followed by inequality, then food insecurity, and poverty at three threshold levels (\$2.15, \$3.65, and \$6.85). The final section discusses the effect of climate change on the age-sex poverty gap.

Climate Effects on Economy

Figure 3 shows the behavior of each scenario for global GDP measured in market exchange rates (in 2017 USD).

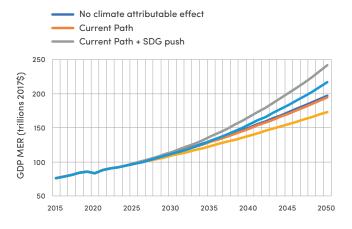
In 2015, the first year of initialization in the model, global GDP is \$76.7 trillion. Across all scenarios the world is projected to see an overall increase in GDP through mid-century. In the *No Climate attributable effect* scenario, GDP could reach \$197.3 trillion by mid-century. In the *Current Path* and *Worse Climate Path* scenario however, global GDP falls relative to the *No Climate attributable effect* scenario.

Development policies can mitigate the effect. Under the SDG push scenarios global GDP is higher relative to the No Climate attributable effect scenario. In the Current Path scenario, GDP reaches \$194.8 trillion and in the

Worse Climate Path scenario it reaches just \$173.4 trillion in 2050. The Current Path + SDG Push scenario however projects global GDP to reach \$241.6 trillion and in the Worse Climate Path+ SDG Push scenario it is projected to reach \$216.9 trillion in 2050. Development policies that broadly address SDG achievement, including key interventions in gender inequalities such as pay gaps and gaps in education, along with other core interventions such as investments in access to water and sanitation mitigate the climate change impact on GDP and boost economic development, even when compared to the No Climate attributable effect counterfactual.

FIGURE 3

Global trends in GDP measured in market exchange rates in trillions of 2017 USD across scenarios



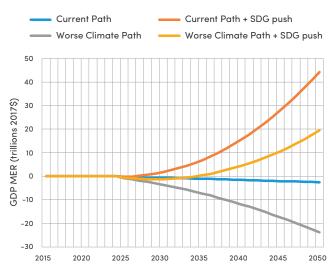
Source: UN Women and the Pardee Center for International Futures using IFs v. 7.97.

Figure 4 shows the climate–attributable effect of each scenario on global GDP in absolute dollar terms. In the Current Path scenario, GDP declines by \$675 billion in 2030 and \$2.5 trillion in 2050. The Current Path mitigated by the SDG push interventions however sees these declines replaced by a boost, gaining the world \$1.8 trillion in 2030 and \$44.3 trillion in 2050. The Worse Climate Path scenario projects an even greater economic impact from climate change as GDP declines \$3.7 trillion in 2030 and \$23.9 trillion in 2050. The Worse Climate Path + SDG Push strategy lessens the impacts of climate change on the economy by halving global losses so that

GDP declines \$1.3 trillion in 2030 and by mid-century the world sees gains in GDP of \$19.5 trillion.

FIGURE 4

Climate attributable effect on global GDP measured in market exchange rates in trillions of 2017 USD



Source: UN Women and the Pardee Center for International Futures using IFs v. 7.97.

Figure 5 shows the climate-attributable effect of the Worse Climate Path scenario, with and without the SDG push mitigation strategy in 2050 across regions measured as the percent change. Sub-Saharan Africa (SSA) suffers the greatest loss in GDP under the Worse Climate Path scenario at a 16.6% decline, equivalent to \$1.4 trillion lost. SSA is followed by Oceania (excluding Australia and New Zealand) and Central and Southern Asia (CSA) which suffers a 14.8% and 13.5% reduction in GDP equivalent to \$2.8 trillion lost for Central and Southern Asia. In a Worse Climate Path world with SDG Push interventions impacts from climate change on the economy are mitigated so that by 2050 all regions see gains in GDP. In 2050, Oceania (excluding Australia and New Zealand) at 18.4%, Latin America and the Caribbean (LAC) (16.1%) and SSA (13.7%) experience the greatest gains in GDP with an additional \$0.02 trillion, \$1.8 trillion and \$1.2 trillion respectively.



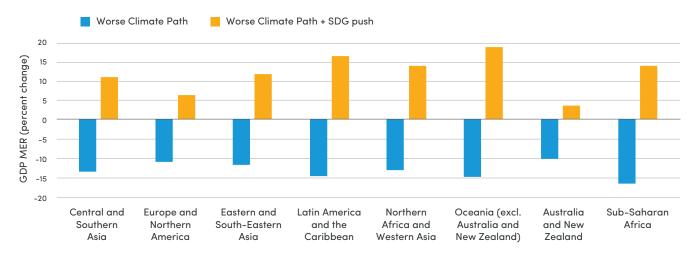


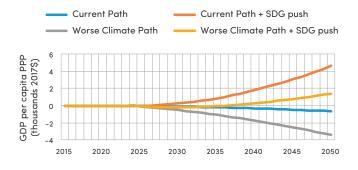
Figure 6 shows the climate-attributable effect of each scenario on global GDP per capita measured in purchasing power parity (in 2017 USD). In 2015, global GDP per capita is \$15,270. In the No Climate attributable effect scenario GDP per capita reaches \$18,390 in 2030 and \$25,680 in 2050. The Current Path scenario projects a decline in GDP per capita relative to the No Climate attributable effect scenario of \$106 in 2030 and \$661 in 2050.The Current Path + SDG Push scenario mitigates the effects of climate change on GDP per capita gaining the world an additional \$242 in 2030 and \$4,600 in 2050. In the Worse Climate Path scenario, global GDP per capita declines \$543 in 2030 and up to \$3,418 by mid-century. In the Worse Climate Path + SDG Push scenario losses due to climate change are reduced as global GDP per capita falls just \$201 in 2030 and by mid-century the world gains an additional \$1,400.

From a regional perspective, Figure 7 shows that SSA will suffer the greatest losses in GDP per capita with a reduction of 14.7% equivalent to \$1,106 lost in 2050 due to climate change. SSA is followed by North Africa and Western Asia (NAWA) which sees a 13.2% decline in GDP per capita in 2050 equivalent to \$2,916 lost. The Worse Climate Path + SDG Push scenario mitigates the economic impact from climate change allowing all regions

to see gains in GDP per capita by mid-century. Oceania (excluding Australia and New Zealand) at 9.4%, LAC (8.1%) and NAWA (8%) see the largest gains in GDP per capita equivalent to an additional \$1,687 and \$1,756 respectively for LAC and NAWA.

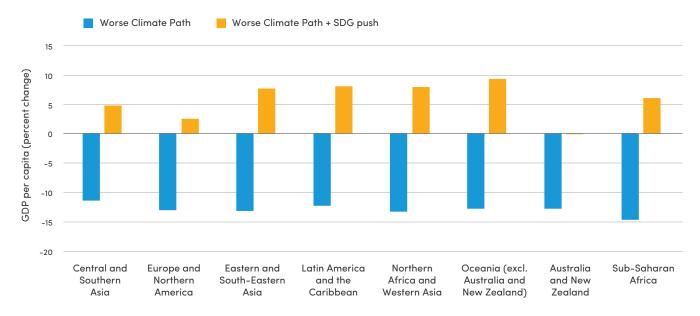
FIGURE 6

Climate–attributable effect on global GDP per capita across all scenarios measured in purchasing power parity in thousands of 2017 USD



Source: UN Women and the Pardee Center for International Futures using IFs v. 7.97.





Climate Effects on Inequality

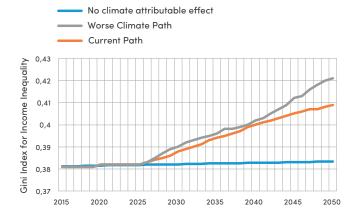
Figure 8 shows the behavior of each scenario for the global Gini Index measured on a 1-point scale. In 2015, the global Gini Index is 0.381. The SDG Push scenarios are excluded because they do not include interventions that directly impact the Gini co-efficient. In 2030, the Current Path scenario increases to 0.388 and the Worse Climate Path scenario increases to 0.39. By mid-century, the Current Path scenario projects Gini to reach 0.409 which is 7% higher than the No Climate attributable effect scenario in 2050 and the Worse Climate Path scenario projects Gini to reach 0.421 or 10% higher than the No Climate attributable effect scenario.

Figure 9 looks at the climate-attributable effect of the Worse Climate Path scenario on the Gini Index across regions measured as a percent change relative to the No Climate attributable effect scenario. In 2030, NAWA experiences the greatest increase in inequality at 2.7% followed by Eastern and South-Eastern Asia (ESEA) at 2.3%, Central and Southern Asia (CSA) at 2.2%, Oceania at 2%, SSA at 2%, Europe and North America (ENA) at 1.7%, and LAC at 1.4%. By mid-century ENA experiences

the greatest increase in Gini at 13.1% followed closely by NAWA which sees a 12% increase in Gini.

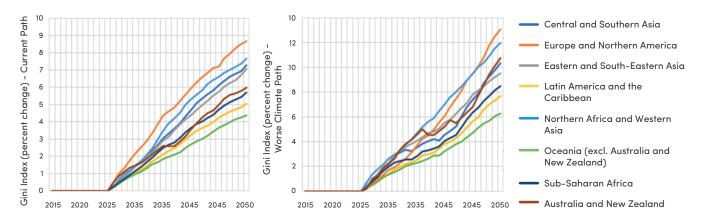
FIGURE 8

Global trends in inequality measured using the Gini Index across scenarios



Source: UN Women and the Pardee Center for International Futures using IFs v. 7.97.





Climate Effects on Food Insecurity

In partnership with UN Women, a new variable was added to the IFs model that attempts to capture a more holistic perspective on food insecurity by disaggregating the experience by sex. The Food Insecurity Experience Scale (FIES) is a measure of food security obtained through individual and household level surveys that seek to capture experiences surrounding hunger, nutrition, and eating habits and frequency (FAO 2022). FIES is measured as the total percent of the population that is experiencing food insecurity. In 2015, 28% of the population equivalent to 2.1 billion people are experiencing food insecurity. The forecasts indicate that the world will make progress towards improving food security, but climate change could significantly slow down this progress.

Figure 10a shows the climate-attributable effect of each scenario on the global population experiencing food insecurity measured in millions. In the *Current Path* scenario 10.4 million people are pushed into food insecurity in 2030 and 60.9 million people in 2050. The *Current Path + SDG Push* scenario mitigates the impacts of climate change lifting 141.9 million people out of food insecurity in 2030 and 203.4 million people in 2050. The *Worse Climate Path* scenario projects 101 million people pushed into food insecurity due to climate change in 2030 and 366.9 million people in 2050. In the *Worse Climate Path + SDG Push* scenario, the effects of climate

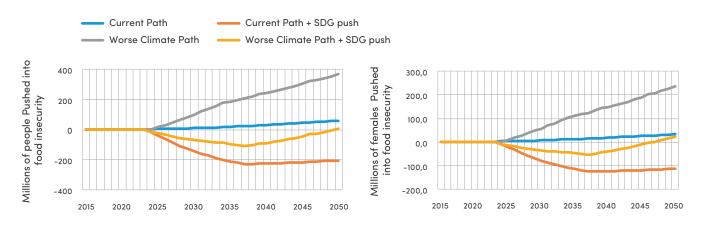
change are mitigated so that 69.5 million people are lifted out of food insecurity in 2030 and by mid-century the number of people pushed into food security reduces to 3.8 million.

The FIES also allows us to capture food insecurity by sex. In 2015, the prevalence of food insecurity is higher among women at 29.1% of the female population compared to 26.8% of the male population. The scenarios have shown that the world is projected to make progress towards lowering the prevalence of food insecurity, however, the gap between women and men experiencing food insecurity will remain through mid-century and climate change is projected to hinder progress towards closing this gap. Figure 10 b shows the climate-attributable effect of each scenario on the global population of women and girls experiencing food insecurity measured in millions. In the Current Path scenario 7.5 million women and girls are pushed into food insecurity in 2030 and 33 million in 2050. Figure 11 shows the climate-attributable effect of each scenario measured in millions, comparing females and males in 2030. In the Current Path scenario, 5.5 million more females than males are pushed into food insecurity by 2030 (10.4 million people - 7.5 million females vs 2.5 million males). The Worse Climate Path scenario projects an even greater impact on women as 16 million more females than males are pushed into food insecurity for a total 100 million additional people experiencing food insecurity by 2030. The SDG push package of development policies significantly

reduce the impact of climate change on food security for both women and men, however, by these policies are projected to pull more women out of food insecurity than men. In the *Current Path + SDG Push* scenario 77.6 million women and 65.5 million men are pulled out of food insecurity. In the *Worse Climate Path + SDG Push* scenario 36.4 million women and 33.8 million men are lifted out of food insecurity.

FIGURE 10

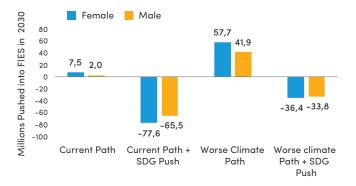
Climate-attributable effect of each scenario on global food insecurity measured in millions of people



Source: UN Women and the Pardee Center for International Futures using IFs v. 7.97.

FIGURE 11

Climate–attributable effect of each scenario on females and males in 2030 measured in millions across each scenario



Source: UN Women and the Pardee Center for International Futures using IFs v. 7.97.

If we look at the distribution of food insecurity regionally, Table 2 shows that in the *Worse Climate Path* scenario, most people experiencing food insecurity due to climate change in 2030 will be living in CSA (36.1 million)

and SSA (35.9 million). These regions already suffer from the highest rates of food insecurity in the world at about 54% of the population in SSA and 30.4% of the population in CSA.

The Worse Climate Path + SDG Push scenario projects significant advancements in food security by mitigating the impact of climate change to improve conditions that surpass the No Climate attributable effect scenario. To capture the full effect of development interventions, we look at the difference between the Worse Climate Path scenario and the Worse Climate Path + SDG Push scenario. This gives us the total number of people lifted out of food insecurity due to SDG interventions under the worst climate conditions (see values in parentheses, Table 2). Naturally as CSA and SSA have the highest prevalence of food insecurity they see the largest absolute reductions under the Worse Climate Path + SDG Push scenario. SSA sees 28.4 million people lifted out of food insecurity (64.3 million total) and CSA sees 24.4 million people lifted out of food insecurity (60.4 million total).

TABLE 2. Climate-attributable effect of the Worse Climate Path and SDG Push scenario in 2030 relative to the No Climate attributable effect scenario measured in millions of people for each region. Negative values indicate people lifted out of food insecurity and positive values indicate people pushed into food insecurity. Values in parentheses represent the total number of people pulled out of food insecurity in the SDG Push scenario relative to the Worse Climate Path scenario.

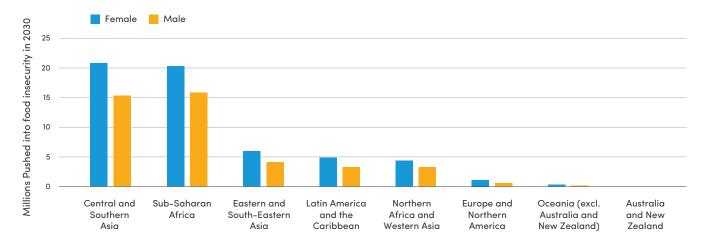
	CSA	ENA	ESEA	LAC	NAWA	Oceania	SSA
Worse Climate Path (no EmpowerGender package)	36.1	1.6	10.2	8.1	7.5	0.4	35.9
Worse Climate Path (with EmpowerGender package of	-24.4	-1.4	-6.5	-4.1	-5.1	-0.3	-28.4
interventions)	(-60.4)	(-2.9)	(-16.7)	(-12.2)	(-12.7)	(-0.7)	(-64.3)

Figure 12 shows the climate-attributable effect of the Worse Climate Path scenario by sex in 2030 across regions. Out of the 57.7 million women pushed into food insecurity in 2030 due to climate change, 36% will live in CSA and 35% will live in SSA. CSA suffers the greatest overall increase in female food insecurity as 20.8 million women are pushed into food insecurity which is 5.5 million more than men. SSA follows with 20.2 million women pushed into food insecurity, 4.4 million more than men.

In a Worse Climate Path world with SDG Push interventions, females and males are pulled out of food insecurity even in the worst climate conditions. Figure 13 shows the effect by 2030 of the SDG Push interventions in a Worse Climate Path scenario for females and males relative to the No Climate attributable effect scenario. SSA experiences the highest number of females pulled out of food insecurity at 15.1 million, followed by CSA which sees 12.5 million females lifted out of food insecurity.

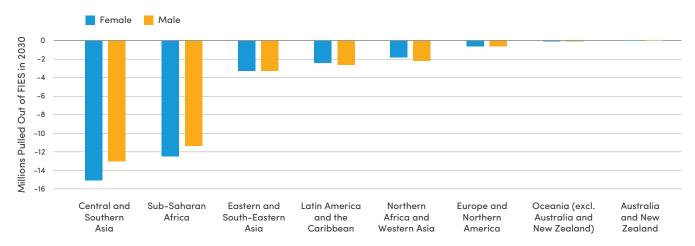
FIGURE 12

Climate-attributable effect of the Worse Climate Path scenario in 2030 on females and males measured in millions across regions



Source: UN Women and the Pardee Center for International Futures using IFs v. 7.97.





Climate Effects on Poverty

Levels of poverty are measured by various thresholds defined by the World Bank. In this analysis we look at extreme poverty measured as those living on less than \$2.15 per day. Poverty is measured as less than \$3.65 per day and moderate poverty is measured as less than \$6.85 per day (World Bank 2022). The following sections examine the scenarios across all three poverty thresholds starting with extreme poverty.

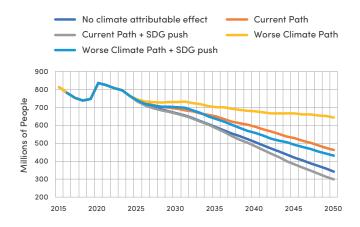
\$2.15 Poverty Threshold

Figure 14 shows the behavior of each scenario for the global number of people living in extreme poverty. In 2015, 813 million people live in extreme poverty nearly 11% of the global population. The overall long-term trend, irrespective of the scenario, indicates a downward trajectory in extreme poverty, however climate change could significantly slow down this progress. In the No Climate attributable effect scenario extreme poverty decreases to 344.2 million in 2050 equivalent to 3.6% of the global population. The Current Path scenario projects 463.9 million people in extreme poverty in 2050 (4.7% of global population). The Worse Climate Path scenario projects 644.5 million people living in extreme poverty in 2050 (6.4% of global population). Development policies have the potential to mitigate effects of climate change on the impoverished. The Current Path + SDG Push reduces

extreme poverty below the level of the *No Climate attributable effect* scenario and projects 299.0 million people to live in extreme poverty in 2050 equivalent to 3% of the global population. The *Worse Climate Path+SDG Push* projects 431.2 million people living in extreme poverty (4.3% of global population).

FIGURE 14

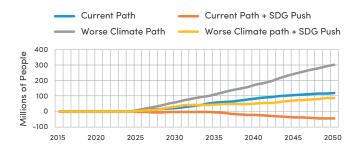
Global trends in extreme poverty (less than \$2.15 per day) measured in millions across all scenarios



Source: UN Women and the Pardee Center for International Futures using IFs v. 7.97.

FIGURE 15

Climate–attributable effect on global extreme poverty (less than \$2.15 per day) measured in millions across scenarios



Source: UN Women and the Pardee Center for International Futures using IFs v. 7.97.

Figure 15 shows the climate-attributable effect of each scenario on the global population of extreme poverty relative to the *No Climate attributable effect* scenario. The *Current Path* scenario pushes an additional 23.9 million people into extreme poverty in 2030 and 119.6 million people in 2050. The *Worse Climate Path* scenario pushes 61 million people into extreme poverty in

2030 and 300.3 million in 2050. The *Current Path + SDG Push* scenario projects improvements in extreme poverty so that by 2030 3.7 million people are lifted out of extreme poverty and 45.2 million people are lifted out in 2050 relative to the *Current Path*. The *Worse Climate Path + SDG Push* scenario leads to 32.8 million people pushed into poverty in 2030 and 87.0 million people by mid-century.

Table 3 shows the regional distribution of climate induced extreme poverty in the Worse Climate Path and Worse Climate Path + SDG Push scenario. Most people pushed into extreme poverty due to climate change in 2030 are projected to live in SSA (27.8 million) and CSA (20.9 million). In a Worse Climate Path world with SDG Push policies, extreme poverty is reduced 57% in SSA in 2030 as just 11.6 million people are pushed into extreme poverty and 41% in CSA as 12.3 million people are pushed into extreme poverty. By mid-century in the Worse Climate Path scenario, SSA (189.6 million) and CSA (50.9 million) are still suffering the greatest increases in extreme poverty due to climate change. SDG Push interventions significantly reduce the number of people pushed into extreme poverty in 2050 by 76% in SSA (43.6 million) and 68% in CSA (16.2 million).

TABLE 3. Climate–attributable effect of the Worst Climate Path and Worse Climate Path + SDG Push scenarios in 2030 and 2050 on extreme poverty (less than \$2.15 per day) measured in millions across regions

		CSA	ENA	ESEA	LAC	NAWA	Oceania (excl. ANZ)	SSA	ANZ	Global
	Worse Climate Path	20.9	1.7	4.6	3.9	2.8	0.2	27.8	0.04	61.9
2030	Worse Climate Path + SDG Push	12.3	1.3	3.3	2.6	1.6	0.2	11.6	0.03	32.88
	Worse Climate Path	50.9	9.7	10.9	24.0	18.8	0.9	189.6	0.09	300.3
2050	Worse Climate Path + SDG Push	16.2	5.1	4.0	10.5	7.3	0.6	43.6	0.04	87.4

Source: UN Women and the Pardee Center for International Futures using IFs v. 7.97.

\$3.65 Poverty Threshold

In 2015, 2.2 billion people live in poverty measured at the \$3.65 per day threshold. In the *No Climate attributable effect* scenario, the number of people living in poverty in 2050 reaches 1.1 billion people. In the *Current Path* scenario, the number of people living in poverty in 2050

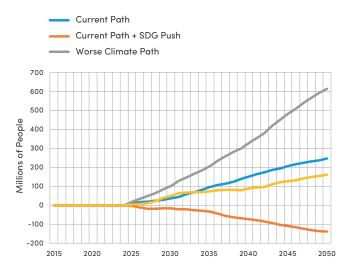
reaches 1.3 billion people, the Worse Climate Path scenario reaches 1.7 billion, the Current Path + SDG Push scenario reaches 918.5 million people, and the Worse Climate Path + SDG Push scenario reaches 1.2 billion people. Figure 16 shows the climate-attributable effect of each scenario on poverty relative to the No Climate attributable effect scenario. In the Current Path scenario

37.3 million people are pushed into poverty in 2030 and 247.5 million people in 2050. The *Worse Climate Path* scenario projects an additional 102.9 million people pushed into poverty in 2030 and 613.6 million people in 2050. In the *Current Path + SDG Push* scenario, the world sees improvements in poverty as 16.5 million people are lifted out of poverty in 2030 and 136.7 million people in 2050 relative to the *No Climate attributable effect* world. In the *Worse Climate Path + SDG Push* scenario, the number of people pushed into poverty due to climate change is 49.4 million in 2030 and 161.4 million in 2050.

Table 4 shows the regional distribution of climate induced poverty in the *Worse Climate Path* and *Worse Climate Path + SDG Push* scenarios. Most people pushed into poverty due to climate change in 2030 will be living in CSA (46.6 million) and SSA (23.9 million). *SDG Push* interventions can significantly reduce the number of people pushed into poverty by 55% in CSA (20.9 million) and 70% in SSA (7.2 million). In 2050, it is still CSA (210.3 million) and SSA (264.2 million) suffering the greatest increases in climate induced poverty. My mid-century *SDG Push* interventions reduce the number of people pushed into poverty by 72% in CSA (59.3 million) and 81% in SSA (50.3 million).

FIGURE 16

Climate-attributable effect on global poverty (less than \$3.65 per day) measured in millions across scenarios



Source: UN Women and the Pardee Center for International Futures using IFs v. 7.97.

TABLE 4. Climate-attributable effect of the Worse Climate Path and Worse Climate Path + SDG Push scenarios in 2030 and 2050 on poverty (less than \$3.65 per day) measured in millions across regions

		CSA	ENA	ESEA	LAC	NAWA	Oceania (excl. ANZ)	ANZ	SSA	Global
	Worse Climate Path	46.6	2.3	16.4	6.9	6.5	0.3	0.05	23.9	102.9
2030	Worse Climate Path + SDG Push	20.9	1.7	11.3	4.3	3.7	0.2	0.04	7.2	49.4
	Worse Climate Path	210.3	13.1	41.6	42.3	40.4	1.6	0.1	264.2	613.6
2050	Worse Climate Path + SDG Push	59.3	6.8	13.3	17.1	13.5	1.0	0.1	50.3	161.4

Source: UN Women and the Pardee Center for International Futures using IFs v. 7.97.

\$6.85 Poverty Threshold

In 2015, 3.8 billion people live in moderate poverty measured as living on less than \$6.85 per day. In the No Climate attributable effect scenario, the number of people living in moderate poverty in 2050 reaches 2.7 billion, the Current Path scenario reaches 3 billion, the Worse Climate Path scenario reaches 3.5 billion, the Current Path + SDG Push scenario reaches 2.4 billion,

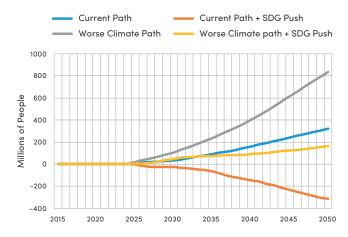
and the Worse Climate Path + SDG Push scenario reaches 2.9 billion. Figure 17 shows the climate-attributable effect of each scenario on moderate poverty relative to the No Climate attributable effect scenario. In the Current Path scenario 35.6 million people are pushed into moderate poverty in 2030 and 321.8 million in 2050. The Worse Climate Path scenario projects an additional 133.6 million people pushed into moderate poverty in 2030 and 835.3 million people in 2050. In the Current

Path + SDG Push scenario, the world sees improvements in moderate poverty as 26 million people are lifted out of poverty in 2030 and 315.1 million people in 2050. In the Worse Climate Path + SDG Push scenario, the number of people pushed into moderate poverty reduces to 47.5 million in 2030 and 163.5 million in 2050.

Table 5 shows the regional distribution of climate induced moderate poverty in the *Worse Climate Path* and *Worse Climate Path + SDG Push* scenarios. Most people pushed into moderate poverty due to climate change in 2030 will be living in ESEA (37.9 million) and CSA (31.6 million). In a *Worse Climate Path* world with *SDG Push* interventions, climate-attributable moderate poverty is reduced 35% in ESEA in 2030 (24.7 million) and 78% in CSA (6.8 million). By mid-century, CSA (305.7 million) and SSA (261 million) are suffering the greatest increases in moderate poverty due to climate change. *SDG Push* interventions significantly reduce the number of people pushed into moderate poverty in 2050 by 84% in CSA (48.9 million) and 87% in SSA (33.3 million).

FIGURE 17

Climate-attributable effect on global moderate poverty (less than \$6.85 per day) measured in millions across scenarios



Source: UN Women and the Pardee Center for International Futures using IFs v. 7.97.

TABLE 5. Climate–attributable effect of the Worse Climate Path and Worse Climate Path + SDG Push scenarios in 2030 and 2050 on moderate poverty (less than \$6.85 per day) measured in millions across regions

		CSA	ENA	ESEA	LAC	NAWA	Oceania (excl. ANZ)	ANZ	SSA	Global
	Worse Climate Path	31.6	6.1	37.9	10.5	8.7	0.2	0.1	12.5	107.6
2030	Worse Climate Path + SDG Push	6.8	4.4	24.7	5.9	3.8	0.2	0.1	1.7	47.5
	Worse Climate Path	305.7	29.9	102.2	67.4	66.6	1.9	0.2	261.0	834.9
2050	Worse Climate Path + SDG Push	48.9	15.7	25.6	22.9	15.8	1.1	0.1	33.3	163.5

Source: UN Women and the Pardee Center for International Futures using IFs v. 7.97.

Climate Effects on the Age-Sex Poverty Gap

This section looks at the effect of climate change across poverty thresholds with a gendered lens. Literature shows that women are especially vulnerable to the impacts of climate change. The 25 to 34 age group is often where the poverty disparity between men and women is greatest, also known as the age-sex poverty gap. The following analysis discusses poverty from a gendered

perspective and presents forecasts of the age-sex poverty gap across thresholds.

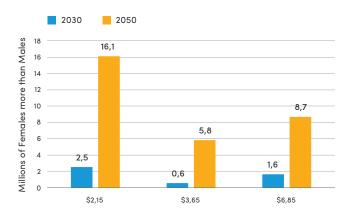
The world rate of poverty amongst women is higher than that of men across each poverty threshold. In 2015, 11.4% of women and girls live in extreme poverty (\$2.15 per day) compared to 10.5% of men and boys. The difference is even higher in the 25–34 age group as 10.3% of women live in extreme poverty compared to 8.2% of men. At the poverty threshold (\$3.65 per day), 29.4% of

women live in poverty compared to 28.5% of men. The gap widens in the 25–34 age group as 28.3% of women live in poverty compared to 25.9% of men. At the moderate poverty threshold (\$6.85 per day), 52% of women live in moderate poverty compared to 51.2% of men. The gap widens in the 25–34 age group as 51% of women live in moderate poverty compared to 48.9% of men.

Climate change is projected to continue to push women into poverty across thresholds. Figure 18 shows how many more women than men are pushed into poverty at each threshold due to climate change in the *Worse Climate Path* scenario. The greatest disparity between men and women is at the lowest poverty threshold where, by mid-century, 16.1 million more women than men are living in extreme poverty due to climate change. Women continue to be affected by climate change at a disproportionate rate than men at higher poverty thresholds. By 2050, 5.8 million more women than men are pushed under the \$3.65 threshold and 8.7 million more women than men are pushed under the \$6.85 threshold.

FIGURE 18

Additional number of females pushed into poverty relative to males pushed into poverty in the Worse Climate Path scenario at each threshold measured in millions in 2030 and 2050

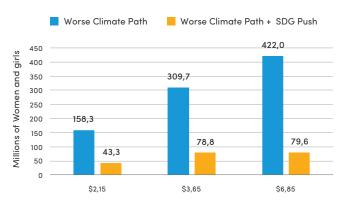


Source: UN Women and the Pardee Center for International Futures using IFs v. 7.97.

SDG policy interventions that target the development of women and girls help alleviate female poverty even under the worst climate conditions. Figure 19 shows the total number of women pushed into poverty at each threshold in 2050 in the *Worse Climate Path* and *Worse Climate Path + SDG Push* scenarios. In a *Worse Climate Path* world with *SDG Push* interventions, the effect of climate change on female poverty is reduced 73% at the \$2.15 threshold (from 158.3 million to 43.3 million), 75% at the \$3.65 threshold (from 309.7 million to 78.8 million), and 81% at the \$6.85 threshold (from 422 million to 79.6 million). Table 6 shows the total number of men and women pushed into poverty at each threshold.

FIGURE 19

Climate–attributable women pushed into poverty in 2050 in the High Impact and High Impact SDG Push scenarios measured in millions



Source: UN Women and the Pardee Center for International Futures using IFs v. 7.97.

The SDG Push interventions exhibit a lower incidence of female individuals being pushed into poverty, both in comparison to the High Impact interventions and in comparison, to their male counterparts. This differential impact can be attributed to the deliberate focus of the SDG Push interventions on addressing persistent gender disparities in various domains, such as education and pay. By actively targeting these long-standing gender gaps, the SDG Push interventions aim to provide greater support to women than men, resulting in a more pronounced positive effect on women's socio-economic outcomes. This emphasis on rectifying gender imbalances contributes to the observed disparity in impact between women and men.

TABLE 6. Climate-attributable females and males pushed into poverty at each threshold in the Worse Climate Path and Worse Climate Path + SDG Push scenarios measured in millions

		20	30	2050		
		Female	Male	Female	Male	
\$2.15	Worse Climate Path	31.7	29.2	158.3	142.2	
\$2.15	Worse Climate Path + SDG Push	15.4	17.4	43.3	44.1	
62.65	Worse Climate Path	51.7	51.2	309.7	303.9	
\$3.65	Worse Climate Path + SDG Push	23.9	25.5	78.8	82.6	
66.05	Worse Climate Path	54.6	53.0	422.0	413.3	
\$6.85	Worse Climate Path + SDG Push	23.0	24.5	79.6	83.9	

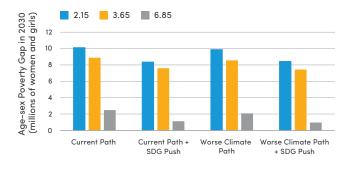
Climate change is also projected to slow down progress towards closing the age-sex poverty gap. Figure 20 shows forecasts of the age-sex poverty gap in 2030. Across each poverty threshold and in each scenario, projections show that more women aged 25 to 34 will be living in poverty than men. At the \$2.15 threshold, the age-sex poverty gap climbs to 10.1 million more women than men. At the \$3.65 threshold, the age-sex poverty gap climbs up to 8.9 million more women than men, and at the moderate poverty line the gap reaches 2.9 million more women than men. SDG policies are projected to narrow the age-sex poverty gap to a low of 8.4 million at the extreme poverty line, 7.5 million at the poverty line, and 944,000 at the moderate poverty line.

Table 7 shows the total number (in millions) of females and males in the 25 to 34 age group pushed into poverty due to climate change across scenarios for each poverty threshold. All scenarios project that climate change will increase the number of people aged 25 to 34 living in poverty except for the *Current Path + SDG Push* scenario which sees improvements in reducing poverty across each threshold. In 2030, at the \$2.15 threshold 1.7 to 4.3 million females are pushed into poverty. At the \$3.65 threshold in 2030, 2.8 to 7.4 million females are pushed into poverty. At the \$6.85 threshold in 2030, 1.9 to 7.1 million females are pushed into poverty the *Current Path + SDG Push* scenario projects improvements in poverty across each threshold so that by 2030 800,000 females are lifted out of extreme poverty, 1.9 million females are

lifted out of poverty, and 3 million females are lifted out of moderate poverty. The *Worse Climate Path + SDG Push* scenario mitigates the impact of climate change so that by 2030 climate–attributable female poverty at the \$2.15 and \$3.65 thresholds reduces 62% and 73% at the \$6.85 threshold.

FIGURE 20

World age-sex poverty gap in 2030 for each scenario across each threshold measured in millions (25–34 age group). Positive numbers indicate more women than men living in poverty



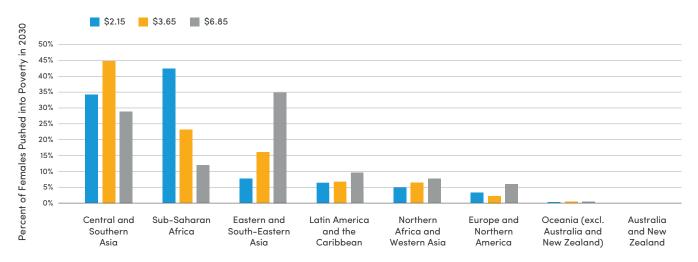
Source: UN Women and the Pardee Center for International Futures using IFs v. 7.97.

TABLE 7. Climate attributable number of females and males in 2030 and 2050 for each poverty threshold across each scenario measured in millions. Negative values indicate people lifted out of poverty relative to the No Climate attributable effect scenario

		20:	30	20)50
		Female	Male	Female	Male
	Current Path	2.0	1.1	7.9	5.8
\$2.15	Current Path + SDG Push	-0.8	0.0	-4.1	-3.0
\$2.15	Worse Climate Path	4.3	3.6	19.5	14.7
	Worse Climate Path + SDG Push	1.7	2.4	4.1	4.3
	Current Path	2.9	2.2	14.8	13.4
\$3.65	Current Path + SDG Push	-1.9	-1.3	-11.4	-9.9
33.6 5	Worse Climate Path	7.4	7.0	36.5	33.6
	Worse Climate Path + SDG Push	2.8	3.5	6.0	7.5
	Current Path	2.4	1.6	17.6	16.0
\$6.85	Current Path + SDG Push	-3.0	-2.5	-25.7	-25.0
30 .05	Worse Climate Path	7.1	6.6	46.9	44.1
	Worse Climate Path + SDG Push	1.9	2.6	1.6	2.7

FIGURE 21

Climate–attributable effect of the Worse Climate Path scenario on women for each poverty threshold across regions. Measured as the percent of total women and girls globally who are pushed into poverty



Source: UN Women and the Pardee Center for International Futures using IFs v. 7.97.

THE EFFECT OF CLIMATE IN THE ASIA-PACIFIC REGION

In this section, forecasts are presented for the Asia-Pacific (APAC) region in comparison with world forecasts. The APAC country grouping is specific to UN Women and includes countries from both UN SDG groupings of CSA and Oceania. An analysis of climate-attributable effects across each variable including the economy, inequality, food insecurity, and poverty at each threshold is discussed in the following sections.

In 2015, the GDP of APAC is \$15.8 trillion. In 2030 in the Worse Climate Path scenario, GDP reduces 3.3% equivalent to \$1.1 trillion lost due to climate change. The APAC region suffers a slightly greater economic loss relative to the world which sees a reduction in global GDP of 3.2% in 2030. SDG Push interventions reduce the negative economic impact from climate change in the APAC region so that in 2030 GDP reduces just 1.1% equivalent to \$394 billion lost in the Worse Climate Path + SDG Push scenario. In 2050, the APAC region suffers a similar economic loss as the world with a 12.2% reduction in GDP equivalent to \$9.6 trillion lost due to climate change while the world sees a 12.1% reduction in GDP.

TABLE 8. Climate–attributable effect on Gini for APAC and the world in 2030 and 2050 measured as a percent change

		APAC	World
2030	Current Path	1.4%	1.4%
2030	Worse Climate Path	2.2%	2.1%
2050	Current Path	7.1%	6.8%
2050	Worse Climate Path	9.8%	9.9%

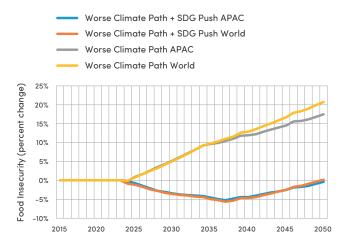
Source: UN Women and the Pardee Center for International Futures using IFs v. 7.97.

Table 8 shows the climate-attributable effect of the *Current Path* and *Worse Climate Path* scenarios on inequality measured as the percent change in Gini for APAC and the world. *SDG Push* scenarios are omitted because they do not include interventions to address inequality. In 2030, the APAC region sees an increase in

Gini of up to 2.2% compared to the world which sees an increase of up to 2.1%. By 2050, in the *Current Path* scenario APAC suffers from higher increases in inequality at 7.1% compared to 6.8% at the world level. However, in the *Worse Climate Path* scenario APAC and the world experience similar impacts on inequality with 9.8% and 9.9% increases respectively.

FIGURE 22

Climate-attributable effect of the Worse Climate Path and Worse Climate path + SDG Push scenarios on food insecurity (FIES) in APAC and world measured as a percent change



Source: UN Women and the Pardee Center for International Futures using IFs v. 7.97.

Figure 22 shows the climate-attributable effect of the Worse Climate Path and Worse Climate Path + SDG Push scenarios on food insecurity measured as percent change for APAC and the world. In 2030, APAC and the world suffer similar effects from climate change in both the Worse Climate Path and Worse Climate Path + SDG Push scenario where they see a 5% increase in food insecurity and a 4% reduction in food insecurity respectively. In 2050 in the Worse Climate Path scenario, the world sees a 21% increase in food insecurity while APAC sees a 17% increase in food insecurity. In the Worse Climate

Path + SDG Push scenario, both the world and APAC are projected to see food insecurity levels drop to that of the No Climate attributable effect scenario suggesting that SDG policies can help mitigate impacts from climate change on food security.

When we look at food insecurity disaggregated by sex, we can see that APAC suffers similar impacts from climate change as the world. In the *Worse Climate Path* scenario in 2030, both APAC and the world experiences a 6% increase in female food insecurity. In the *Worse Climate Path + SDG Push* scenario, both APAC and the world see female food insecurity decrease 4%. By 2050 in the *Worse Climate Path* scenario, the world sees a 26% increase in female food insecurity relative toa 23% increase in APAC. The *Worse Climate Path + SDG Push* scenario mitigates the impact from climate change as female food insecurity increases just 3% in the world and 2% in APAC in 2050.

TABLE 9. Climate-attributable effect of the High Impact and High Impact SDG Push scenarios on female food insecurity measured as percent change in APAC and the world

		APAC	World
	Worse Climate Path	6%	6%
2030	Worse Climate Path + SDG Push	-4%	-4%
	Worse Climate Path	23%	26%
2050	Worse Climate Path + SDG Push	2%	3%

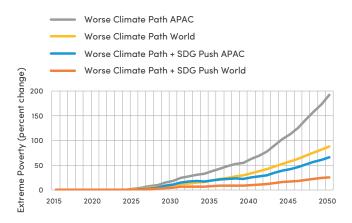
Source: UN Women and the Pardee Center for International Futures using IFs v. 7.97.

The APAC region suffers from significantly higher increases in extreme poverty relative to the world. Figure 23 shows the climate-attributable effect of the Worse Climate Path and Worse Climate Path + SDG Push scenarios on extreme poverty in APAC and the world. In 2030, extreme poverty increases 18% in APAC (equivalent to 21 million people) while the world sees an increase of 11%. In the Worse Climate Path+ SDG Push scenario in 2030, climate-attributable extreme poverty falls to an increase of 9% in APAC (equivalent to 14.5 million people) and 5% in the world in 2030. In 2050, climate induced extreme poverty increases 192% in APAC (equivalent to 52.5 million people), significantly higher than the world

which experiences a 66% increase in extreme poverty. *SDG Push* interventions help alleviate extreme poverty by mid-century as APAC sees an increase of 87% (equivalent to 18 million people) and the world experiences a 25% increase.

FIGURE 23

Climate–attributable effect of the Worse Climate Path and Worse Climate Path + SDG Push scenarios on extreme poverty (\$2.15 per day) measured as percent change for APAC and the world



Source: UN Women and the Pardee Center for International Futures using IFs v. 7.97.

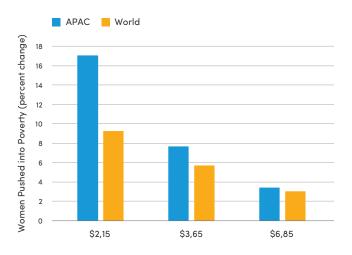
The APAC region continues to experience greater rates of climate induced poverty at higher thresholds. Table 10 shows the climate-attributable effect of the Worse Climate Path and Worse Climate Path + SDG Push scenarios on poverty measured as percent change. In the Worse Climate Path scenario in 2030, poverty at the \$3.65 threshold increases 7.7% in APAC (60 million people) compared to 5.7% in the world. SDG Push policies mitigate effects of climate change reducing climate-attributable poverty to 3.9% in APAC and 2.7% in the world. At the moderate poverty level (\$6.85 per day) APAC still suffers higher rates of poverty due to climate change at 3.4% increase (30.2 million people) compared to 3% increase in the world. SDG Push policies help alleviate poverty, but APAC continues to experience a greater impact from climate change as moderate poverty increases 1.5% in APAC (27.3 million people) compared to 1.3% in the world.

TABLE 10. Climate-attributable effect of the High Impact and High Impact SDG Push scenarios on poverty at the \$3.65 and \$6.85 thresholds for APAC and the world measured as percent change

		2030			2050	
		APAC	World	APAC	World	
\$3.65	Worse Climate Path	7.7%	5.7%	84.3%	58.2%	
	Worse Climate Path + SDG Push	3.9%	2.7%	24.4%	15.3%	
\$6.85	Worse Climate Path	3.4%	3.0%	34.7%	30.8%	
	Worse Climate Path + SDG Push	1.5%	1.3%	6.0%	6.0%	

FIGURE 24

Climate-attributable effect of the Worse Climate Path scenario on poverty in APAC and world measured as a percent change in 2030



Source: UN Women and the Pardee Center for International Futures using IFs v. 7.97.

Now we examine the effect of climate change on poverty in APAC with a gendered lens. Figure 24 shows the climate-attributable effect of the *Worse Climate Path* scenario on female poverty in APAC and world across thresholds. Climate change increase female poverty in APAC at a higher rate than the world across each

threshold. In 2030, female extreme poverty increases 17% in APAC (12.5 million women) compared to 9% in the world. Female poverty increases 7.7% in APAC (30 million women) relative to 5.7% at the world. At the highest threshold, APAC still experiences a greater increase in female moderate poverty at 3.4% (32 million women) compared to 3% in the world.

Table 11 shows the total number of females and males in the 25 to 34 age group pushed into poverty across scenarios at each threshold for the APAC region. More females than males aged 25 to 34 are pushed into poverty across each threshold under the Current Path and Worse Climate Path scenarios due to the impacts of climate change. Up to 1.7 million females are pushed into extreme poverty in 2030 and up to 4 million in 2050. SDG Push interventions are projected to mitigate climate's effect by lifting up to 100,000 women out of extreme poverty in 2030 and up to 200,000 women by 2050. At the poverty threshold (\$3.65 per day), up to 4.5 million women are pushed into poverty in 2030 and up to 14.1 million females in 2050. SDG Push interventions mitigate the impact of climate change by lifting up to 900,000 females out of poverty in 2030 and up to 3.1 million females in 2050. At the moderate poverty threshold (\$6.85 per day), up to 4.2 million women are pushed into poverty in 2030 and up to 21.3 million women in 2050. SDG Push interventions mitigate the impact of climate change by lifting up to 1.9 million women out of moderate poverty in 2030 and up to 11.2 million women in 2050.

TABLE 11. Climate-attributable effect of each scenario on female and males in the 25 to 34 age group across poverty thresholds measured in millions in 2030 and 2050 for APAC

		2030		2050	
		Female	Male	Female	Male
	Current Path	0.9	0.4	1.6	0.6
\$2.15	Current Path + SDG Push	-0.1	0.3	-0.2	0.0
ŞZ.15	Worse Climate Path	1.7	1.4	4.0	1.5
	Worse Climate Path + SDG Push	0.7	1.1	1.1	0.7
	Current Path	1.8	1.5	5.8	5.2
\$3.65	Current Path + SDG Push	-0.9	-0.5	-3.1	-2.2
33.03	Worse Climate Path	4.5	4.4	14.1	12.9
	Worse Climate Path + SDG Push	1.8	2.3	2.9	3.8
	Current Path	1.3	1.0	7.8	7.3
\$6.85	Current Path + SDG Push	-1.9	-1.6	-11.2	-10.9
30.00	Worse Climate Path	4.2	4.2	21.3	20.5
	Worse Climate Path + SDG Push	1.1	1.6	0.8	1.5

DISCUSSION

Results have shown that climate change could have a long-term negative impact on human development and more specifically worsen female poverty and food insecurity. Though climate change will not prevent headway towards achieving the sustainable development goals, it could significantly slow down progress. We have also shown that a significant set of SDG related policy interventions with a slant towards women's development could considerably reduce the negative effects of climate change even under the worst conditions and mitigate the adverse impact on female poverty and food insecurity.

While we project climate change to have a negative impact on GDP, reducing up to 3.2% in 2030 (\$3.7 trillion) and 12.1% in 2050 (\$23.9 trillion), *SDG Push* interventions can significantly reduce these negative impacts gaining the world up to an additional \$1.8 trillion in 2030 and \$44.3 trillion in 2050. If we compare this to the effects of

the recent pandemic, which reduced GDP by 3% in 2020 (\$3.2 trillion lost), we can see how unexpected shocks could further derail development beyond the negative impacts from climate change. When we examine GDP per capita, projections show that the world could experiences losses of up to \$543 per capita in 2030 and \$3,418 per capita in 2050. SDG Push interventions have the potential to reduce the amount lost gaining the world up to an additional \$242 per capita in 2030 and \$4,599 in 2050. From a regional perspective, SSA and LAC are projected to suffer the greatest economic losses in GDP relative to other regions through mid-century. In terms of inequality, the scenarios show that the Gini could increase up to 2.1% (.008 points) in 2030 and up to 9.9% (.038 points) in 2050. In 2030, NAWA is projected to experience the highest increases in inequality due to climate change and by 2050 ENA experiences the highest increase in inequality.

Climate change also threatens food security as projections show that climate change could push up to 101 million people into food insecurity in 2030 and up to 366.9 million in 2050. Out of the 101 million women and girls pushed into food insecurity due to climate change in a Worse Climate Path scenario by 2030, most will live in CSA and SSA. SDG Push interventions can not only reduce these negative impacts but help improve conditions that surpass levels of the No Climate attributable effect scenario indicating that the implementation of policies today is crucial to mitigating the negative impacts of climate change on future food security. Women are particularly vulnerable to these effects of climate change, as the projections show that up to 57.7 million women could be pushed into food insecurity in 2030 which is about 14.4 million more women than men. Like total food insecurity, CSA and SSA suffer from the highest rates of female food insecurity in the world, and this remains true through mid-century.

Future impacts of climate change on poverty are projected to be significant across all thresholds. In 2030 climate change could push up to 61 million people into extreme poverty, up to 102.9 million people in poverty, and up to 107.6 million people in moderate poverty. Most people pushed into extreme poverty due to climate change in 2030 will be living in SSA and CSA. *Development policy* interventions diminish the negative impacts of climate change and significantly reduce the number of people pushed into poverty. In 2030, up to 3.7 million people are lifted out of extreme poverty, 16.5 million out of

poverty, and 26 million out of moderate poverty. From a gendered perspective, the poverty gap is projected to persist into mid-century across each threshold. In 2030 we project that climate change could push 31.7 million women into extreme poverty, 51.7 million into poverty, and 54.6 million into moderate poverty. The largest disparity between females and males is found at the extreme poverty level where climate change could push 2.5 million more women than men into poverty by 2030 due to unequal impacts outlined throughout this report. CSA and SSA are projected to suffer the highest increases in female poverty at the extreme and poverty thresholds, while ESEA and CSA are projected to suffer the highest rates of female poverty in 2050.

The APAC region is particularly vulnerable to the effects of climate change as it experiences extreme poverty at double the rate of the world. While the world could suffer a 9.1% increase in extreme poverty in 2030, APAC extreme poverty is projected to increase 18.1%. In addition, women in the APAC region are almost twice as likely to be pushed into extreme poverty due to climate change relative to the world as female extreme poverty could increase up to 17.1% in APAC compared to 9.3% in the world. These findings indicate that already vulnerable regions, like small island nations of the Pacific, low lying coastal nations in South-East Asia, and nations with a high dependence on natural resources, such as those in Southern Asia, should be targeted with mitigation and adaption funds to support their development and disaster response capabilities.

CONCLUSION

This model has shown that climate change is expected to have a negative long-term impact on the development trajectory of the world and the APAC region in particular. An increase in the frequency and intensity of extreme weather events and temperature threaten livelihoods and further exacerbate the risk of poverty, inequality, hunger, and economic loss. While the projections of variables we have presented show upward trends of development, we have also shown that climate change could slow down this progress and continue to impact livelihoods to mid-century. Research has shown that the impact of climate change is not always gender neutral and the results have demonstrated that

women are highly vulnerable to climate change as they are pushed into extreme poverty and food insecurity at greater rates than men.

The findings suggest certain policy decisions do alleviate the negative impacts of climate change. First, policies focused on achieving sustainable development goals must be implemented rapidly. To help reduce the effects of climate change, policies need to address barriers to adaptation with a focus on vulnerable communities like the island states of the APAC region, low-income households, and women and girls. In areas that are heavily dependent on the environment for income, mostly through

agriculture, fishing and forestry, polices will need to support the adaptation capabilities of communities to changing conditions and aid in implementing sustainable practices that mitigate future impacts of climate change. Investments in improving the socio-economic standing of women are necessary to increase the resilience of households and reduce extreme forms of poverty. A focus on climate-smart agriculture, that succeeds in improving access to food for low-income households while maintaining biodiversity levels, will be critical in addressing hunger and undernutrition across the world.

While this report has attempted to provide insight into the potential long-term effects of climate change, the approach has limitations to capturing the full impact of future climate change. First, the IFs model cannot forecast shocks to the system, such as pandemics or extreme weather events like typhoons. As we learned from the recent COVID-19 pandemic, unpredictable shocks have the potential to derail development progress in short periods of time. Second, the agricultural model within IFs does not disaggregate yields by crop type. This presents a limitation as literature on carbon dioxide fertilization varies depending on crop type as some crops are expected to experience increases in yield while others

will experience decreases. In addition, the model takes a macro level approach, unlike the study by the World Bank which uses micro simulations, IFs is not able to capture nuances of the individual's experience. The results have shown that the possible range of impact from climate change is wide and heavily dependent on dynamics and systems which are not yet fully understood. This highlights the need for further research to be conducted into the relationships between climate and the economy, agriculture, and particularly misunderstood, the relationship between climate and inequality. There is also a need for more complete and extensive datasets on gender issues, so that we may possess a better understanding of how gender inequality interplays with development and build models that more accurately represent these dynamics.

This report has sought to provide context in an uncertain research space into the potential range of impact climate change could have on future development. As one of few studies forecasting the effect of climate change on women, this study contributes to our understanding of the vulnerabilities and disparities between women and men while also highlighting gaps in research and areas which need further advancement.

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APPENDIX

ANNEX 1

SDG Push package of interventions

The SDG Push scenario includes a set of interventions to simulate the impact that focused investments on social protection, promoting a green economy, strengthening governance structures, and digital disruption/innovationwith a focus on addressing gender gaps in key areas such as education and wages may have on social progress. The assumptions and parameters that make up this scenario include the following:

Social Protection

- Improved diets via additional calorie allocation to those most in need and reduces calories received from meat consumption by 20 per cent over 30 years.
- Increased numbers of improved modern cookstoves by 500 million units over a 12-year period.
- A targeted doubling of the public health budget.
- Increase government welfare transfers to unskilled households (as a percent of GDP) to levels on average with high-income economies over a 10-year period. Countries already at that level remain unchanged.
- Increases calories consumed from crops by 11% over 13 years.
- Increased access to water and sanitation:
 - Percentage of population with access to piped water doubles over 30 years (world) and increases by 50% over 30 years (WB low-income countries). The more substantial intervention outside of low-income countries is because the intervention works on closing the remaining gap with universal access, a process that becomes more demanding as it progresses.
 - Percent of population with access to improved sanitation doubles over 30 years (world) and increases by 50% over 30 years (WB low-income countries).

- Ratio of female to male wages by country reaches 1 by 2050 (simulates all countries reaching wage parity over 30 years; ratio left alone if it already exceeds 1).
 This assumption is applied at the country level.
- A 20 percent reduction in total fertility rates over the course of 10 years.
- Converge female and male wages over a 10-year period. Countries where women earn more wages remain unchanged.
- Increases female student throughput across all levels by 20 percent (if possible) over a 10-year period for all countries.

Governance

- The scenario simulates improved governance participation and efficiency by 30% over a 13-year period via Polity project index.
- Improves governance effectiveness (quality) by 30% over 13-year period - World Bank's governance effectiveness index.
- Reduces government corruption by 30% over 15-year period - Transparency International index.

Green economy

- Water demand is reduced by 30% over 32 years in the world.
- Electricity transmission and distribution loss (as a percent of production) drops by 40% over 13 years in the world.
- Reduction of particulate matter in urban air (urban air pollution) of 30% over 35 years in the world.
- Increase in forested land area- simulating impact of reforestation in the world.
- A carbon tax is introduced at \$200 per ton over 13 years for OECD countries; and at \$50 per ton for non-OECD countries in a 13-year period.

- Energy demand per unit of GDP decreases by 1.4% annually, slowly declining to a rate of 1.3% by 2050, reducing the energy intensity of the economy.
- Simulating increased cleaner and more sustainable energy production sources by:
 - Annual rate goedi encouragement of technological progress)
- Energy demand in OECD countries falls a further 10% over 68 years, relative to endogenous calculation.
- Energy demand in non-OECD countries falls a further 38% over 78 years, relative to endogenous calculation.
- Increased electricity access, tripling the upward push in the percentage of the world population with access to electricity over a 12-year period.
- Increasing electricity access in low income countries by 50% over a 12-year period.
- World agricultural production loss of crops, meat, ocean fish catch, and aquaculture is reduced by 30% over 30 years.
- World agricultural transportation and processing loss is reduced by 30% over 30 years.
- World agricultural food loss at the consumption stage is reduced by 30% over 30 years.
- High-income economies increase their agricultural yields by 20% over 15 years.
- Upper-middle-income economies increase their agricultural yields by 20% over 15 years.
- Lower-middle-income economies increase agricultural yields by 50% over 50 years.

- Low-income economies double agricultural yields over 50 years. This intervention results in yields that follow historical patterns. This, in combination with improved diets/calories intervention (incentive), results in yields that grow more rapidly.
- Countries currently catching more than 2 mmt of fish annually reduce their fish catch by 25% over 50 years.

Digital disruption/innovation

- Lower secondary graduation rates are tripled in a 12year period starting in 2021.
- Targets a 5% annual increase in lower secondary graduation starting in 2021.
- The rate of science and engineering graduates in increased by 10 percentage points over a 13-year period.
- Doubles the total of lower secondary graduation rates over a 13-year period starting in 2021.
- Targeting a doubling of budgetary allocation to education.
- Targeting a doubling of budgetary allocation to research and development.
- Targeting a doubling of budgetary allocation to infrastructure.
- Private research and development spending as a percent of GDP increased by 20% over 13-year period.
- Access to broadband grows 50% over 19 years.
- Access to mobile broadband grows 50% over 19 years.

ANNEX 2

TABLE A.2.1 Poverty rates at the \$2.15 per person per day International Poverty Line, by sex, Global, 2015–2050, various scenarios

Year	No climate	Current Path	Current Path + SDG push	Worse Climate Path	Worse Climate Path + SDG Push	No climate	Current Path	Current Path + SDG push	Worse Climate Path	Worse Climate Path + SDG Push
	Female	Female	Female	Female	Female	Male	Male	Male	Male	Male
2015	11.41	11.41	11.41	11.41	11.41	10.52	10.52	10.52	10.52	10.52
2016	10.83	10.83	10.83	10.83	10.83	9.981	9.981	9.981	9.981	9.981
2017	10.35	10.35	10.35	10.35	10.35	9.527	9.527	9.527	9.527	9.527
2018	10.04	10.04	10.04	10.04	10.04	9.25	9.25	9.25	9.25	9.25
2019	10.06	10.06	10.06	10.06	10.06	9.282	9.282	9.282	9.282	9.282
2020	11.11	11.11	11.11	11.11	11.11	10.33	10.33	10.33	10.33	10.33
2021	10.84	10.84	10.84	10.84	10.84	10.09	10.09	10.09	10.09	10.09
2022	10.51	10.51	10.51	10.51	10.51	9.784	9.784	9.784	9.784	9.784
2023	10.26	10.26	10.26	10.26	10.26	9.55	9.55	9.55	9.55	9.55
2024	9.779	9.81	9.779	9.782	9.782	9.098	9.067	9.098	9.101	9.101
2025	9.324	9.422	9.294	9.452	9.35	8.673	8.709	8.656	8.793	8.711
2026	8.974	9.131	8.916	9.221	9.028	8.353	8.446	8.318	8.58	8.427
2027	8.711	8.909	8.625	9.078	8.812	8.119	8.249	8.065	8.452	8.246
2028	8.496	8.723	8.408	8.962	8.661	7.931	8.088	7.882	8.352	8.128
2029	8.293	8.556	8.217	8.908	8.577	7.754	7.943	7.724	8.307	8.071
2030	8.093	8.404	8.014	8.83	8.441	7.577	7.812	7.552	8.241	7.965
2031	7.887	8.252	7.793	8.782	8.32	7.39	7.676	7.356	8.198	7.865
2032	7.647	8.098	7.558	8.634	8.084	7.173	7.536	7.145	8.056	7.653
2033	7.391	7.913	7.291	8.475	7.827	6.937	7.37	6.904	7.902	7.418
2034	7.134	7.737	7.025	8.289	7.541	6.697	7.209	6.662	7.726	7.156
2035	6.875	7.557	6.746	8.161	7.298	6.462	7.041	6.404	7.603	6.935
2036	6.619	7.351	6.44	8.063	7.078	6.234	6.847	6.118	7.508	6.734
2037	6.372	7.135	6.125	7.926	6.817	6.014	6.654	5.828	7.373	6.491
2038	6.136	6.958	5.85	7.795	6.567	5.803	6.495	5.577	7.244	6.259
2039	5.906	6.8	5.6	7.65	6.327	5.596	6.353	5.35	7.113	6.038
2040	5.671	6.625	5.34	7.574	6.132	5.381	6.193	5.111	7.038	5.86
2041	5.433	6.438	5.081	7.45	5.911	5.163	6.024	4.875	6.924	5.66
2042	5.2	6.234	4.808	7.328	5.688	4.949	5.839	4.624	6.809	5.456
2043	4.974	6.044	4.549	7.275	5.527	4.741	5.667	4.385	6.755	5.307
2044	4.76	5.856	4.298	7.216	5.362	4.544	5.495	4.152	6.697	5.154
2045	4.56	5.703	4.081	7.144	5.19	4.358	5.354	3.948	6.628	4.996
2046	4.364	5.536	3.86	7.051	5.006	4.174	5.199	3.74	6.539	4.825
2047	4.173	5.367	3.646	6.991	4.858	3.995	5.04	3.538	6.477	4.683
2048	3.987	5.191	3.441	6.894	4.69	3.82	4.874	3.343	6.379	4.524
2049	3.804	5.009	3.241	6.803	4.538	3.647	4.704	3.153	6.287	4.381
2050	3.626	4.858	3.069	6.692	4.373	3.477	4.56	2.987	6.175	4.224

TABLE A.2.2 Poverty rates at the \$3.65 per person per day International Poverty Line, by sex, Global, 2015–2050, various scenarios

Year	No climate	Current Path	Current Path + SDG push	Worse Climate Path	Worse Climate Path + SDG Push	No climate	Current Path	Current Path + SDG push	Worse Climate Path	Worse Climate Path + SDG Push
	Female	Female	Female	Female	Female	Male	Male	Male	Male	Male
2015	29.36	29.36	29.36	29.36	29.36	28.5	28.5	28.5	28.5	28.5
2016	28.2	28.2	28.2	28.2	28.2	27.36	27.36	27.36	27.36	27.36
2017	27.12	27.12	27.12	27.12	27.12	26.29	26.29	26.29	26.29	26.29
2018	26.39	26.39	26.39	26.39	26.39	25.58	25.58	25.58	25.58	25.58
2019	26.29	26.29	26.29	26.29	26.29	25.5	25.5	25.5	25.5	25.5
2020	28.03	28.03	28.03	28.03	28.03	27.25	27.25	27.25	27.25	27.25
2021	27.48	27.48	27.48	27.48	27.48	26.72	26.72	26.72	26.72	26.72
2022	26.84	26.84	26.84	26.84	26.84	26.09	26.09	26.09	26.09	26.09
2023	26.33	26.33	26.33	26.33	26.33	25.61	25.61	25.61	25.61	25.61
2024	25.35	25.37	25.35	25.36	25.36	24.64	24.62	24.64	24.65	24.65
2025	24.36	24.51	24.31	24.6	24.42	23.66	23.77	23.63	23.9	23.74
2026	23.57	23.8	23.43	24	23.65	22.9	23.08	22.77	23.31	22.99
2027	22.98	23.25	22.75	23.59	23.11	22.32	22.55	22.11	22.91	22.46
2028	22.49	22.79	22.25	23.25	22.72	21.85	22.11	21.63	22.58	22.1
2029	22.02	22.38	21.8	23.02	22.45	21.4	21.71	21.2	22.36	21.85
2030	21.56	22.01	21.33	22.75	22.09	20.95	21.35	20.75	22.1	21.5
2031	21.09	21.62	20.8	22.55	21.76	20.49	20.97	20.24	21.91	21.19
2032	20.54	21.21	20.23	22.18	21.23	19.95	20.57	19.69	21.54	20.67
2033	19.95	20.74	19.6	21.79	20.64	19.37	20.11	19.07	21.15	20.1
2034	19.36	20.28	18.97	21.37	20.02	18.79	19.66	18.45	20.73	19.49
2035	18.77	19.82	18.3	21.01	19.44	18.21	19.21	17.8	20.37	18.93
2036	18.19	19.34	17.61	20.71	18.9	17.65	18.73	17.12	20.07	18.4
2037	17.63	18.85	16.9	20.38	18.33	17.1	18.25	16.42	19.75	17.84
2038	17.1	18.43	16.27	20.05	17.77	16.58	17.83	15.8	19.42	17.29
2039	16.58	18.04	15.69	19.7	17.21	16.06	17.45	15.24	19.06	16.74
2040	16.05	17.64	15.11	19.47	16.75	15.55	17.06	14.67	18.83	16.29
2041	15.52	17.23	14.53	19.16	16.25	15.03	16.65	14.11	18.53	15.8
2042	15	16.78	13.9	18.88	15.74	14.52	16.21	13.49	18.25	15.31
2043	14.46	16.35	13.29	18.69	15.32	14	15.79	12.89	18.05	14.9
2044	13.95	15.92	12.67	18.47	14.89	13.5	15.37	12.29	17.84	14.47
2045	13.46	15.54	12.12	18.24	14.44	13.02	15	11.75	17.61	14.03
2046	12.97	15.12	11.55	17.98	13.97	12.54	14.59	11.19	17.35	13.58
2047	12.5	14.71	11	17.77	13.57	12.07	14.19	10.66	17.14	13.19
2048	12.02	14.29	10.46	17.51	13.14	11.61	13.77	10.13	16.88	12.77
2049	11.55	13.85	9.93	17.25	12.72	11.15	13.35	9.613	16.62	12.36
2050	11.09	13.48	9.459	16.97	12.3	10.7	12.98	9.156	16.34	11.95

TABLE A.2.3 Poverty rates at the \$6.85 per person per day International Poverty Line, by sex, Global, 2015–2050, various scenarios

Year	No climate	Current Path	Current Path + SDG push	Worse Climate Path	Worse Climate Path + SDG Push	No climate	Current Path	Current Path + SDG push	Worse Climate Path	Worse Climate Path + SDG Push
	Female	Female	Female	Female	Female	Male	Male	Male	Male	Male
2015	51.98	51.98	51.98	51.98	51.98	51.27	51.27	51.27	51.27	51.27
2016	50.78	50.78	50.78	50.78	50.78	50.07	50.07	50.07	50.07	50.07
2017	49.55	49.55	49.55	49.55	49.55	48.85	48.85	48.85	48.85	48.85
2018	48.68	48.68	48.68	48.68	48.68	47.99	47.99	47.99	47.99	47.99
2019	48.42	48.42	48.42	48.42	48.42	47.74	47.74	47.74	47.74	47.74
2020	49.94	49.94	49.94	49.94	49.94	49.26	49.26	49.26	49.26	49.26
2021	49.29	49.29	49.29	49.29	49.29	48.63	48.63	48.63	48.63	48.63
2022	48.79	48.79	48.79	48.79	48.79	48.14	48.14	48.14	48.14	48.14
2023	48.43	48.43	48.43	48.43	48.43	47.8	47.8	47.8	47.8	47.8
2024	47.46	47.48	47.46	47.47	47.47	46.83	46.8	46.83	46.85	46.85
2025	46.26	46.43	46.2	46.54	46.33	45.66	45.77	45.6	45.92	45.73
2026	45.27	45.5	45.08	45.73	45.34	44.68	44.85	44.5	45.12	44.76
2027	44.49	44.74	44.19	45.13	44.59	43.91	44.1	43.63	44.52	44.03
2028	43.83	44.11	43.5	44.64	44.05	43.26	43.48	42.96	44.04	43.51
2029	43.21	43.55	42.89	44.22	43.59	42.65	42.93	42.37	43.62	43.06
2030	42.63	43.04	42.26	43.84	43.08	42.07	42.42	41.75	43.23	42.56
2031	42.03	42.52	41.56	43.51	42.59	41.48	41.91	41.06	42.89	42.08
2032	41.35	41.98	40.81	43.05	41.93	40.8	41.36	40.32	42.42	41.43
2033	40.64	41.36	39.98	42.58	41.22	40.09	40.74	39.49	41.95	40.73
2034	39.91	40.76	39.13	42.1	40.48	39.36	40.14	38.65	41.46	39.99
2035	39.18	40.16	38.25	41.64	39.72	38.64	39.53	37.77	40.99	39.24
2036	38.46	39.53	37.31	41.23	39	37.92	38.91	36.84	40.57	38.52
2037	37.76	38.91	36.36	40.82	38.26	37.22	38.29	35.9	40.15	37.78
2038	37.08	38.35	35.49	40.4	37.52	36.54	37.73	35.03	39.72	37.04
2039	36.4	37.81	34.66	39.99	36.81	35.87	37.19	34.21	39.31	36.34
2040	35.71	37.26	33.81	39.65	36.15	35.18	36.63	33.37	38.96	35.68
2041	35.01	36.69	32.96	39.25	35.44	34.49	36.07	32.52	38.55	34.98
2042	34.29	36.09	32.02	38.88	34.69	33.77	35.47	31.6	38.17	34.24
2043	33.54	35.49	31.07	38.54	33.99	33.03	34.87	30.66	37.82	33.54
2044	32.8	34.88	30.1	38.19	33.27	32.29	34.26	29.69	37.46	32.82
2045	32.07	34.3	29.18	37.84	32.55	31.57	33.68	28.78	37.1	32.1
2046	31.33	33.69	28.24	37.45	31.79	30.83	33.07	27.84	36.69	31.35
2047	30.58	33.08	27.3	37.08	31.1	30.09	32.45	26.91	36.32	30.66
2048	29.83	32.43	26.35	36.69	30.38	29.34	31.81	25.97	35.92	29.94
2049	29.06	31.77	25.41	36.28	29.65	28.58	31.15	25.03	35.5	29.22
2050	28.29	31.16	24.52	35.84	28.91	27.81	30.54	24.15	35.05	28.49

TABLE A.2.4 Poverty rates at the \$2.15 per person per day International Poverty Line, by sex, Central and Southern Asia, 2015–2050, various scenarios

Year	No climate	Current Path	Current Path + SDG push	Worse Climate Path	Worse Climate Path + SDG Push	No climate	Current Path	Current Path + SDG push	Worse Climate Path	Worse Climate Path + SDG Push
	Female	Female	Female	Female	Female	Male	Male	Male	Male	Male
2015	17.85	17.85	17.85	17.85	17.85	15.17	15.17	15.17	15.17	15.17
2016	15.78	15.78	15.78	15.78	15.78	13.23	13.23	13.23	13.23	13.23
2017	14.15	14.15	14.15	14.15	14.15	11.71	11.71	11.71	11.71	11.71
2018	13.05	13.05	13.05	13.05	13.05	10.7	10.7	10.7	10.7	10.7
2019	12.86	12.86	12.86	12.86	12.86	10.57	10.57	10.57	10.57	10.57
2020	14.85	14.85	14.85	14.85	14.85	12.55	12.55	12.55	12.55	12.55
2021	13.83	13.83	13.83	13.83	13.83	11.6	11.6	11.6	11.6	11.6
2022	12.76	12.76	12.76	12.76	12.76	10.6	10.6	10.6	10.6	10.6
2023	11.77	11.77	11.77	11.77	11.77	9.69	9.69	9.69	9.69	9.69
2024	10.49	10.53	10.49	10.49	10.49	8.498	8.46	8.498	8.501	8.501
2025	9.429	9.558	9.388	9.604	9.469	7.534	7.582	7.517	7.694	7.595
2026	8.66	8.858	8.556	9.003	8.728	6.864	6.976	6.802	7.172	6.966
2027	8.115	8.359	7.948	8.606	8.21	6.41	6.563	6.303	6.846	6.551
2028	7.663	7.965	7.543	8.261	7.842	6.043	6.251	5.998	6.57	6.28
2029	7.233	7.609	7.177	8.099	7.668	5.697	5.971	5.727	6.461	6.187
2030	6.815	7.273	6.798	7.796	7.315	5.358	5.706	5.438	6.219	5.923
2031	6.397	6.894	6.35	7.621	7.07	5.01	5.395	5.076	6.087	5.749
2032	5.937	6.545	5.94	7.231	6.608	4.641	5.107	4.744	5.752	5.368
2033	5.492	6.144	5.5	6.843	6.145	4.276	4.789	4.39	5.414	4.982
2034	5.082	5.781	5.093	6.401	5.65	3.939	4.493	4.066	5.043	4.566
2035	4.694	5.456	4.716	6.079	5.261	3.646	4.229	3.764	4.777	4.258
2036	4.331	5.137	4.347	5.804	4.914	3.398	3.969	3.468	4.549	3.981
2037	4.008	4.822	4.002	5.549	4.588	3.179	3.754	3.207	4.342	3.724
2038	3.721	4.561	3.708	5.307	4.288	2.983	3.573	2.992	4.144	3.488
2039	3.463	4.338	3.461	5.003	3.974	2.804	3.425	2.818	3.931	3.242
2040	3.227	4.135	3.23	4.849	3.772	2.639	3.29	2.658	3.828	3.096
2041	3.008	3.943	3.012	4.652	3.541	2.486	3.159	2.504	3.7	2.933
2042	2.801	3.731	2.778	4.496	3.33	2.337	3.013	2.338	3.597	2.781
2043	2.601	3.536	2.558	4.43	3.193	2.192	2.875	2.176	3.554	2.68
2044	2.419	3.344	2.348	4.339	3.039	2.058	2.738	2.019	3.488	2.563
2045	2.248	3.183	2.165	4.221	2.874	1.93	2.618	1.875	3.406	2.441
2046	2.083	3.009	1.983	4.092	2.705	1.802	2.486	1.733	3.313	2.312
2047	1.924	2.836	1.809	4.017	2.579	1.677	2.347	1.592	3.25	2.207
2048	1.773	2.663	1.643	3.885	2.416	1.555	2.209	1.457	3.138	2.07
2049	1.631	2.491	1.486	3.757	2.263	1.439	2.074	1.327	3.03	1.943
2050	1.496	2.357	1.361	3.642	2.125	1.328	1.965	1.222	2.933	1.828

TABLE A.2.5 Poverty rates at the \$3.65 per person per day International Poverty Line, by sex, Central and Southern Asia, 2015–2050, various scenarios

Year	No climate	Current Path	Current Path + SDG push	Worse Climate Path	Worse Climate Path + SDG Push	No climate	Current Path	Current Path + SDG push	Worse Climate Path	Worse Climate Path + SDG Push
	Female	Female	Female	Female	Female	Male	Male	Male	Male	Male
2015	55.13	55.13	55.13	55.13	55.13	53.04	53.04	53.04	53.04	53.04
2016	51.87	51.87	51.87	51.87	51.87	49.85	49.85	49.85	49.85	49.85
2017	49.04	49.04	49.04	49.04	49.04	47.07	47.07	47.07	47.07	47.07
2018	46.92	46.92	46.92	46.92	46.92	45	45	45	45	45
2019	46.6	46.6	46.6	46.6	46.6	44.75	44.75	44.75	44.75	44.75
2020	50.28	50.28	50.28	50.28	50.28	48.48	48.48	48.48	48.48	48.48
2021	48.43	48.43	48.43	48.43	48.43	46.69	46.69	46.69	46.69	46.69
2022	46.34	46.34	46.34	46.34	46.34	44.66	44.66	44.66	44.66	44.66
2023	44.37	44.37	44.37	44.37	44.37	42.75	42.75	42.75	42.75	42.75
2024	41.57	41.6	41.57	41.58	41.58	39.99	39.96	39.99	40	40
2025	39.01	39.27	38.94	39.45	39.15	37.49	37.69	37.44	37.92	37.64
2026	37.03	37.37	36.69	37.74	37.08	35.56	35.84	35.25	36.25	35.64
2027	35.55	35.95	34.95	36.57	35.58	34.14	34.47	33.59	35.12	34.21
2028	34.28	34.76	33.71	35.55	34.5	32.92	33.33	32.41	34.15	33.2
2029	33.04	33.66	32.57	34.81	33.74	31.73	32.28	31.33	33.44	32.49
2030	31.79	32.58	31.35	33.84	32.63	30.54	31.25	30.18	32.52	31.45
2031	30.49	31.4	29.92	33.08	31.67	29.28	30.11	28.8	31.79	30.53
2032	29.01	30.19	28.47	31.9	30.24	27.84	28.93	27.4	30.63	29.15
2033	27.48	28.82	26.9	30.66	28.71	26.35	27.6	25.88	29.41	27.68
2034	25.99	27.51	25.38	29.33	27.12	24.89	26.32	24.4	28.12	26.13
2035	24.56	26.27	23.89	28.21	25.71	23.5	25.11	22.96	27.02	24.77
2036	23.21	25.06	22.43	27.2	24.4	22.19	23.94	21.54	26.03	23.5
2037	21.96	23.9	21.01	26.27	23.17	20.97	22.8	20.17	25.12	22.31
2038	20.81	22.91	19.81	25.36	22	19.86	21.84	19	24.24	21.17
2039	19.74	22	18.74	24.34	20.76	18.81	20.96	17.97	23.23	19.97
2040	18.72	21.16	17.72	23.69	19.87	17.83	20.14	16.99	22.6	19.11
2041	17.75	20.34	16.74	22.93	18.9	16.89	19.35	16.04	21.86	18.18
2042	16.8	19.48	15.69	22.28	17.98	15.97	18.51	15.03	21.22	17.3
2043	15.86	18.67	14.69	21.84	17.28	15.05	17.73	14.06	20.79	16.62
2044	14.98	17.87	13.7	21.32	16.51	14.21	16.94	13.1	20.28	15.87
2045	14.16	17.17	12.83	20.76	15.71	13.4	16.27	12.27	19.73	15.1
2046	13.34	16.41	11.93	20.18	14.92	12.62	15.53	11.4	19.16	14.34
2047	12.56	15.68	11.08	19.74	14.28	11.86	14.82	10.58	18.72	13.72
2048	11.8	14.93	10.25	19.2	13.55	11.12	14.1	9.776	18.19	13.02
2049	11.06	14.19	9.45	18.65	12.84	10.41	13.38	9.01	17.65	12.33
2050	10.35	13.56	8.773	18.13	12.17	9.72	12.77	8.363	17.14	11.69

TABLE A.2.6 Poverty rates at the \$6.85 per person per day International Poverty Line, by sex, Central and Southern Asia, 2015–2050, various scenarios

Year	No climate	Current Path	Current Path + SDG push	Worse Climate Path	Worse Climate Path + SDG Push	No climate	Current Path	Current Path + SDG push	Worse Climate Path	Worse Climate Path + SDG Push
	Female	Female	Female	Female	Female	Male	Male	Male	Male	Male
2015	84.61	84.61	84.61	84.61	84.61	83	83	83	83	83
2016	82.76	82.76	82.76	82.76	82.76	81.2	81.2	81.2	81.2	81.2
2017	81.06	81.06	81.06	81.06	81.06	79.54	79.54	79.54	79.54	79.54
2018	79.76	79.76	79.76	79.76	79.76	78.28	78.28	78.28	78.28	78.28
2019	79.6	79.6	79.6	79.6	79.6	78.14	78.14	78.14	78.14	78.14
2020	81.9	81.9	81.9	81.9	81.9	80.47	80.47	80.47	80.47	80.47
2021	80.74	80.74	80.74	80.74	80.74	79.36	79.36	79.36	79.36	79.36
2022	79.42	79.42	79.42	79.42	79.42	78.08	78.08	78.08	78.08	78.08
2023	78.13	78.13	78.13	78.13	78.13	76.83	76.83	76.83	76.83	76.83
2024	76.13	76.16	76.13	76.14	76.14	74.87	74.85	74.87	74.88	74.88
2025	74.14	74.36	74.09	74.51	74.26	72.92	73.09	72.88	73.28	73.05
2026	72.49	72.7	72.12	72.98	72.42	71.31	71.47	70.96	71.78	71.26
2027	71.19	71.4	70.52	71.87	71.01	70.05	70.21	69.41	70.7	69.9
2028	70.03	70.23	69.26	70.9	69.95	68.93	69.06	68.2	69.76	68.89
2029	68.87	69.11	68.07	69.96	68.97	67.8	67.98	67.06	68.84	67.95
2030	67.66	67.97	66.76	68.98	67.81	66.63	66.88	65.8	67.88	66.84
2031	66.36	66.75	65.23	68.01	66.61	65.35	65.68	64.31	66.93	65.67
2032	64.81	65.4	63.56	66.79	65.09	63.83	64.35	62.68	65.73	64.19
2033	63.13	63.84	61.7	65.49	63.42	62.19	62.82	60.85	64.45	62.55
2034	61.42	62.26	59.78	64.14	61.68	60.5	61.26	58.96	63.12	60.85
2035	59.68	60.69	57.8	62.81	59.94	58.79	59.71	57.02	61.81	59.14
2036	57.98	59.14	55.8	61.55	58.23	57.11	58.19	55.06	60.56	57.46
2037	56.34	57.6	53.78	60.38	56.58	55.49	56.66	53.07	59.41	55.85
2038	54.74	56.2	51.96	59.22	54.95	53.92	55.29	51.28	58.26	54.25
2039	53.19	54.84	50.23	57.99	53.3	52.4	53.94	49.58	57.05	52.63
2040	51.67	53.52	48.53	56.99	51.86	50.89	52.64	47.9	56.05	51.21
2041	50.16	52.22	46.82	55.89	50.33	49.41	51.36	46.23	54.97	49.71
2042	48.63	50.85	44.99	54.86	48.77	47.9	50.01	44.42	53.94	48.18
2043	47.06	49.55	43.19	53.93	47.36	46.35	48.73	42.64	53.02	46.79
2044	45.56	48.22	41.35	52.98	45.89	44.87	47.42	40.83	52.07	45.34
2045	44.09	47.02	39.64	51.99	44.38	43.42	46.23	39.15	51.09	43.85
2046	42.61	45.71	37.85	50.99	42.88	41.95	44.93	37.38	50.1	42.38
2047	41.13	44.43	36.11	50.08	41.52	40.5	43.68	35.67	49.2	41.03
2048	39.66	43.13	34.36	49.14	40.11	39.04	42.39	33.95	48.26	39.64
2049	38.19	41.8	32.62	48.16	38.67	37.59	41.07	32.23	47.29	38.23
2050	36.71	40.58	31.03	47.2	37.27	36.13	39.87	30.67	46.33	36.85

TABLE A.2.7 Poverty rates at the \$2.15 per person per day International Poverty Line, by sex, Eastern and South-Eastern Asia, 2015–2050, various scenarios

Year	No climate	Current Path	Current Path + SDG push	Worse Climate Path	Worse Climate Path + SDG Push	No climate	Current Path	Current Path + SDG push	Worse Climate Path	Worse Climate Path + SDG Push
	Female	Female	Female	Female	Female	Male	Male	Male	Male	Male
2015	2.699	2.699	2.699	2.699	2.699	2.578	2.578	2.578	2.578	2.578
2016	2.377	2.377	2.377	2.377	2.377	2.258	2.258	2.258	2.258	2.258
2017	2.088	2.088	2.088	2.088	2.088	1.976	1.976	1.976	1.976	1.976
2018	1.893	1.893	1.893	1.893	1.893	1.785	1.785	1.785	1.785	1.785
2019	1.772	1.772	1.772	1.772	1.772	1.667	1.667	1.667	1.667	1.667
2020	1.967	1.967	1.967	1.967	1.967	1.862	1.862	1.862	1.862	1.862
2021	1.956	1.956	1.956	1.956	1.956	1.856	1.856	1.856	1.856	1.856
2022	1.861	1.861	1.861	1.861	1.861	1.764	1.764	1.764	1.764	1.764
2023	1.815	1.815	1.815	1.815	1.815	1.722	1.722	1.722	1.722	1.722
2024	1.69	1.705	1.69	1.691	1.691	1.598	1.583	1.598	1.599	1.599
2025	1.559	1.593	1.552	1.594	1.567	1.472	1.475	1.468	1.503	1.482
2026	1.439	1.493	1.434	1.506	1.458	1.36	1.382	1.359	1.417	1.382
2027	1.342	1.402	1.337	1.438	1.381	1.271	1.299	1.273	1.351	1.314
2028	1.256	1.326	1.259	1.39	1.33	1.193	1.23	1.204	1.305	1.269
2029	1.181	1.261	1.194	1.361	1.297	1.126	1.172	1.146	1.277	1.243
2030	1.118	1.21	1.137	1.326	1.253	1.07	1.128	1.097	1.244	1.207
2031	1.063	1.171	1.089	1.307	1.224	1.02	1.092	1.055	1.225	1.182
2032	1.01	1.139	1.047	1.268	1.173	0.972	1.064	1.019	1.186	1.138
2033	0.96	1.099	0.999	1.236	1.123	0.923	1.028	0.975	1.154	1.093
2034	0.911	1.061	0.95	1.196	1.067	0.876	0.991	0.928	1.114	1.041
2035	0.863	1.025	0.898	1.164	1.018	0.831	0.955	0.879	1.08	0.994
2036	0.816	0.98	0.84	1.137	0.971	0.787	0.911	0.823	1.05	0.948
2037	0.772	0.936	0.785	1.101	0.919	0.745	0.869	0.771	1.01	0.897
2038	0.728	0.9	0.736	1.063	0.869	0.704	0.834	0.726	0.969	0.849
2039	0.685	0.866	0.69	1.022	0.818	0.664	0.799	0.682	0.924	0.8
2040	0.643	0.828	0.644	1.01	0.788	0.624	0.762	0.639	0.905	0.77
2041	0.603	0.792	0.6	0.984	0.748	0.587	0.725	0.598	0.873	0.731
2042	0.566	0.76	0.56	0.962	0.709	0.553	0.694	0.559	0.846	0.693
2043	0.531	0.728	0.52	0.948	0.677	0.521	0.662	0.521	0.826	0.66
2044	0.5	0.702	0.487	0.936	0.647	0.492	0.635	0.489	0.807	0.63
2045	0.472	0.677	0.457	0.929	0.623	0.465	0.61	0.46	0.794	0.606
2046	0.445	0.653	0.429	0.918	0.598	0.44	0.586	0.434	0.776	0.58
2047	0.42	0.631	0.403	0.912	0.58	0.417	0.563	0.409	0.764	0.562
2048	0.396	0.607	0.376	0.902	0.56	0.395	0.539	0.382	0.748	0.541
2049	0.373	0.589	0.355	0.894	0.541	0.375	0.521	0.36	0.734	0.522
2050	0.352	0.573	0.336	0.876	0.515	0.356	0.505	0.34	0.711	0.496

TABLE A.2.8 Poverty rates at the \$3.65 per person per day International Poverty Line, by sex, Eastern and South-Eastern Asia, 2015–2050, various scenarios

Year	No climate	Current Path	Current Path + SDG push	Worse Climate Path	Worse Climate Path + SDG Push	No climate	Current Path	Current Path + SDG push	Worse Climate Path	Worse Climate Path + SDG Push
	Female	Female	Female	Female	Female	Male	Male	Male	Male	Male
2015	13.86	13.86	13.86	13.86	13.86	13.56	13.56	13.56	13.56	13.56
2016	12.5	12.5	12.5	12.5	12.5	12.2	12.2	12.2	12.2	12.2
2017	11.22	11.22	11.22	11.22	11.22	10.93	10.93	10.93	10.93	10.93
2018	10.32	10.32	10.32	10.32	10.32	10.03	10.03	10.03	10.03	10.03
2019	9.749	9.749	9.749	9.749	9.749	9.466	9.466	9.466	9.466	9.466
2020	10.3	10.3	10.3	10.3	10.3	10.02	10.02	10.02	10.02	10.02
2021	9.998	9.998	9.998	9.998	9.998	9.728	9.728	9.728	9.728	9.728
2022	9.564	9.564	9.564	9.564	9.564	9.302	9.302	9.302	9.302	9.302
2023	9.257	9.257	9.257	9.257	9.257	9.006	9.006	9.006	9.006	9.006
2024	8.668	8.683	8.668	8.674	8.674	8.425	8.411	8.425	8.431	8.431
2025	8.023	8.108	7.994	8.153	8.051	7.78	7.837	7.754	7.907	7.812
2026	7.453	7.598	7.419	7.703	7.532	7.212	7.327	7.181	7.455	7.295
2027	7.002	7.154	6.953	7.342	7.146	6.761	6.882	6.717	7.09	6.911
2028	6.612	6.804	6.597	7.073	6.871	6.373	6.532	6.364	6.817	6.638
2029	6.269	6.496	6.29	6.871	6.664	6.033	6.225	6.061	6.61	6.433
2030	5.969	6.241	6.009	6.665	6.43	5.736	5.973	5.784	6.402	6.201
2031	5.695	6.018	5.752	6.518	6.246	5.462	5.749	5.528	6.249	6.018
2032	5.436	5.824	5.516	6.304	5.992	5.207	5.553	5.295	6.029	5.764
2033	5.189	5.614	5.273	6.127	5.754	4.966	5.342	5.056	5.846	5.526
2034	4.959	5.419	5.033	5.927	5.496	4.742	5.149	4.821	5.64	5.269
2035	4.746	5.243	4.794	5.76	5.263	4.533	4.973	4.586	5.467	5.037
2036	4.547	5.049	4.547	5.621	5.053	4.339	4.781	4.344	5.322	4.828
2037	4.362	4.871	4.318	5.473	4.843	4.159	4.604	4.121	5.168	4.621
2038	4.185	4.718	4.115	5.306	4.634	3.987	4.452	3.922	4.995	4.415
2039	4.014	4.577	3.929	5.151	4.443	3.819	4.312	3.741	4.834	4.227
2040	3.848	4.427	3.744	5.071	4.31	3.658	4.163	3.56	4.745	4.095
2041	3.69	4.284	3.569	4.955	4.149	3.505	4.021	3.389	4.623	3.936
2042	3.543	4.157	3.404	4.862	3.994	3.362	3.893	3.227	4.522	3.781
2043	3.408	4.035	3.241	4.792	3.856	3.23	3.772	3.069	4.445	3.644
2044	3.284	3.924	3.098	4.729	3.733	3.109	3.662	2.928	4.375	3.522
2045	3.171	3.822	2.967	4.689	3.631	2.999	3.56	2.8	4.329	3.42
2046	3.063	3.721	2.842	4.629	3.523	2.892	3.459	2.677	4.266	3.313
2047	2.958	3.626	2.721	4.585	3.437	2.79	3.364	2.56	4.217	3.228
2048	2.857	3.527	2.6	4.537	3.35	2.691	3.266	2.441	4.165	3.142
2049	2.761	3.444	2.494	4.491	3.262	2.598	3.184	2.338	4.115	3.056
2050	2.67	3.374	2.398	4.42	3.153	2.509	3.115	2.244	4.041	2.951

TABLE A.2.9 Poverty rates at the \$6.85 per person per day International Poverty Line, by sex, Eastern and South-Eastern Asia, 2015–2050, various scenarios

Year	No climate	Current Path	Current Path + SDG push	Worse Climate Path	Worse Climate Path + SDG Push	No climate	Current Path	Current Path + SDG push	Worse Climate Path	Worse Climate Path + SDG Push
	Female	Female	Female	Female	Female	Male	Male	Male	Male	Male
2015	41.46	41.46	41.46	41.46	41.46	41.31	41.31	41.31	41.31	41.31
2016	38.81	38.81	38.81	38.81	38.81	38.64	38.64	38.64	38.64	38.64
2017	36.06	36.06	36.06	36.06	36.06	35.89	35.89	35.89	35.89	35.89
2018	33.97	33.97	33.97	33.97	33.97	33.8	33.8	33.8	33.8	33.8
2019	32.67	32.67	32.67	32.67	32.67	32.5	32.5	32.5	32.5	32.5
2020	33.46	33.46	33.46	33.46	33.46	33.27	33.27	33.27	33.27	33.27
2021	32.22	32.22	32.22	32.22	32.22	32.04	32.04	32.04	32.04	32.04
2022	31.17	31.17	31.17	31.17	31.17	30.99	30.99	30.99	30.99	30.99
2023	30.21	30.21	30.21	30.21	30.21	30.04	30.04	30.04	30.04	30.04
2024	28.68	28.7	28.68	28.7	28.7	28.51	28.5	28.51	28.53	28.53
2025	26.8	26.97	26.7	27.1	26.84	26.65	26.79	26.55	26.94	26.69
2026	25.12	25.4	24.96	25.7	25.28	24.99	25.23	24.84	25.56	25.15
2027	23.75	24.03	23.53	24.55	24.06	23.63	23.87	23.43	24.41	23.95
2028	22.56	22.95	22.44	23.63	23.13	22.46	22.8	22.34	23.49	23.03
2029	21.49	21.98	21.47	22.84	22.34	21.38	21.83	21.38	22.7	22.24
2030	20.48	21.09	20.5	22.07	21.48	20.38	20.94	20.42	21.92	21.39
2031	19.52	20.24	19.56	21.44	20.76	19.41	20.08	19.46	21.28	20.66
2032	18.6	19.45	18.66	20.65	19.87	18.49	19.28	18.56	20.48	19.77
2033	17.75	18.65	17.77	19.98	19.06	17.62	18.48	17.67	19.8	18.95
2034	16.97	17.96	16.96	19.3	18.23	16.84	17.78	16.86	19.1	18.12
2035	16.27	17.35	16.19	18.71	17.47	16.13	17.16	16.09	18.5	17.36
2036	15.64	16.74	15.44	18.2	16.8	15.5	16.55	15.33	17.99	16.69
2037	15.07	16.23	14.79	17.76	16.18	14.94	16.04	14.68	17.53	16.07
2038	14.55	15.77	14.19	17.26	15.56	14.41	15.57	14.08	17.03	15.45
2039	14.06	15.34	13.65	16.85	15.05	13.92	15.14	13.54	16.61	14.94
2040	13.59	14.89	13.1	16.53	14.6	13.45	14.69	13	16.28	14.49
2041	13.14	14.48	12.59	16.15	14.1	13	14.28	12.49	15.9	13.99
2042	12.72	14.1	12.1	15.87	13.66	12.58	13.9	12.01	15.61	13.54
2043	12.34	13.75	11.63	15.62	13.24	12.2	13.54	11.53	15.34	13.12
2044	11.98	13.42	11.19	15.38	12.84	11.85	13.21	11.09	15.1	12.72
2045	11.66	13.11	10.78	15.23	12.53	11.53	12.89	10.68	14.95	12.41
2046	11.35	12.82	10.4	15.01	12.18	11.22	12.61	10.3	14.72	12.05
2047	11.06	12.54	10.04	14.83	11.87	10.93	12.32	9.935	14.52	11.74
2048	10.78	12.26	9.68	14.66	11.59	10.65	12.04	9.578	14.34	11.45
2049	10.52	12.04	9.367	14.49	11.3	10.39	11.81	9.265	14.17	11.16
2050	10.27	11.84	9.083	14.31	11.01	10.14	11.61	8.981	13.99	10.87

TABLE A.2.10 Poverty rates at the \$2.15 per person per day International Poverty Line, by sex, Northern Africa and Western Asia, 2015–2050, various scenarios

Year	No climate	Current Path	Current Path + SDG push	Worse Climate Path	Worse Climate Path + SDG Push	No climate	Current Path	Current Path + SDG push	Worse Climate Path	Worse Climate Path + SDG Push
	Female	Female	Female	Female	Female	Male	Male	Male	Male	Male
2015	3.254	3.254	3.254	3.254	3.254	3.233	3.233	3.233	3.233	3.233
2016	3.589	3.589	3.589	3.589	3.589	3.504	3.504	3.504	3.504	3.504
2017	3.825	3.825	3.825	3.825	3.825	3.739	3.739	3.739	3.739	3.739
2018	4.032	4.032	4.032	4.032	4.032	3.944	3.944	3.944	3.944	3.944
2019	4.235	4.235	4.235	4.235	4.235	4.149	4.149	4.149	4.149	4.149
2020	4.982	4.982	4.982	4.982	4.982	4.896	4.896	4.896	4.896	4.896
2021	5.185	5.185	5.185	5.185	5.185	5.104	5.104	5.104	5.104	5.104
2022	5.1	5.1	5.1	5.1	5.1	5.029	5.029	5.029	5.029	5.029
2023	5.05	5.05	5.05	5.05	5.05	4.992	4.992	4.992	4.992	4.992
2024	4.666	4.739	4.666	4.67	4.67	4.623	4.551	4.623	4.628	4.627
2025	4.462	4.565	4.397	4.539	4.434	4.435	4.397	4.397	4.497	4.435
2026	4.311	4.461	4.216	4.536	4.351	4.302	4.31	4.255	4.479	4.38
2027	4.217	4.415	4.108	4.567	4.324	4.223	4.275	4.177	4.495	4.379
2028	4.168	4.37	4.031	4.566	4.284	4.187	4.242	4.132	4.489	4.371
2029	4.115	4.308	4.002	4.537	4.234	4.148	4.197	4.135	4.453	4.35
2030	4.053	4.241	3.958	4.566	4.25	4.095	4.142	4.117	4.473	4.391
2031	3.988	4.216	3.942	4.582	4.23	4.023	4.113	4.112	4.464	4.378
2032	3.905	4.208	3.886	4.55	4.16	3.934	4.096	4.065	4.409	4.314
2033	3.81	4.198	3.821	4.566	4.139	3.831	4.077	4.007	4.395	4.294
2034	3.716	4.22	3.784	4.586	4.108	3.727	4.085	3.974	4.385	4.268
2035	3.633	4.196	3.707	4.627	4.082	3.634	4.046	3.899	4.392	4.241
2036	3.562	4.137	3.61	4.681	4.053	3.551	3.973	3.798	4.409	4.209
2037	3.499	4.082	3.507	4.749	4.036	3.474	3.901	3.692	4.439	4.185
2038	3.452	4.051	3.415	4.765	3.964	3.414	3.851	3.596	4.418	4.11
2039	3.405	4.047	3.353	4.808	3.913	3.354	3.827	3.529	4.415	4.054
2040	3.356	4.047	3.281	4.851	3.857	3.291	3.806	3.455	4.412	3.99
2041	3.304	4.022	3.204	4.905	3.841	3.226	3.768	3.377	4.424	3.967
2042	3.245	3.991	3.132	4.952	3.815	3.168	3.738	3.303	4.434	3.935
2043	3.19	3.982	3.072	5.037	3.825	3.115	3.728	3.236	4.485	3.935
2044	3.145	3.964	2.994	5.113	3.824	3.072	3.71	3.146	4.541	3.923
2045	3.108	3.977	2.937	5.202	3.82	3.036	3.723	3.075	4.615	3.91
2046	3.07	3.979	2.868	5.266	3.791	2.999	3.724	2.995	4.665	3.871
2047	3.029	3.947	2.78	5.299	3.751	2.961	3.691	2.898	4.689	3.823
2048	2.987	3.945	2.714	5.341	3.715	2.919	3.687	2.823	4.712	3.777
2049	2.945	3.917	2.625	5.432	3.713	2.877	3.657	2.729	4.779	3.765
2050	2.908	3.928	2.556	5.514	3.691	2.84	3.664	2.656	4.845	3.735

TABLE A.2.11 Poverty rates at the \$3.65 per person per day International Poverty Line, by sex, Northern Africa and Western Asia, 2015–2050, various scenarios

Year	No climate	Current Path	Current Path + SDG push	Worse Climate Path	Worse Climate Path + SDG Push	No climate	Current Path	Current Path + SDG push	Worse Climate Path	Worse Climate Path + SDG Push
	Female	Female	Female	Female	Female	Male	Male	Male	Male	Male
2015	13.49	13.49	13.49	13.49	13.49	13.2	13.2	13.2	13.2	13.2
2016	13.71	13.71	13.71	13.71	13.71	13.39	13.39	13.39	13.39	13.39
2017	13.76	13.76	13.76	13.76	13.76	13.44	13.44	13.44	13.44	13.44
2018	13.95	13.95	13.95	13.95	13.95	13.64	13.64	13.64	13.64	13.64
2019	14.23	14.23	14.23	14.23	14.23	13.92	13.92	13.92	13.92	13.92
2020	15.54	15.54	15.54	15.54	15.54	15.23	15.23	15.23	15.23	15.23
2021	15.92	15.92	15.92	15.92	15.92	15.62	15.62	15.62	15.62	15.62
2022	15.8	15.8	15.8	15.8	15.8	15.51	15.51	15.51	15.51	15.51
2023	15.97	15.97	15.97	15.97	15.97	15.7	15.7	15.7	15.7	15.7
2024	15.5	15.53	15.5	15.52	15.52	15.24	15.21	15.24	15.26	15.26
2025	15.07	15.18	14.98	15.25	15.08	14.82	14.87	14.74	14.99	14.83
2026	14.75	14.95	14.62	15.24	14.94	14.51	14.65	14.39	14.98	14.7
2027	14.52	14.81	14.39	15.24	14.86	14.29	14.51	14.18	14.97	14.64
2028	14.35	14.67	14.2	15.15	14.73	14.13	14.39	14	14.89	14.52
2029	14.18	14.5	14.05	15.06	14.61	13.98	14.23	13.87	14.81	14.42
2030	14.02	14.36	13.9	15.09	14.59	13.84	14.1	13.74	14.83	14.41
2031	13.87	14.28	13.78	15.11	14.53	13.69	14.02	13.62	14.85	14.36
2032	13.69	14.23	13.61	15.07	14.38	13.51	13.96	13.46	14.79	14.21
2033	13.47	14.14	13.4	15.08	14.29	13.29	13.88	13.25	14.79	14.12
2034	13.24	14.11	13.24	15.1	14.19	13.07	13.85	13.09	14.8	14.02
2035	13.01	14.02	13.02	15.15	14.08	12.84	13.75	12.87	14.84	13.91
2036	12.79	13.87	12.74	15.2	13.97	12.62	13.6	12.59	14.89	13.79
2037	12.57	13.69	12.41	15.25	13.85	12.41	13.42	12.26	14.93	13.66
2038	12.39	13.56	12.11	15.22	13.63	12.23	13.29	11.96	14.89	13.45
2039	12.2	13.48	11.89	15.22	13.44	12.05	13.22	11.74	14.88	13.26
2040	12.01	13.37	11.64	15.21	13.24	11.85	13.1	11.49	14.86	13.05
2041	11.8	13.22	11.38	15.2	13.09	11.64	12.95	11.23	14.84	12.9
2042	11.57	13.04	11.1	15.15	12.88	11.42	12.77	10.96	14.78	12.69
2043	11.35	12.91	10.84	15.14	12.71	11.2	12.64	10.69	14.76	12.52
2044	11.13	12.75	10.54	15.15	12.55	10.98	12.48	10.39	14.76	12.36
2045	10.92	12.61	10.24	15.17	12.37	10.78	12.34	10.1	14.77	12.18
2046	10.72	12.46	9.95	15.16	12.17	10.57	12.19	9.808	14.75	11.97
2047	10.51	12.27	9.635	15.06	11.93	10.36	12	9.495	14.64	11.73
2048	10.29	12.09	9.336	14.96	11.7	10.15	11.82	9.207	14.54	11.5
2049	10.08	11.88	9.025	14.91	11.53	9.945	11.62	8.907	14.49	11.33
2050	9.882	11.75	8.762	14.84	11.31	9.747	11.48	8.655	14.42	11.12

TABLE A.2.12 Poverty rates at the \$6.85 per person per day International Poverty Line, by sex, Northern Africa and Western Asia, 2015–2050, various scenarios

Year	No climate	Current Path	Current Path + SDG push	Worse Climate Path	Worse Climate Path + SDG Push	No climate	Current Path	Current Path + SDG push	Worse Climate Path	Worse Climate Path + SDG Push
	Female	Female	Female	Female	Female	Male	Male	Male	Male	Male
2015	40.97	40.97	40.97	40.97	40.97	40.55	40.55	40.55	40.55	40.55
2016	40.38	40.38	40.38	40.38	40.38	39.96	39.96	39.96	39.96	39.96
2017	39.84	39.84	39.84	39.84	39.84	39.43	39.43	39.43	39.43	39.43
2018	39.79	39.79	39.79	39.79	39.79	39.4	39.4	39.4	39.4	39.4
2019	39.94	39.94	39.94	39.94	39.94	39.58	39.58	39.58	39.58	39.58
2020	42.08	42.08	42.08	42.08	42.08	41.74	41.74	41.74	41.74	41.74
2021	42.68	42.68	42.68	42.68	42.68	42.36	42.36	42.36	42.36	42.36
2022	42.65	42.65	42.65	42.65	42.65	42.35	42.35	42.35	42.35	42.35
2023	43.29	43.29	43.29	43.29	43.29	43.02	43.02	43.02	43.02	43.02
2024	42.97	42.99	42.97	43.02	43.02	42.72	42.71	42.72	42.77	42.77
2025	42.16	42.31	42.04	42.45	42.2	41.93	42.05	41.82	42.22	41.98
2026	41.44	41.67	41.21	42.05	41.61	41.23	41.43	41.01	41.83	41.4
2027	40.76	41.08	40.52	41.62	41.08	40.56	40.85	40.34	41.4	40.89
2028	40.17	40.53	39.89	41.14	40.54	39.98	40.3	39.72	40.93	40.36
2029	39.68	40.05	39.36	40.76	40.1	39.5	39.83	39.2	40.55	39.93
2030	39.34	39.75	38.91	40.67	39.86	39.16	39.54	38.76	40.46	39.69
2031	39.07	39.54	38.51	40.64	39.63	38.9	39.33	38.36	40.42	39.47
2032	38.79	39.41	38.12	40.55	39.3	38.62	39.19	37.97	40.32	39.14
2033	38.47	39.22	37.67	40.47	38.97	38.29	38.99	37.53	40.23	38.81
2034	38.09	39.04	37.25	40.44	38.68	37.91	38.81	37.1	40.18	38.52
2035	37.66	38.79	36.76	40.34	38.32	37.48	38.55	36.62	40.08	38.16
2036	37.21	38.44	36.13	40.27	37.97	37.03	38.2	35.98	39.99	37.8
2037	36.75	38.04	35.39	40.17	37.59	36.57	37.79	35.25	39.88	37.43
2038	36.34	37.68	34.67	40	37.15	36.15	37.43	34.53	39.71	36.99
2039	35.92	37.4	34.08	39.89	36.74	35.73	37.14	33.94	39.58	36.57
2040	35.45	37.05	33.46	39.69	36.24	35.26	36.78	33.32	39.37	36.07
2041	34.95	36.66	32.83	39.52	35.76	34.76	36.4	32.69	39.19	35.6
2042	34.39	36.22	32.12	39.3	35.18	34.21	35.96	31.97	38.96	35.02
2043	33.77	35.8	31.37	39.05	34.59	33.6	35.55	31.23	38.72	34.43
2044	33.14	35.31	30.56	38.83	34.02	32.97	35.06	30.42	38.49	33.86
2045	32.53	34.82	29.74	38.61	33.44	32.36	34.57	29.6	38.27	33.28
2046	31.9	34.31	28.93	38.37	32.85	31.74	34.06	28.8	38.03	32.7
2047	31.27	33.75	28.1	38	32.2	31.11	33.5	27.98	37.66	32.06
2048	30.61	33.15	27.27	37.61	31.57	30.46	32.91	27.16	37.27	31.43
2049	29.95	32.53	26.43	37.25	30.96	29.81	32.31	26.33	36.91	30.83
2050	29.28	31.98	25.66	36.85	30.31	29.16	31.76	25.57	36.52	30.19

TABLE A.2.13 Poverty rates at the \$2.15 per person per day International Poverty Line, by sex, Latin America and the Caribbean, 2015–2050, various scenarios

Year	No climate	Current Path	Current Path + SDG push	Worse Climate Path	Worse Climate Path + SDG Push	No climate	Current Path	Current Path + SDG push	Worse Climate Path	Worse Climate Path + SDG Push
	Female	Female	Female	Female	Female	Male	Male	Male	Male	Male
2015	4.427	4.427	4.427	4.427	4.427	4.233	4.233	4.233	4.233	4.233
2016	4.602	4.602	4.602	4.602	4.602	4.432	4.432	4.432	4.432	4.432
2017	4.77	4.77	4.77	4.77	4.77	4.63	4.63	4.63	4.63	4.63
2018	5.01	5.01	5.01	5.01	5.01	4.9	4.9	4.9	4.9	4.9
2019	5.479	5.479	5.479	5.479	5.479	5.397	5.397	5.397	5.397	5.397
2020	6.537	6.537	6.537	6.537	6.537	6.488	6.488	6.488	6.488	6.488
2021	6.285	6.285	6.285	6.285	6.285	6.258	6.258	6.258	6.258	6.258
2022	6.202	6.202	6.202	6.202	6.202	6.198	6.198	6.198	6.198	6.198
2023	6.423	6.423	6.423	6.423	6.423	6.44	6.44	6.44	6.44	6.44
2024	6.448	6.495	6.448	6.457	6.457	6.484	6.436	6.484	6.494	6.494
2025	6.215	6.305	6.197	6.301	6.232	6.267	6.265	6.261	6.344	6.296
2026	5.848	5.988	5.825	6.028	5.896	5.915	5.965	5.913	6.076	5.985
2027	5.454	5.632	5.43	5.726	5.554	5.535	5.623	5.541	5.776	5.665
2028	5.16	5.394	5.174	5.53	5.334	5.255	5.397	5.308	5.581	5.468
2029	4.95	5.235	5.005	5.416	5.2	5.058	5.251	5.161	5.466	5.354
2030	4.809	5.15	4.89	5.385	5.136	4.93	5.176	5.066	5.434	5.309
2031	4.699	5.084	4.79	5.429	5.142	4.826	5.113	4.979	5.468	5.326
2032	4.601	5.046	4.703	5.436	5.096	4.733	5.077	4.903	5.466	5.29
2033	4.515	5.029	4.628	5.46	5.049	4.65	5.06	4.836	5.476	5.249
2034	4.442	5.014	4.545	5.463	4.973	4.58	5.044	4.76	5.466	5.178
2035	4.378	4.998	4.461	5.504	4.923	4.519	5.027	4.681	5.491	5.131
2036	4.318	4.992	4.383	5.597	4.918	4.463	5.018	4.608	5.57	5.129
2037	4.26	4.974	4.293	5.602	4.833	4.408	5	4.522	5.559	5.047
2038	4.201	4.973	4.219	5.635	4.776	4.352	4.997	4.449	5.576	4.992
2039	4.138	4.973	4.153	5.713	4.771	4.292	4.994	4.386	5.636	4.986
2040	4.07	4.965	4.093	5.805	4.781	4.225	4.983	4.326	5.71	4.994
2041	3.998	4.948	4.025	5.82	4.731	4.154	4.962	4.258	5.707	4.943
2042	3.933	4.913	3.929	5.871	4.698	4.091	4.922	4.162	5.738	4.907
2043	3.87	4.875	3.825	5.959	4.688	4.029	4.882	4.059	5.808	4.894
2044	3.804	4.851	3.733	6.05	4.67	3.963	4.854	3.968	5.88	4.875
2045	3.74	4.841	3.655	6.151	4.657	3.9	4.84	3.891	5.961	4.861
2046	3.664	4.807	3.552	6.206	4.601	3.824	4.803	3.791	5.997	4.805
2047	3.574	4.764	3.447	6.326	4.607	3.735	4.757	3.688	6.096	4.811
2048	3.473	4.696	3.328	6.374	4.563	3.635	4.685	3.57	6.126	4.768
2049	3.366	4.614	3.205	6.393	4.495	3.529	4.6	3.448	6.125	4.7
2050	3.258	4.547	3.105	6.42	4.438	3.422	4.531	3.348	6.133	4.642

TABLE A.2.14 Poverty rates at the \$3.65 per person per day International Poverty Line, by sex Latin America and the Caribbean, 2015–2050, various scenarios

Year	No climate	Current Path	Current Path + SDG push	Worse Climate Path	Worse Climate Path + SDG Push	No climate	Current Path	Current Path + SDG push	Worse Climate Path	Worse Climate Path + SDG Push
	Female	Female	Female	Female	Female	Male	Male	Male	Male	Male
2015	11.37	11.37	11.37	11.37	11.37	11.1	11.1	11.1	11.1	11.1
2016	11.68	11.68	11.68	11.68	11.68	11.43	11.43	11.43	11.43	11.43
2017	11.95	11.95	11.95	11.95	11.95	11.72	11.72	11.72	11.72	11.72
2018	12.29	12.29	12.29	12.29	12.29	12.07	12.07	12.07	12.07	12.07
2019	12.92	12.92	12.92	12.92	12.92	12.73	12.73	12.73	12.73	12.73
2020	14.64	14.64	14.64	14.64	14.64	14.48	14.48	14.48	14.48	14.48
2021	14.06	14.06	14.06	14.06	14.06	13.91	13.91	13.91	13.91	13.91
2022	13.8	13.8	13.8	13.8	13.8	13.66	13.66	13.66	13.66	13.66
2023	13.99	13.99	13.99	13.99	13.99	13.87	13.87	13.87	13.87	13.87
2024	13.9	13.92	13.9	13.92	13.92	13.79	13.77	13.79	13.81	13.81
2025	13.5	13.6	13.48	13.65	13.55	13.4	13.46	13.39	13.55	13.46
2026	13.03	13.21	12.99	13.34	13.13	12.94	13.08	12.91	13.24	13.05
2027	12.54	12.78	12.49	13	12.72	12.46	12.66	12.42	12.91	12.66
2028	12.15	12.48	12.16	12.76	12.45	12.08	12.37	12.1	12.68	12.4
2029	11.84	12.26	11.92	12.62	12.29	11.78	12.17	11.88	12.55	12.25
2030	11.63	12.14	11.75	12.59	12.2	11.58	12.05	11.72	12.52	12.18
2031	11.44	12.02	11.57	12.65	12.2	11.39	11.94	11.55	12.58	12.18
2032	11.25	11.93	11.38	12.64	12.09	11.21	11.86	11.37	12.57	12.08
2033	11.06	11.87	11.2	12.64	11.96	11.02	11.8	11.19	12.58	11.96
2034	10.88	11.78	10.98	12.6	11.78	10.85	11.72	10.97	12.53	11.78
2035	10.71	11.7	10.75	12.6	11.62	10.68	11.64	10.75	12.54	11.62
2036	10.55	11.62	10.53	12.68	11.52	10.52	11.56	10.54	12.62	11.53
2037	10.39	11.52	10.3	12.61	11.3	10.36	11.47	10.3	12.55	11.31
2038	10.23	11.47	10.09	12.61	11.13	10.21	11.42	10.1	12.55	11.15
2039	10.07	11.41	9.913	12.66	11.05	10.05	11.37	9.926	12.6	11.07
2040	9.903	11.35	9.753	12.75	11	9.889	11.31	9.77	12.69	11.02
2041	9.736	11.27	9.573	12.73	10.86	9.724	11.24	9.594	12.67	10.89
2042	9.578	11.17	9.346	12.76	10.74	9.569	11.14	9.369	12.7	10.77
2043	9.424	11.07	9.107	12.85	10.66	9.417	11.03	9.132	12.79	10.7
2044	9.267	10.99	8.891	12.95	10.58	9.262	10.95	8.918	12.89	10.61
2045	9.114	10.93	8.702	13.06	10.5	9.111	10.9	8.73	13	10.53
2046	8.947	10.83	8.483	13.1	10.37	8.945	10.8	8.512	13.04	10.4
2047	8.761	10.73	8.268	13.25	10.34	8.76	10.7	8.299	13.18	10.38
2048	8.562	10.58	8.031	13.28	10.24	8.563	10.56	8.063	13.22	10.28
2049	8.356	10.43	7.789	13.28	10.1	8.357	10.4	7.822	13.22	10.15
2050	8.149	10.29	7.581	13.29	9.985	8.151	10.27	7.615	13.23	10.03

TABLE A.2.15 Poverty rates at the \$6.85 per person per day International Poverty Line, by sex, Latin America and the Caribbean, 2015–2050, various scenarios

Year	No climate	Current Path	Current Path + SDG push	Worse Climate Path	Worse Climate Path + SDG Push	No climate	Current Path	Current Path + SDG push	Worse Climate Path	Worse Climate Path + SDG Push
	Female	Female	Female	Female	Female	Male	Male	Male	Male	Male
2015	30.42	30.42	30.42	30.42	30.42	29.57	29.57	29.57	29.57	29.57
2016	30.92	30.92	30.92	30.92	30.92	30.13	30.13	30.13	30.13	30.13
2017	31.27	31.27	31.27	31.27	31.27	30.52	30.52	30.52	30.52	30.52
2018	31.6	31.6	31.6	31.6	31.6	30.89	30.89	30.89	30.89	30.89
2019	32.27	32.27	32.27	32.27	32.27	31.6	31.6	31.6	31.6	31.6
2020	34.8	34.8	34.8	34.8	34.8	34.2	34.2	34.2	34.2	34.2
2021	33.67	33.67	33.67	33.67	33.67	33.1	33.1	33.1	33.1	33.1
2022	33.06	33.06	33.06	33.06	33.06	32.51	32.51	32.51	32.51	32.51
2023	33.11	33.11	33.11	33.11	33.11	32.61	32.61	32.61	32.61	32.61
2024	32.77	32.79	32.77	32.8	32.8	32.3	32.28	32.3	32.34	32.34
2025	32.1	32.25	32.08	32.36	32.2	31.67	31.78	31.65	31.93	31.78
2026	31.51	31.75	31.39	31.99	31.65	31.1	31.31	30.99	31.59	31.25
2027	30.92	31.25	30.76	31.64	31.16	30.55	30.84	30.4	31.26	30.8
2028	30.42	30.86	30.3	31.35	30.81	30.08	30.48	29.97	31	30.49
2029	29.99	30.54	29.95	31.16	30.58	29.68	30.19	29.65	30.83	30.28
2030	29.65	30.32	29.63	31.1	30.42	29.37	30	29.36	30.8	30.16
2031	29.32	30.1	29.28	31.12	30.31	29.06	29.81	29.04	30.84	30.08
2032	28.96	29.89	28.88	31.02	30.04	28.72	29.62	28.66	30.77	29.83
2033	28.57	29.67	28.43	30.93	29.7	28.36	29.42	28.24	30.7	29.53
2034	28.18	29.42	27.91	30.76	29.27	27.98	29.2	27.74	30.55	29.11
2035	27.78	29.15	27.36	30.63	28.84	27.61	28.95	27.21	30.43	28.7
2036	27.38	28.88	26.81	30.59	28.49	27.23	28.69	26.67	30.41	28.37
2037	27	28.59	26.23	30.36	27.96	26.86	28.42	26.11	30.19	27.85
2038	26.62	28.37	25.73	30.22	27.53	26.5	28.22	25.63	30.07	27.45
2039	26.25	28.16	25.28	30.16	27.22	26.14	28.03	25.2	30.02	27.15
2040	25.88	27.96	24.88	30.17	26.98	25.79	27.85	24.81	30.05	26.93
2041	25.52	27.73	24.44	30.06	26.65	25.44	27.63	24.39	29.95	26.61
2042	25.16	27.47	23.93	30.01	26.32	25.1	27.39	23.89	29.9	26.29
2043	24.82	27.23	23.4	30.04	26.04	24.77	27.16	23.37	29.95	26.04
2044	24.48	27.01	22.91	30.09	25.77	24.44	26.96	22.89	30.01	25.77
2045	24.14	26.83	22.47	30.17	25.54	24.11	26.79	22.46	30.1	25.56
2046	23.79	26.6	22.01	30.15	25.23	23.77	26.57	22.01	30.1	25.26
2047	23.42	26.37	21.56	30.28	25.1	23.42	26.35	21.57	30.23	25.15
2048	23.04	26.08	21.09	30.26	24.86	23.04	26.08	21.11	30.23	24.92
2049	22.65	25.78	20.61	30.21	24.59	22.66	25.78	20.64	30.18	24.65
2050	22.27	25.52	20.18	30.16	24.33	22.29	25.53	20.21	30.14	24.41

TABLE A.2.16 Poverty rates at the \$2.15 per person per day International Poverty Line, by sex, Europe and Northern America, 2015–2050, various scenarios

Year	No climate	Current Path	Current Path + SDG push	Worse Climate Path	Worse Climate Path + SDG Push	No climate	Current Path	Current Path + SDG push	Worse Climate Path	Worse Climate Path + SDG Push
	Female	Female	Female	Female	Female	Male	Male	Male	Male	Male
2015	0.787	0.787	0.787	0.787	0.787	0.739	0.739	0.739	0.739	0.739
2016	0.777	0.777	0.777	0.777	0.777	0.727	0.727	0.727	0.727	0.727
2017	0.732	0.732	0.732	0.732	0.732	0.683	0.683	0.683	0.683	0.683
2018	0.69	0.69	0.69	0.69	0.69	0.652	0.652	0.652	0.652	0.652
2019	0.667	0.667	0.667	0.667	0.667	0.64	0.64	0.64	0.64	0.64
2020	0.769	0.769	0.769	0.769	0.769	0.756	0.756	0.756	0.756	0.756
2021	0.706	0.706	0.706	0.706	0.706	0.703	0.703	0.703	0.703	0.703
2022	0.701	0.701	0.701	0.701	0.701	0.704	0.704	0.704	0.704	0.704
2023	0.752	0.752	0.752	0.752	0.752	0.759	0.759	0.759	0.759	0.759
2024	0.711	0.743	0.711	0.716	0.716	0.729	0.696	0.729	0.733	0.733
2025	0.636	0.678	0.632	0.66	0.641	0.666	0.643	0.674	0.682	0.684
2026	0.586	0.654	0.594	0.636	0.601	0.626	0.625	0.656	0.657	0.663
2027	0.548	0.645	0.574	0.626	0.576	0.597	0.619	0.652	0.647	0.657
2028	0.519	0.634	0.554	0.63	0.568	0.576	0.612	0.646	0.643	0.658
2029	0.496	0.631	0.543	0.646	0.572	0.558	0.609	0.644	0.651	0.669
2030	0.481	0.637	0.538	0.666	0.577	0.545	0.612	0.645	0.658	0.676
2031	0.465	0.639	0.529	0.677	0.572	0.533	0.613	0.642	0.66	0.679
2032	0.451	0.646	0.521	0.69	0.565	0.522	0.618	0.644	0.663	0.681
2033	0.436	0.654	0.511	0.712	0.564	0.508	0.623	0.645	0.67	0.685
2034	0.419	0.663	0.502	0.74	0.565	0.493	0.63	0.644	0.685	0.694
2035	0.399	0.67	0.49	0.776	0.572	0.475	0.634	0.638	0.709	0.709
2036	0.378	0.661	0.466	0.794	0.562	0.456	0.624	0.618	0.715	0.706
2037	0.354	0.646	0.437	0.802	0.548	0.437	0.607	0.593	0.712	0.693
2038	0.329	0.637	0.414	0.81	0.533	0.419	0.597	0.576	0.709	0.682
2039	0.306	0.631	0.394	0.829	0.526	0.402	0.589	0.563	0.714	0.68
2040	0.284	0.623	0.372	0.843	0.515	0.387	0.581	0.549	0.715	0.673
2041	0.266	0.615	0.349	0.873	0.514	0.373	0.572	0.534	0.73	0.677
2042	0.249	0.61	0.33	0.916	0.524	0.361	0.567	0.522	0.757	0.687
2043	0.233	0.604	0.309	0.947	0.52	0.35	0.56	0.508	0.774	0.691
2044	0.218	0.595	0.287	0.994	0.528	0.338	0.551	0.494	0.802	0.703
2045	0.204	0.578	0.264	1.009	0.511	0.326	0.535	0.474	0.8	0.695
2046	0.191	0.576	0.252	1.041	0.512	0.311	0.531	0.462	0.813	0.697
2047	0.177	0.561	0.236	1.083	0.522	0.296	0.517	0.442	0.835	0.706
2048	0.163	0.549	0.221	1.129	0.533	0.281	0.504	0.425	0.859	0.715
2049	0.149	0.532	0.206	1.158	0.534	0.266	0.487	0.405	0.871	0.716
2050	0.136	0.516	0.192	1.175	0.53	0.252	0.471	0.387	0.869	0.71

TABLE A.2.17 Poverty rates at the \$3.65 per person per day International Poverty Line, by sex, Europe and Northern America, 2015–2050, various scenarios

Year	No climate	Current Path	Current Path + SDG push	Worse Climate Path	Worse Climate Path + SDG Push	No climate	Current Path	Current Path + SDG push	Worse Climate Path	Worse Climate Path + SDG Push
	Female	Female	Female	Female	Female	Male	Male	Male	Male	Male
2015	1.192	1.192	1.192	1.192	1.192	1.199	1.199	1.199	1.199	1.199
2016	1.149	1.149	1.149	1.149	1.149	1.126	1.126	1.126	1.126	1.126
2017	1.076	1.076	1.076	1.076	1.076	1.042	1.042	1.042	1.042	1.042
2018	1.02	1.02	1.02	1.02	1.02	0.978	0.978	0.978	0.978	0.978
2019	0.992	0.992	0.992	0.992	0.992	0.941	0.941	0.941	0.941	0.941
2020	1.146	1.146	1.146	1.146	1.146	1.089	1.089	1.089	1.089	1.089
2021	1.07	1.07	1.07	1.07	1.07	1.005	1.005	1.005	1.005	1.005
2022	1.144	1.144	1.144	1.144	1.144	1.065	1.065	1.065	1.065	1.065
2023	1.331	1.331	1.331	1.331	1.331	1.239	1.239	1.239	1.239	1.239
2024	1.253	1.256	1.253	1.26	1.26	1.151	1.148	1.151	1.158	1.158
2025	1.093	1.113	1.095	1.125	1.109	0.996	1.009	0.999	1.027	1.013
2026	0.996	1.05	1.02	1.062	1.035	0.904	0.949	0.929	0.964	0.941
2027	0.932	1.019	0.982	1.04	1.003	0.842	0.92	0.894	0.941	0.911
2028	0.883	0.99	0.947	1.024	0.982	0.795	0.893	0.861	0.924	0.89
2029	0.844	0.971	0.923	1.021	0.973	0.756	0.873	0.838	0.923	0.885
2030	0.815	0.968	0.91	1.024	0.964	0.726	0.87	0.827	0.923	0.876
2031	0.786	0.961	0.892	1.014	0.944	0.698	0.862	0.809	0.913	0.857
2032	0.759	0.958	0.875	1.025	0.938	0.67	0.859	0.794	0.921	0.85
2033	0.73	0.957	0.857	1.03	0.923	0.641	0.857	0.777	0.925	0.837
2034	0.7	0.963	0.844	1.05	0.92	0.611	0.863	0.764	0.945	0.835
2035	0.668	0.964	0.824	1.078	0.92	0.579	0.862	0.744	0.969	0.835
2036	0.635	0.943	0.786	1.096	0.909	0.546	0.841	0.705	0.982	0.824
2037	0.603	0.915	0.742	1.086	0.878	0.515	0.812	0.661	0.972	0.794
2038	0.572	0.905	0.716	1.096	0.863	0.486	0.8	0.635	0.977	0.777
2039	0.544	0.898	0.694	1.119	0.861	0.459	0.791	0.613	0.993	0.772
2040	0.519	0.892	0.673	1.135	0.851	0.436	0.782	0.591	1.003	0.763
2041	0.498	0.886	0.65	1.177	0.86	0.417	0.773	0.569	1.038	0.771
2042	0.479	0.881	0.628	1.225	0.873	0.4	0.766	0.547	1.082	0.785
2043	0.462	0.874	0.606	1.269	0.88	0.384	0.757	0.524	1.117	0.789
2044	0.445	0.863	0.58	1.325	0.896	0.368	0.741	0.498	1.159	0.8
2045	0.428	0.842	0.549	1.346	0.887	0.352	0.716	0.467	1.166	0.782
2046	0.41	0.842	0.536	1.373	0.887	0.335	0.711	0.451	1.183	0.776
2047	0.39	0.829	0.515	1.425	0.906	0.316	0.695	0.43	1.219	0.787
2048	0.369	0.815	0.493	1.484	0.928	0.297	0.675	0.408	1.262	0.802
2049	0.348	0.795	0.469	1.514	0.931	0.278	0.653	0.385	1.283	0.799
2050	0.327	0.772	0.444	1.528	0.927	0.259	0.627	0.362	1.289	0.791

TABLE A.2.18 Poverty rates at the \$6.85 per person per day International Poverty Line, by sex, Europe and Northern America, 2015–2050, various scenarios

Year	No climate	Current Path	Current Path + SDG push	Worse Climate Path	Worse Climate Path + SDG Push	No climate	Current Path	Current Path + SDG push	Worse Climate Path	Worse Climate Path + SDG Push
	Female	Female	Female	Female	Female	Male	Male	Male	Male	Male
2015	3.819	3.819	3.819	3.819	3.819	3.877	3.877	3.877	3.877	3.877
2016	3.66	3.66	3.66	3.66	3.66	3.678	3.678	3.678	3.678	3.678
2017	3.447	3.447	3.447	3.447	3.447	3.442	3.442	3.442	3.442	3.442
2018	3.25	3.25	3.25	3.25	3.25	3.222	3.222	3.222	3.222	3.222
2019	3.13	3.13	3.13	3.13	3.13	3.084	3.084	3.084	3.084	3.084
2020	3.484	3.484	3.484	3.484	3.484	3.443	3.443	3.443	3.443	3.443
2021	3.293	3.293	3.293	3.293	3.293	3.23	3.23	3.23	3.23	3.23
2022	3.99	3.99	3.99	3.99	3.99	3.923	3.923	3.923	3.923	3.923
2023	4.679	4.679	4.679	4.679	4.679	4.616	4.616	4.616	4.616	4.616
2024	4.461	4.5	4.461	4.477	4.477	4.386	4.345	4.386	4.403	4.403
2025	3.96	4.047	3.958	4.05	3.996	3.869	3.876	3.88	3.953	3.92
2026	3.617	3.776	3.65	3.799	3.702	3.508	3.584	3.565	3.677	3.624
2027	3.377	3.605	3.452	3.676	3.546	3.25	3.392	3.358	3.531	3.467
2028	3.194	3.459	3.285	3.587	3.432	3.05	3.223	3.182	3.414	3.348
2029	3.047	3.358	3.164	3.522	3.342	2.886	3.102	3.054	3.315	3.247
2030	2.939	3.318	3.095	3.499	3.282	2.762	3.041	2.978	3.263	3.179
2031	2.838	3.274	3.021	3.435	3.181	2.649	2.983	2.899	3.174	3.07
2032	2.743	3.238	2.94	3.455	3.152	2.54	2.929	2.81	3.171	3.037
2033	2.647	3.21	2.862	3.452	3.089	2.434	2.882	2.721	3.137	2.961
2034	2.549	3.195	2.796	3.479	3.049	2.331	2.854	2.643	3.131	2.906
2035	2.451	3.167	2.713	3.504	3.001	2.222	2.805	2.545	3.116	2.837
2036	2.356	3.099	2.596	3.529	2.957	2.117	2.72	2.415	3.111	2.778
2037	2.269	3.022	2.474	3.491	2.855	2.021	2.63	2.283	3.042	2.658
2038	2.193	3.003	2.411	3.519	2.822	1.939	2.597	2.216	3.044	2.608
2039	2.13	2.997	2.366	3.583	2.829	1.869	2.577	2.165	3.081	2.599
2040	2.081	2.997	2.326	3.626	2.816	1.813	2.562	2.118	3.096	2.57
2041	2.045	3.004	2.287	3.731	2.853	1.769	2.553	2.072	3.167	2.594
2042	2.018	3.004	2.24	3.839	2.882	1.733	2.534	2.017	3.234	2.603
2043	1.99	3	2.19	3.948	2.91	1.697	2.511	1.958	3.31	2.617
2044	1.96	2.984	2.131	4.071	2.95	1.658	2.477	1.891	3.394	2.638
2045	1.931	2.945	2.058	4.138	2.945	1.623	2.422	1.811	3.433	2.624
2046	1.89	2.955	2.033	4.187	2.933	1.576	2.413	1.777	3.442	2.593
2047	1.84	2.937	1.988	4.294	2.976	1.523	2.378	1.724	3.509	2.618
2048	1.782	2.911	1.937	4.406	3.021	1.463	2.336	1.665	3.583	2.646
2049	1.713	2.866	1.875	4.45	3.008	1.403	2.278	1.595	3.586	2.613
2050	1.638	2.805	1.796	4.47	2.985	1.344	2.2	1.507	3.571	2.573

TABLE A.2.19 Poverty rates at the \$2.15 per person per day International Poverty Line, by sex, Sub-Saharan Africa, 2015–2050, various scenarios

Year	No climate	Current Path	Current Path + SDG push	Worse Climate Path	Worse Climate Path + SDG Push	No climate	Current Path	Current Path + SDG push	Worse Climate Path	Worse Climate Path + SDG Push
	Female	Female	Female	Female	Female	Male	Male	Male	Male	Male
2015	39.75	39.75	39.75	39.75	39.75	38.8	38.8	38.8	38.8	38.8
2016	39.47	39.47	39.47	39.47	39.47	38.52	38.52	38.52	38.52	38.52
2017	38.99	38.99	38.99	38.99	38.99	38.05	38.05	38.05	38.05	38.05
2018	38.58	38.58	38.58	38.58	38.58	37.64	37.64	37.64	37.64	37.64
2019	38.42	38.42	38.42	38.42	38.42	37.48	37.48	37.48	37.48	37.48
2020	40.21	40.21	40.21	40.21	40.21	39.27	39.27	39.27	39.27	39.27
2021	39.82	39.82	39.82	39.82	39.82	38.89	38.89	38.89	38.89	38.89
2022	39.24	39.24	39.24	39.24	39.24	38.32	38.32	38.32	38.32	38.32
2023	38.67	38.67	38.67	38.67	38.67	37.76	37.76	37.76	37.76	37.76
2024	37.64	37.66	37.64	37.64	37.64	36.73	36.71	36.73	36.73	36.73
2025	36.5	36.73	36.43	36.87	36.58	35.6	35.79	35.53	35.97	35.69
2026	35.57	35.95	35.43	36.22	35.71	34.67	35.01	34.54	35.31	34.82
2027	34.77	35.24	34.54	35.74	35.05	33.88	34.31	33.67	34.83	34.17
2028	34.03	34.52	33.67	35.26	34.44	33.14	33.59	32.81	34.35	33.58
2029	33.27	33.79	32.83	34.79	33.85	32.39	32.86	31.98	33.88	33
2030	32.47	33.08	31.9	34.34	33.19	31.59	32.16	31.07	33.43	32.35
2031	31.62	32.39	30.97	33.83	32.43	30.75	31.47	30.14	32.92	31.6
2032	30.65	31.63	29.91	33.13	31.41	29.78	30.71	29.09	32.21	30.59
2033	29.58	30.78	28.74	32.33	30.28	28.71	29.86	27.93	31.4	29.46
2034	28.46	29.93	27.55	31.49	29.07	27.59	29.01	26.75	30.56	28.26
2035	27.32	29.04	26.29	30.77	27.95	26.45	28.12	25.5	29.83	27.16
2036	26.18	28.05	24.92	30.16	26.92	25.31	27.12	24.14	29.21	26.13
2037	25.05	27.02	23.52	29.36	25.7	24.2	26.1	22.76	28.4	24.92
2038	23.96	26.14	22.28	28.61	24.55	23.12	25.21	21.53	27.65	23.78
2039	22.89	25.3	21.11	27.86	23.46	22.06	24.38	20.39	26.9	22.71
2040	21.79	24.38	19.9	27.24	22.46	20.98	23.47	19.2	26.28	21.73
2041	20.67	23.41	18.72	26.49	21.4	19.89	22.53	18.05	25.53	20.7
2042	19.59	22.42	17.51	25.68	20.33	18.83	21.56	16.87	24.74	19.65
2043	18.56	21.49	16.4	25.1	19.48	17.82	20.66	15.78	24.18	18.83
2044	17.59	20.59	15.34	24.54	18.66	16.87	19.78	14.74	23.63	18.03
2045	16.69	19.83	14.42	23.96	17.85	15.99	19.03	13.85	23.06	17.24
2046	15.82	19.04	13.51	23.33	17.02	15.14	18.26	12.96	22.45	16.44
2047	15.01	18.29	12.65	22.79	16.3	14.34	17.53	12.13	21.92	15.73
2048	14.22	17.52	11.85	22.19	15.58	13.58	16.77	11.35	21.33	15.03
2049	13.46	16.75	11.08	21.62	14.93	12.83	16.02	10.6	20.78	14.4
2050	12.72	16.07	10.4	20.98	14.23	12.12	15.36	9.935	20.14	13.73

TABLE A.2.20 Poverty rates at the \$3.65 per person per day International Poverty Line, by sex, Sub-Saharan Africa, 2015–2050, various scenarios

Year	No climate	Current Path	Current Path + SDG push	Worse Climate Path	Worse Climate Path + SDG Push	No climate	Current Path	Current Path + SDG push	Worse Climate Path	Worse Climate Path + SDG Push
	Female	Female	Female	Female	Female	Male	Male	Male	Male	Male
2015	66.82	66.82	66.82	66.82	66.82	65.43	65.43	65.43	65.43	65.43
2016	66.5	66.5	66.5	66.5	66.5	65.14	65.14	65.14	65.14	65.14
2017	65.91	65.91	65.91	65.91	65.91	64.55	64.55	64.55	64.55	64.55
2018	65.47	65.47	65.47	65.47	65.47	64.13	64.13	64.13	64.13	64.13
2019	65.26	65.26	65.26	65.26	65.26	63.93	63.93	63.93	63.93	63.93
2020	66.92	66.92	66.92	66.92	66.92	65.6	65.6	65.6	65.6	65.6
2021	66.44	66.44	66.44	66.44	66.44	65.14	65.14	65.14	65.14	65.14
2022	65.9	65.9	65.9	65.9	65.9	64.61	64.61	64.61	64.61	64.61
2023	65.32	65.32	65.32	65.32	65.32	64.06	64.06	64.06	64.06	64.06
2024	64.28	64.3	64.28	64.28	64.28	63.03	63.01	63.03	63.03	63.03
2025	63.07	63.3	63	63.46	63.16	61.83	62.04	61.77	62.22	61.94
2026	62.03	62.38	61.83	62.66	62.13	60.81	61.13	60.63	61.43	60.92
2027	61.14	61.52	60.77	61.99	61.27	59.93	60.28	59.59	60.78	60.08
2028	60.3	60.65	59.74	61.35	60.47	59.11	59.42	58.58	60.14	59.3
2029	59.45	59.79	58.74	60.7	59.69	58.28	58.58	57.59	59.5	58.54
2030	58.54	58.93	57.62	60.12	58.86	57.38	57.74	56.5	58.93	57.73
2031	57.56	58.1	56.47	59.49	57.92	56.42	56.92	55.37	58.3	56.8
2032	56.43	57.16	55.14	58.66	56.71	55.3	55.98	54.05	57.48	55.61
2033	55.16	56.1	53.66	57.72	55.34	54.04	54.93	52.59	56.55	54.26
2034	53.81	55.03	52.13	56.76	53.9	52.69	53.86	51.06	55.58	52.83
2035	52.39	53.87	50.46	55.84	52.45	51.28	52.72	49.41	54.67	51.4
2036	50.92	52.6	48.63	54.99	51.05	49.83	51.45	47.6	53.82	50.01
2037	49.44	51.27	46.71	54	49.45	48.36	50.13	45.7	52.83	48.43
2038	47.95	50.02	44.92	53.02	47.89	46.88	48.89	43.92	51.86	46.89
2039	46.45	48.82	43.21	52.03	46.38	45.38	47.7	42.23	50.88	45.39
2040	44.89	47.52	41.42	51.1	44.9	43.84	46.41	40.47	49.95	43.93
2041	43.29	46.17	39.65	50.03	43.36	42.27	45.09	38.72	48.9	42.42
2042	41.68	44.75	37.79	48.9	41.76	40.68	43.69	36.89	47.79	40.85
2043	40.07	43.36	35.97	47.94	40.35	39.1	42.32	35.1	46.85	39.47
2044	38.51	41.97	34.18	46.99	38.96	37.55	40.95	33.33	45.91	38.1
2045	37	40.73	32.55	46.01	37.56	36.07	39.73	31.73	44.96	36.73
2046	35.52	39.45	30.93	45	36.14	34.62	38.48	30.14	43.96	35.34
2047	34.1	38.19	29.37	44.05	34.84	33.22	37.24	28.61	43.03	34.05
2048	32.7	36.92	27.87	43.06	33.53	31.84	36	27.13	42.06	32.78
2049	31.33	35.65	26.42	42.11	32.33	30.5	34.75	25.71	41.12	31.6
2050	30	34.49	25.08	41.09	31.1	29.19	33.61	24.39	40.12	30.39

TABLE A.2.21 Poverty rates at the \$6.85 per person per day International Poverty Line, by sex, Sub-Saharan Africa, 2015–2050, various scenarios

Year	No climate	Current Path	Current Path + SDG push	Worse Climate Path	Worse Climate Path + SDG Push	No climate	Current Path	Current Path + SDG push	Worse Climate Path	Worse Climate Path + SDG Push
	Female	Female	Female	Female	Female	Male	Male	Male	Male	Male
2015	87.85	87.85	87.85	87.85	87.85	86.65	86.65	86.65	86.65	86.65
2016	87.71	87.71	87.71	87.71	87.71	86.5	86.5	86.5	86.5	86.5
2017	87.38	87.38	87.38	87.38	87.38	86.16	86.16	86.16	86.16	86.16
2018	87.13	87.13	87.13	87.13	87.13	85.91	85.91	85.91	85.91	85.91
2019	87.02	87.02	87.02	87.02	87.02	85.8	85.8	85.8	85.8	85.8
2020	87.94	87.94	87.94	87.94	87.94	86.71	86.71	86.71	86.71	86.71
2021	87.65	87.65	87.65	87.65	87.65	86.42	86.42	86.42	86.42	86.42
2022	87.35	87.35	87.35	87.35	87.35	86.12	86.12	86.12	86.12	86.12
2023	87.05	87.05	87.05	87.05	87.05	85.81	85.81	85.81	85.81	85.81
2024	86.46	86.49	86.46	86.46	86.46	85.23	85.19	85.23	85.23	85.23
2025	85.75	85.92	85.71	85.99	85.81	84.54	84.63	84.5	84.76	84.61
2026	85.13	85.33	84.96	85.47	85.14	83.92	84.05	83.78	84.24	83.95
2027	84.58	84.76	84.26	85	84.53	83.38	83.48	83.08	83.76	83.35
2028	84.05	84.18	83.57	84.54	83.96	82.86	82.9	82.41	83.29	82.79
2029	83.51	83.6	82.87	84.06	83.38	82.32	82.32	81.72	82.8	82.21
2030	82.92	83.01	82.09	83.63	82.77	81.74	81.73	80.95	82.35	81.6
2031	82.29	82.43	81.27	83.18	82.09	81.09	81.14	80.13	81.87	80.92
2032	81.52	81.74	80.28	82.61	81.24	80.32	80.43	79.14	81.29	80.07
2033	80.64	80.96	79.15	81.97	80.25	79.43	79.63	78.01	80.61	79.08
2034	79.67	80.12	77.92	81.3	79.2	78.45	78.78	76.78	79.93	78.03
2035	78.62	79.22	76.56	80.61	78.06	77.39	77.86	75.42	79.21	76.89
2036	77.5	78.21	75.04	79.91	76.88	76.27	76.85	73.9	78.49	75.71
2037	76.32	77.15	73.41	79.15	75.57	75.09	75.78	72.28	77.71	74.4
2038	75.1	76.09	71.77	78.37	74.23	73.86	74.71	70.64	76.9	73.06
2039	73.81	75.01	70.15	77.56	72.89	72.57	73.63	69.02	76.07	71.72
2040	72.46	73.85	68.42	76.71	71.47	71.22	72.46	67.3	75.2	70.31
2041	71.02	72.63	66.66	75.78	70	69.79	71.24	65.56	74.26	68.85
2042	69.5	71.33	64.76	74.78	68.43	68.28	69.94	63.67	73.26	67.29
2043	67.93	69.98	62.8	73.8	66.88	66.71	68.59	61.72	72.25	65.73
2044	66.33	68.59	60.8	72.79	65.31	65.12	67.21	59.73	71.23	64.17
2045	64.74	67.27	58.88	71.76	63.71	63.53	65.88	57.82	70.19	62.57
2046	63.12	65.9	56.93	70.7	62.08	61.92	64.51	55.88	69.11	60.95
2047	61.51	64.52	54.99	69.64	60.49	60.32	63.13	53.96	68.04	59.36
2048	59.89	63.11	53.08	68.57	58.9	58.7	61.73	52.06	66.95	57.78
2049	58.25	61.67	51.17	67.49	57.36	57.07	60.29	50.16	65.85	56.24
2050	56.62	60.29	49.33	66.37	55.8	55.45	58.91	48.33	64.72	54.7

TABLE A.2.22 Poverty rates at the \$2.15 per person per day International Poverty Line, by sex, Oceania (excl. Australia and New Zealand), 2015–2050, various scenarios

Year	No climate	Current Path	Current Path + SDG push	Worse Climate Path	Worse Climate Path + SDG Push	No climate	Current Path	Current Path + SDG push	Worse Climate Path	Worse Climate Path + SDG Push
	Female	Female	Female	Female	Female	Male	Male	Male	Male	Male
2015	32.42	32.42	32.42	32.42	32.42	31.6	31.6	31.6	31.6	31.6
2016	30.74	30.74	30.74	30.74	30.74	29.91	29.91	29.91	29.91	29.91
2017	29.26	29.26	29.26	29.26	29.26	28.44	28.44	28.44	28.44	28.44
2018	29.18	29.18	29.18	29.18	29.18	28.37	28.37	28.37	28.37	28.37
2019	27.57	27.57	27.57	27.57	27.57	26.78	26.78	26.78	26.78	26.78
2020	28.13	28.13	28.13	28.13	28.13	27.35	27.35	27.35	27.35	27.35
2021	26.47	26.47	26.47	26.47	26.47	25.7	25.7	25.7	25.7	25.7
2022	24.08	24.08	24.08	24.08	24.08	23.33	23.33	23.33	23.33	23.33
2023	21.7	21.7	21.7	21.7	21.7	20.96	20.96	20.96	20.96	20.96
2024	19.76	19.79	19.76	19.77	19.77	19.04	19.01	19.04	19.05	19.05
2025	18.03	18.21	18.07	18.31	18.2	17.33	17.45	17.38	17.6	17.51
2026	17	17.25	16.98	17.47	17.23	16.32	16.5	16.32	16.77	16.57
2027	16.53	16.86	16.5	17.15	16.82	15.87	16.13	15.87	16.47	16.18
2028	16.29	16.71	16.36	17.14	16.81	15.65	16	15.75	16.46	16.2
2029	16.03	16.52	16.22	17.19	16.91	15.42	15.83	15.64	16.52	16.33
2030	15.66	16.23	16	17.05	16.83	15.06	15.56	15.45	16.39	16.27
2031	15.21	15.92	15.78	16.84	16.71	14.63	15.26	15.26	16.19	16.18
2032	14.7	15.51	15.49	16.57	16.57	14.13	14.87	14.99	15.91	16.05
2033	14.19	15.16	15.31	16.3	16.47	13.63	14.52	14.82	15.64	15.97
2034	13.72	14.77	15.11	16.09	16.48	13.17	14.14	14.64	15.44	16
2035	13.29	14.43	15.01	15.96	16.6	12.75	13.81	14.56	15.31	16.14
2036	12.9	14.1	14.91	15.84	16.72	12.37	13.49	14.47	15.19	16.27
2037	12.54	13.8	14.84	15.77	16.91	12.02	13.2	14.42	15.12	16.48
2038	12.2	13.57	14.72	15.7	16.93	11.7	12.99	14.32	15.05	16.52
2039	11.86	13.34	14.63	15.51	16.88	11.36	12.76	14.24	14.86	16.48
2040	11.47	13.08	14.48	15.42	16.95	10.99	12.51	14.12	14.77	16.57
2041	11.03	12.73	14.2	15.28	16.95	10.56	12.17	13.86	14.63	16.59
2042	10.55	12.35	13.75	15.1	16.74	10.09	11.8	13.43	14.45	16.4
2043	10.05	11.93	13.14	14.81	16.25	9.608	11.39	12.84	14.17	15.92
2044	9.55	11.49	12.43	14.49	15.58	9.117	10.96	12.14	13.85	15.27
2045	9.033	11.01	11.61	14.05	14.73	8.614	10.5	11.34	13.41	14.43
2046	8.502	10.47	10.68	13.62	13.83	8.096	9.966	10.43	12.98	13.56
2047	7.965	9.946	9.708	13.14	12.88	7.574	9.457	9.48	12.51	12.62
2048	7.426	9.389	8.692	12.57	11.78	7.049	8.912	8.482	11.94	11.53
2049	6.894	8.833	7.694	12.07	10.71	6.531	8.368	7.502	11.44	10.48
2050	6.351	8.258	6.733	11.48	9.573	6.003	7.806	6.558	10.85	9.363

TABLE A.2.23 Poverty rates at the \$3.65 per person per day International Poverty Line, by sex, Oceania (excl. Australia and New Zealand), 2015–2050, various scenarios

Year	No climate	Current Path	Current Path + SDG push	Worse Climate Path	Worse Climate Path + SDG Push	No climate	Current Path	Current Path + SDG push	Worse Climate Path	Worse Climate Path + SDG Push
	Female	Female	Female	Female	Female	Male	Male	Male	Male	Male
2015	56.41	56.41	56.41	56.41	56.41	55.52	55.52	55.52	55.52	55.52
2016	54.6	54.6	54.6	54.6	54.6	53.71	53.71	53.71	53.71	53.71
2017	52.96	52.96	52.96	52.96	52.96	52.07	52.07	52.07	52.07	52.07
2018	52.86	52.86	52.86	52.86	52.86	51.97	51.97	51.97	51.97	51.97
2019	51.18	51.18	51.18	51.18	51.18	50.3	50.3	50.3	50.3	50.3
2020	52.13	52.13	52.13	52.13	52.13	51.26	51.26	51.26	51.26	51.26
2021	50.38	50.38	50.38	50.38	50.38	49.52	49.52	49.52	49.52	49.52
2022	47.39	47.39	47.39	47.39	47.39	46.54	46.54	46.54	46.54	46.54
2023	44.31	44.31	44.31	44.31	44.31	43.47	43.47	43.47	43.47	43.47
2024	41.64	41.67	41.64	41.64	41.64	40.81	40.78	40.81	40.82	40.82
2025	39.21	39.46	39.27	39.61	39.46	38.4	38.59	38.47	38.79	38.65
2026	37.76	38.06	37.68	38.38	38.04	36.96	37.2	36.9	37.57	37.25
2027	37.13	37.5	36.98	37.94	37.45	36.34	36.65	36.22	37.13	36.68
2028	36.84	37.29	36.78	37.93	37.45	36.07	36.46	36.03	37.12	36.7
2029	36.51	37.03	36.59	37.96	37.55	35.76	36.21	35.87	37.16	36.82
2030	36	36.62	36.28	37.78	37.45	35.26	35.81	35.58	36.98	36.74
2031	35.35	36.14	35.93	37.45	37.25	34.62	35.35	35.25	36.65	36.55
2032	34.58	35.52	35.48	37.01	36.99	33.86	34.72	34.8	36.21	36.31
2033	33.79	34.94	35.15	36.56	36.79	33.08	34.16	34.49	35.75	36.12
2034	33.05	34.32	34.81	36.24	36.79	32.35	33.54	34.17	35.43	36.13
2035	32.36	33.76	34.6	36.03	36.92	31.67	32.99	33.98	35.22	36.28
2036	31.72	33.22	34.39	35.82	37.04	31.04	32.45	33.78	35.01	36.42
2037	31.13	32.71	34.23	35.67	37.24	30.46	31.95	33.64	34.86	36.63
2038	30.56	32.31	34	35.49	37.2	29.9	31.56	33.43	34.68	36.61
2039	29.96	31.87	33.78	35.19	37.11	29.31	31.12	33.23	34.38	36.53
2040	29.29	31.39	33.47	34.97	37.11	28.65	30.65	32.93	34.16	36.55
2041	28.5	30.76	32.96	34.69	37.02	27.88	30.03	32.44	33.88	36.47
2042	27.64	30.08	32.18	34.33	36.63	27.03	29.37	31.69	33.52	36.1
2043	26.72	29.32	31.12	33.83	35.82	26.13	28.62	30.65	33.03	35.31
2044	25.78	28.51	29.86	33.23	34.7	25.2	27.82	29.41	32.43	34.21
2045	24.8	27.63	28.41	32.48	33.3	24.24	26.95	27.98	31.68	32.82
2046	23.76	26.63	26.75	31.71	31.8	23.22	25.96	26.34	30.91	31.34
2047	22.7	25.65	24.97	30.85	30.18	22.16	25	24.58	30.05	29.73
2048	21.6	24.59	23.06	29.88	28.31	21.08	23.95	22.68	29.09	27.89
2049	20.49	23.53	21.11	28.96	26.41	19.98	22.9	20.75	28.17	25.99
2050	19.32	22.4	19.15	27.92	24.36	18.83	21.78	18.81	27.13	23.96

TABLE A.2.24 Poverty rates at the \$6.85 per person per day International Poverty Line, by sex, Oceania (excl. Australia and New Zealand), 2015–2050, various scenarios

Year	No climate	Current Path	Current Path + SDG push	Worse Climate Path	Worse Climate Path + SDG Push	No climate	Current Path	Current Path + SDG push	Worse Climate Path	Worse Climate Path + SDG Push
	Female	Female	Female	Female	Female	Male	Male	Male	Male	Male
2015	78.87	78.87	78.87	78.87	78.87	78.3	78.3	78.3	78.3	78.3
2016	77.54	77.54	77.54	77.54	77.54	76.96	76.96	76.96	76.96	76.96
2017	76.25	76.25	76.25	76.25	76.25	75.67	75.67	75.67	75.67	75.67
2018	76.13	76.13	76.13	76.13	76.13	75.55	75.55	75.55	75.55	75.55
2019	74.98	74.98	74.98	74.98	74.98	74.4	74.4	74.4	74.4	74.4
2020	76.16	76.16	76.16	76.16	76.16	75.58	75.58	75.58	75.58	75.58
2021	75	75	75	75	75	74.42	74.42	74.42	74.42	74.42
2022	72.32	72.32	72.32	72.32	72.32	71.74	71.74	71.74	71.74	71.74
2023	69.54	69.54	69.54	69.54	69.54	68.95	68.95	68.95	68.95	68.95
2024	66.93	66.95	66.93	66.94	66.94	66.35	66.33	66.35	66.36	66.36
2025	64.59	64.82	64.65	64.98	64.83	64.01	64.2	64.08	64.39	64.25
2026	63.24	63.48	63.11	63.79	63.45	62.66	62.86	62.54	63.2	62.88
2027	62.72	62.98	62.47	63.43	62.93	62.14	62.36	61.91	62.83	62.37
2028	62.55	62.84	62.31	63.47	62.97	61.98	62.22	61.76	62.87	62.42
2029	62.3	62.61	62.15	63.48	63.06	61.74	62	61.61	62.88	62.51
2030	61.83	62.21	61.82	63.3	62.94	61.26	61.6	61.29	62.7	62.4
2031	61.17	61.7	61.42	62.93	62.67	60.61	61.09	60.9	62.32	62.14
2032	60.37	61.01	60.89	62.42	62.33	59.81	60.4	60.37	61.79	61.79
2033	59.53	60.37	60.47	61.89	62.02	58.97	59.75	59.96	61.25	61.5
2034	58.74	59.68	60.06	61.52	61.95	58.18	59.06	59.55	60.88	61.43
2035	57.99	59.04	59.74	61.27	62	57.43	58.42	59.24	60.62	61.48
2036	57.29	58.42	59.42	61.01	62.01	56.73	57.8	58.92	60.35	61.5
2037	56.62	57.83	59.13	60.8	62.07	56.07	57.21	58.64	60.13	61.56
2038	55.96	57.33	58.83	60.52	61.96	55.41	56.71	58.36	59.85	61.46
2039	55.27	56.76	58.54	60.18	61.86	54.72	56.14	58.07	59.5	61.38
2040	54.48	56.15	58.13	59.83	61.78	53.94	55.53	57.68	59.15	61.3
2041	53.57	55.39	57.53	59.44	61.61	53.03	54.77	57.09	58.75	61.14
2042	52.55	54.58	56.63	58.97	61.14	52.02	53.97	56.2	58.28	60.68
2043	51.45	53.67	55.38	58.37	60.24	50.93	53.07	54.97	57.68	59.8
2044	50.29	52.67	53.88	57.64	58.96	49.78	52.07	53.49	56.95	58.53
2045	49.06	51.57	52.12	56.77	57.38	48.56	50.98	51.74	56.08	56.97
2046	47.76	50.34	50.1	55.85	55.65	47.26	49.76	49.74	55.16	55.25
2047	46.38	49.1	47.88	54.82	53.75	45.9	48.53	47.53	54.13	53.35
2048	44.94	47.76	45.41	53.69	51.58	44.47	47.19	45.08	53.01	51.2
2049	43.46	46.4	42.83	52.57	49.24	42.99	45.84	42.5	51.88	48.87
2050	41.86	44.92	40.12	51.32	46.7	41.4	44.36	39.8	50.63	46.34

TABLE A.2.25 Poverty rates at the \$2.15 per person per day International Poverty Line, by sex, Australia and New Zealand, 2015–2050, various scenarios

Year	No climate	Current Path	Current Path + SDG push	Worse Climate Path	Worse Climate Path + SDG Push	No climate	Current Path	Current Path + SDG push	Worse Climate Path	Worse Climate Path + SDG Push
	Female	Female	Female	Female	Female	Male	Male	Male	Male	Male
2015	0.422	0.422	0.422	0.422	0.422	0.416	0.416	0.416	0.416	0.416
2016	0.421	0.421	0.421	0.421	0.421	0.401	0.401	0.401	0.401	0.401
2017	0.398	0.398	0.398	0.398	0.398	0.384	0.384	0.384	0.384	0.384
2018	0.377	0.377	0.377	0.377	0.377	0.368	0.368	0.368	0.368	0.368
2019	0.367	0.367	0.367	0.367	0.367	0.361	0.361	0.361	0.361	0.361
2020	0.389	0.389	0.389	0.389	0.389	0.382	0.382	0.382	0.382	0.382
2021	0.392	0.392	0.392	0.392	0.392	0.389	0.389	0.389	0.389	0.389
2022	0.362	0.362	0.362	0.362	0.362	0.362	0.362	0.362	0.362	0.362
2023	0.362	0.362	0.362	0.362	0.362	0.364	0.364	0.364	0.364	0.364
2024	0.364	0.39	0.364	0.367	0.367	0.368	0.342	0.368	0.371	0.371
2025	0.354	0.378	0.353	0.365	0.358	0.36	0.348	0.36	0.371	0.364
2026	0.335	0.379	0.351	0.361	0.349	0.345	0.354	0.361	0.37	0.359
2027	0.311	0.367	0.338	0.377	0.362	0.325	0.35	0.351	0.389	0.375
2028	0.288	0.345	0.316	0.367	0.347	0.305	0.34	0.338	0.382	0.369
2029	0.266	0.325	0.297	0.372	0.349	0.286	0.33	0.323	0.39	0.375
2030	0.248	0.307	0.277	0.371	0.342	0.27	0.319	0.305	0.392	0.37
2031	0.232	0.291	0.26	0.38	0.336	0.257	0.311	0.289	0.389	0.367
2032	0.218	0.284	0.246	0.412	0.343	0.245	0.307	0.278	0.393	0.375
2033	0.203	0.277	0.231	0.429	0.335	0.232	0.301	0.264	0.387	0.371
2034	0.185	0.264	0.213	0.431	0.316	0.216	0.292	0.248	0.369	0.353
2035	0.165	0.245	0.192	0.434	0.297	0.196	0.274	0.226	0.347	0.335
2036	0.143	0.213	0.163	0.43	0.276	0.174	0.245	0.197	0.318	0.313
2037	0.124	0.184	0.137	0.372	0.223	0.15	0.215	0.169	0.258	0.259
2038	0.107	0.165	0.122	0.343	0.191	0.129	0.196	0.15	0.215	0.227
2039	0.092	0.148	0.108	0.333	0.173	0.111	0.179	0.134	0.183	0.208
2040	0.08	0.137	0.099	0.33	0.159	0.097	0.166	0.122	0.156	0.194
2041	0.07	0.128	0.09	0.333	0.149	0.085	0.156	0.111	0.135	0.184
2042	0.063	0.121	0.082	0.311	0.128	0.076	0.147	0.102	0.105	0.159
2043	0.057	0.114	0.075	0.312	0.123	0.069	0.139	0.093	0.097	0.152
2044	0.051	0.107	0.068	0.313	0.119	0.063	0.131	0.085	0.096	0.148
2045	0.047	0.104	0.065	0.315	0.116	0.058	0.128	0.081	0.097	0.145
2046	0.043	0.101	0.062	0.337	0.12	0.053	0.125	0.077	0.103	0.151
2047	0.04	0.098	0.057	0.356	0.125	0.049	0.119	0.072	0.109	0.156
2048	0.036	0.093	0.052	0.378	0.129	0.045	0.111	0.066	0.116	0.162
2049	0.033	0.091	0.048	0.392	0.13	0.041	0.104	0.061	0.12	0.164
2050	0.031	0.09	0.045	0.405	0.131	0.038	0.098	0.056	0.124	0.165

TABLE A.2.26 Poverty rates at the \$3.65 per person per day International Poverty Line, by sex, Australia and New Zealand, 2015–2050, various scenarios

Year	No climate	Current Path	Current Path + SDG push	Worse Climate Path	Worse Climate Path + SDG Push	No climate	Current Path	Current Path + SDG push	Worse Climate Path	Worse Climate Path + SDG Push
	Female	Female	Female	Female	Female	Male	Male	Male	Male	Male
2015	0.453	0.453	0.453	0.453	0.453	0.554	0.554	0.554	0.554	0.554
2016	0.459	0.459	0.459	0.459	0.459	0.533	0.533	0.533	0.533	0.533
2017	0.434	0.434	0.434	0.434	0.434	0.511	0.511	0.511	0.511	0.511
2018	0.411	0.411	0.411	0.411	0.411	0.489	0.489	0.489	0.489	0.489
2019	0.401	0.401	0.401	0.401	0.401	0.479	0.479	0.479	0.479	0.479
2020	0.428	0.428	0.428	0.428	0.428	0.503	0.503	0.503	0.503	0.503
2021	0.434	0.434	0.434	0.434	0.434	0.509	0.509	0.509	0.509	0.509
2022	0.401	0.401	0.401	0.401	0.401	0.476	0.476	0.476	0.476	0.476
2023	0.402	0.402	0.402	0.402	0.402	0.476	0.476	0.476	0.476	0.476
2024	0.405	0.405	0.405	0.409	0.409	0.479	0.479	0.479	0.483	0.483
2025	0.393	0.4	0.392	0.406	0.398	0.47	0.478	0.47	0.483	0.475
2026	0.371	0.402	0.389	0.401	0.388	0.452	0.483	0.47	0.482	0.469
2027	0.343	0.391	0.374	0.42	0.402	0.428	0.475	0.458	0.503	0.486
2028	0.316	0.37	0.352	0.407	0.388	0.403	0.457	0.439	0.494	0.475
2029	0.29	0.351	0.33	0.413	0.391	0.38	0.44	0.42	0.503	0.48
2030	0.269	0.332	0.306	0.412	0.382	0.361	0.424	0.398	0.504	0.474
2031	0.25	0.317	0.285	0.414	0.375	0.345	0.411	0.379	0.509	0.469
2032	0.234	0.309	0.269	0.434	0.383	0.331	0.405	0.365	0.531	0.479
2033	0.22	0.3	0.252	0.439	0.374	0.311	0.398	0.349	0.538	0.472
2034	0.204	0.286	0.235	0.429	0.352	0.287	0.386	0.324	0.529	0.451
2035	0.181	0.265	0.211	0.417	0.33	0.26	0.362	0.296	0.518	0.429
2036	0.158	0.233	0.18	0.397	0.304	0.231	0.322	0.258	0.498	0.403
2037	0.134	0.201	0.151	0.33	0.246	0.203	0.284	0.222	0.429	0.336
2038	0.114	0.181	0.133	0.288	0.212	0.178	0.259	0.2	0.386	0.294
2039	0.096	0.162	0.116	0.266	0.193	0.156	0.237	0.181	0.359	0.27
2040	0.081	0.149	0.104	0.25	0.177	0.138	0.221	0.166	0.34	0.251
2041	0.071	0.138	0.094	0.24	0.167	0.123	0.208	0.153	0.328	0.238
2042	0.063	0.13	0.085	0.213	0.142	0.11	0.198	0.141	0.293	0.208
2043	0.057	0.122	0.077	0.209	0.135	0.1	0.188	0.13	0.289	0.199
2044	0.052	0.114	0.07	0.208	0.13	0.091	0.177	0.119	0.289	0.194
2045	0.047	0.11	0.066	0.209	0.127	0.085	0.173	0.113	0.291	0.19
2046	0.043	0.107	0.063	0.224	0.132	0.078	0.169	0.108	0.309	0.197
2047	0.04	0.102	0.058	0.236	0.136	0.072	0.163	0.101	0.325	0.203
2048	0.036	0.095	0.053	0.25	0.142	0.066	0.155	0.093	0.344	0.21
2049	0.033	0.09	0.049	0.26	0.143	0.061	0.149	0.086	0.356	0.212
2050	0.031	0.086	0.045	0.268	0.143	0.056	0.144	0.08	0.366	0.213

TABLE A.2.27 Poverty rates at the \$6.85 per person per day International Poverty Line, by sex, Australia and New Zealand, 2015–2050, various scenarios

Year	No climate	Current Path	Current Path + SDG push	Worse Climate Path	Worse Climate Path + SDG Push	No climate	Current Path	Current Path + SDG push	Worse Climate Path	Worse Climate Path + SDG Push
	Female	Female	Female	Female	Female	Male	Male	Male	Male	Male
2015	1.24	1.24	1.24	1.24	1.24	1.374	1.374	1.374	1.374	1.374
2016	1.185	1.185	1.185	1.185	1.185	1.267	1.267	1.267	1.267	1.267
2017	1.119	1.119	1.119	1.119	1.119	1.176	1.176	1.176	1.176	1.176
2018	1.064	1.064	1.064	1.064	1.064	1.099	1.099	1.099	1.099	1.099
2019	1.048	1.048	1.048	1.048	1.048	1.061	1.061	1.061	1.061	1.061
2020	1.117	1.117	1.117	1.117	1.117	1.112	1.112	1.112	1.112	1.112
2021	1.116	1.116	1.116	1.116	1.116	1.095	1.095	1.095	1.095	1.095
2022	1.063	1.063	1.063	1.063	1.063	1.027	1.027	1.027	1.027	1.027
2023	1.078	1.078	1.078	1.078	1.078	1.031	1.031	1.031	1.031	1.031
2024	1.074	1.15	1.074	1.081	1.081	1.016	0.939	1.016	1.023	1.023
2025	1.042	1.133	1.027	1.078	1.039	0.976	0.913	0.987	0.995	0.999
2026	0.989	1.125	0.996	1.067	0.997	0.916	0.883	0.959	0.952	0.967
2027	0.927	1.097	0.949	1.105	1.005	0.846	0.834	0.915	0.937	0.965
2028	0.868	1.058	0.898	1.089	0.968	0.778	0.777	0.871	0.882	0.931
2029	0.817	1.024	0.85	1.108	0.965	0.715	0.722	0.825	0.851	0.918
2030	0.778	0.995	0.802	1.123	0.948	0.658	0.669	0.775	0.813	0.89
2031	0.744	0.973	0.759	1.148	0.939	0.609	0.623	0.733	0.786	0.87
2032	0.717	0.963	0.725	1.21	0.961	0.564	0.585	0.693	0.784	0.868
2033	0.689	0.955	0.69	1.244	0.953	0.516	0.545	0.649	0.759	0.841
2034	0.656	0.939	0.65	1.258	0.924	0.464	0.5	0.599	0.716	0.797
2035	0.615	0.909	0.602	1.262	0.89	0.404	0.442	0.542	0.661	0.741
2036	0.567	0.828	0.536	1.251	0.847	0.346	0.392	0.475	0.592	0.678
2037	0.497	0.728	0.472	1.143	0.74	0.312	0.362	0.412	0.487	0.577
2038	0.425	0.659	0.432	1.039	0.676	0.29	0.339	0.363	0.449	0.506
2039	0.366	0.595	0.395	0.973	0.643	0.263	0.318	0.322	0.428	0.456
2040	0.321	0.546	0.36	0.92	0.617	0.238	0.306	0.3	0.408	0.409
2041	0.282	0.504	0.329	0.895	0.597	0.22	0.297	0.279	0.398	0.387
2042	0.25	0.471	0.303	0.816	0.526	0.206	0.29	0.261	0.377	0.363
2043	0.223	0.439	0.277	0.795	0.498	0.194	0.283	0.244	0.369	0.349
2044	0.202	0.406	0.252	0.783	0.476	0.183	0.275	0.228	0.364	0.337
2045	0.184	0.388	0.237	0.775	0.457	0.174	0.271	0.218	0.362	0.326
2046	0.168	0.373	0.223	0.811	0.469	0.163	0.267	0.208	0.369	0.325
2047	0.153	0.355	0.207	0.833	0.474	0.154	0.258	0.197	0.372	0.319
2048	0.14	0.332	0.188	0.866	0.484	0.144	0.248	0.184	0.378	0.316
2049	0.128	0.313	0.172	0.887	0.484	0.134	0.24	0.172	0.383	0.313
2050	0.117	0.297	0.16	0.9	0.48	0.125	0.233	0.16	0.384	0.308

ANNEX 3

TABLE A.3.1 Food insecurity rates, by sex, Global, 2015–2050, various scenarios

Year	No climate	Current Path	Current Path + SDG push	Worse Climate Path	Worse Climate Path + SDG Push	No climate	Current Path	Current Path + SDG push	Worse Climate Path	Worse Climate Path + SDG Push
	Female	Female	Female	Female	Female	Male	Male	Male	Male	Male
2015	29.07	29.07	29.07	29.07	29.07	26.75	26.75	26.75	26.75	26.75
2016	28.48	28.48	28.48	28.48	28.48	26.24	26.24	26.24	26.24	26.24
2017	28.03	28.03	28.03	28.03	28.03	25.87	25.87	25.87	25.87	25.87
2018	27.56	27.56	27.56	27.56	27.56	25.48	25.48	25.48	25.48	25.48
2019	27.22	27.22	27.22	27.22	27.22	25.21	25.21	25.21	25.21	25.21
2020	27.45	27.45	27.45	27.45	27.45	25.45	25.45	25.45	25.45	25.45
2021	26.92	26.92	26.92	26.92	26.92	25.02	25.02	25.02	25.02	25.02
2022	26.4	26.4	26.4	26.4	26.4	24.6	24.6	24.6	24.6	24.6
2023	25.97	25.97	25.97	25.97	25.97	24.25	24.25	24.25	24.25	24.25
2024	25.56	25.65	25.35	25.55	25.34	23.91	23.87	23.72	23.9	23.71
2025	25.18	25.3	24.7	25.42	24.89	23.6	23.58	23.18	23.77	23.33
2026	24.82	24.95	24.01	25.26	24.37	23.3	23.28	22.61	23.62	22.88
2027	24.48	24.62	23.37	25.14	23.88	23.01	23.02	22.08	23.5	22.48
2028	24.15	24.3	22.76	25.03	23.43	22.75	22.76	21.58	23.39	22.09
2029	23.84	23.99	22.21	24.94	23.02	22.49	22.51	21.13	23.28	21.74
2030	23.54	23.7	21.69	24.86	22.64	22.25	22.28	20.7	23.19	21.42
2031	23.27	23.44	21.23	24.83	22.31	22.03	22.06	20.33	23.13	21.13
2032	23.02	23.2	20.79	24.8	22	21.82	21.86	19.96	23.06	20.86
2033	22.75	22.95	20.37	24.77	21.69	21.6	21.65	19.61	22.99	20.57
2034	22.5	22.7	19.96	24.75	21.4	21.38	21.45	19.27	22.92	20.3
2035	22.24	22.46	19.58	24.59	21.03	21.16	21.24	18.94	22.73	19.95
2036	21.97	22.2	19.21	24.43	20.67	20.93	21.03	18.62	22.54	19.61
2037	21.71	21.95	18.84	24.27	20.32	20.7	20.8	18.29	22.35	19.27
2038	21.43	21.68	18.58	24.12	20.13	20.46	20.58	18.06	22.15	19.06
2039	21.16	21.43	18.32	24.06	20	20.22	20.36	17.84	22.03	18.9
2040	20.9	21.18	18.06	23.8	19.73	19.99	20.14	17.62	21.75	18.64
2041	20.64	20.93	17.83	23.66	19.56	19.77	19.93	17.41	21.55	18.45
2042	20.38	20.68	17.59	23.52	19.4	19.54	19.72	17.21	21.36	18.26
2043	20.13	20.44	17.36	23.38	19.25	19.32	19.51	17.01	21.17	18.08
2044	19.88	20.2	17.13	23.25	19.09	19.1	19.29	16.81	20.98	17.89
2045	19.66	19.99	16.94	23.16	18.97	18.91	19.11	16.63	20.81	17.74
2046	19.45	19.79	16.74	23.17	18.92	18.72	18.93	16.46	20.72	17.63
2047	19.24	19.58	16.55	22.98	18.75	18.52	18.75	16.29	20.47	17.42
2048	19.03	19.38	16.36	22.89	18.64	18.33	18.56	16.11	20.29	17.25
2049	18.82	19.18	16.18	22.81	18.54	18.14	18.38	15.94	20.12	17.09
2050	18.61	18.98	16	22.73	18.44	17.95	18.2	15.77	19.94	16.93

TABLE A.3.2 Food insecurity rates, by sex, Central and Southern Asia, 2015–2050, various scenarios

Year	No climate	Current Path	Current Path + SDG push	Worse Climate Path	Worse Climate Path + SDG Push	No climate	Current Path	Current Path + SDG push	Worse Climate Path	Worse Climate Path + SDG Push
	Female	Female	Female	Female	Female	Male	Male	Male	Male	Male
2015	40.24	40.24	40.24	40.24	40.24	35.85	35.85	35.85	35.85	35.85
2016	38.53	38.53	38.53	38.53	38.53	34.42	34.42	34.42	34.42	34.42
2017	37.36	37.36	37.36	37.36	37.36	33.46	33.46	33.46	33.46	33.46
2018	36.13	36.13	36.13	36.13	36.13	32.46	32.46	32.46	32.46	32.46
2019	35.29	35.29	35.29	35.29	35.29	31.79	31.79	31.79	31.79	31.79
2020	35.52	35.52	35.52	35.52	35.52	32.03	32.03	32.03	32.03	32.03
2021	34.18	34.18	34.18	34.18	34.18	30.95	30.95	30.95	30.95	30.95
2022	32.88	32.88	32.88	32.88	32.88	29.89	29.89	29.89	29.89	29.89
2023	31.83	31.83	31.83	31.83	31.83	29.04	29.04	29.04	29.04	29.04
2024	30.87	31.02	30.79	30.85	30.77	28.28	28.24	28.21	28.26	28.19
2025	30	30.19	29.42	30.36	29.71	27.57	27.57	27.08	27.85	27.31
2026	29.17	29.35	28.06	29.84	28.6	26.91	26.91	26.01	27.4	26.42
2027	28.4	28.61	26.83	29.39	27.58	26.3	26.33	25.05	27.02	25.62
2028	27.68	27.89	25.74	28.96	26.67	25.73	25.76	24.17	26.66	24.88
2029	26.98	27.19	24.77	28.55	25.86	25.18	25.22	23.4	26.3	24.22
2030	26.32	26.54	23.88	28.16	25.11	24.67	24.71	22.7	25.96	23.63
2031	25.71	25.92	23.09	27.82	24.44	24.17	24.21	22.08	25.65	23.08
2032	25.13	25.35	22.37	27.51	23.83	23.7	23.76	21.5	25.36	22.57
2033	24.55	24.78	21.69	27.19	23.23	23.22	23.28	20.94	25.04	22.05
2034	24	24.24	21.06	26.88	22.67	22.77	22.84	20.42	24.73	21.58
2035	23.46	23.7	20.46	26.39	22.02	22.31	22.39	19.93	24.27	21.01
2036	22.93	23.18	19.9	25.9	21.42	21.86	21.95	19.47	23.81	20.48
2037	22.41	22.66	19.35	25.44	20.84	21.43	21.52	19	23.37	19.97
2038	21.91	22.16	18.92	25	20.44	21.01	21.11	18.64	22.95	19.61
2039	21.42	21.68	18.49	24.72	20.12	20.6	20.71	18.28	22.65	19.3
2040	20.96	21.23	18.09	24.16	19.67	20.21	20.33	17.95	22.13	18.88
2041	20.53	20.8	17.71	23.77	19.32	19.85	19.98	17.63	21.74	18.56
2042	20.1	20.38	17.35	23.41	19.01	19.49	19.62	17.33	21.38	18.26
2043	19.71	19.99	16.99	23.06	18.7	19.15	19.29	17.03	21.02	17.97
2044	19.31	19.59	16.65	22.72	18.39	18.81	18.95	16.74	20.67	17.66
2045	19.01	19.3	16.38	22.49	18.18	18.55	18.69	16.51	20.39	17.43
2046	18.72	19.01	16.12	22.38	18.04	18.28	18.44	16.28	20.2	17.26
2047	18.43	18.72	15.88	22.03	17.78	18.02	18.19	16.06	19.84	16.98
2048	18.15	18.44	15.62	21.81	17.58	17.78	17.94	15.83	19.56	16.75
2049	17.88	18.17	15.39	21.61	17.4	17.53	17.7	15.62	19.3	16.53
2050	17.62	17.91	15.15	21.4	17.22	17.29	17.46	15.41	19.03	16.32

TABLE A.3.3 Food insecurity rates, by sex, Eastern and South-Eastern Asia, 2015–2050, various scenarios

Year	No climate	Current Path	Current Path + SDG push	Worse Climate Path	Worse Climate Path + SDG Push	No climate	Current Path	Current Path + SDG push	Worse Climate Path	Worse Climate Path + SDG Push
	Female	Female	Female	Female	Female	Male	Male	Male	Male	Male
2015	16.18	16.18	16.18	16.18	16.18	16.16	16.16	16.16	16.16	16.16
2016	15.88	15.88	15.88	15.88	15.88	15.84	15.84	15.84	15.84	15.84
2017	15.6	15.6	15.6	15.6	15.6	15.57	15.57	15.57	15.57	15.57
2018	15.32	15.32	15.32	15.32	15.32	15.3	15.3	15.3	15.3	15.3
2019	15.06	15.06	15.06	15.06	15.06	15.05	15.05	15.05	15.05	15.05
2020	15.07	15.07	15.07	15.07	15.07	15.06	15.06	15.06	15.06	15.06
2021	14.86	14.86	14.86	14.86	14.86	14.85	14.85	14.85	14.85	14.85
2022	14.6	14.6	14.6	14.6	14.6	14.62	14.62	14.62	14.62	14.62
2023	14.35	14.35	14.35	14.35	14.35	14.39	14.39	14.39	14.39	14.39
2024	14.13	14.19	14.07	14.13	14.07	14.19	14.15	14.14	14.19	14.13
2025	13.94	14	13.79	14.03	13.85	14	13.97	13.85	14.06	13.91
2026	13.74	13.8	13.48	13.91	13.61	13.8	13.78	13.57	13.92	13.67
2027	13.55	13.62	13.2	13.8	13.38	13.62	13.59	13.3	13.79	13.44
2028	13.38	13.45	12.92	13.71	13.16	13.45	13.43	13.04	13.67	13.22
2029	13.2	13.27	12.66	13.62	12.95	13.28	13.26	12.79	13.55	13.01
2030	13.04	13.11	12.41	13.53	12.75	13.11	13.1	12.56	13.43	12.81
2031	12.87	12.95	12.18	13.45	12.56	12.96	12.94	12.33	13.32	12.61
2032	12.72	12.79	11.95	13.38	12.38	12.8	12.79	12.12	13.21	12.42
2033	12.56	12.64	11.74	13.31	12.21	12.64	12.63	11.9	13.1	12.22
2034	12.41	12.49	11.52	13.24	12.03	12.49	12.48	11.68	12.99	12.02
2035	12.25	12.34	11.33	13.13	11.85	12.33	12.33	11.48	12.83	11.81
2036	12.11	12.2	11.15	13.03	11.68	12.18	12.19	11.27	12.7	11.59
2037	11.97	12.05	10.98	12.92	11.52	12.03	12.04	11.07	12.55	11.4
2038	11.82	11.91	10.83	12.83	11.41	11.88	11.89	10.91	12.41	11.23
2039	11.69	11.78	10.7	12.76	11.32	11.74	11.75	10.76	12.28	11.1
2040	11.56	11.66	10.57	12.66	11.2	11.61	11.62	10.61	12.14	10.94
2041	11.44	11.53	10.44	12.58	11.12	11.48	11.5	10.47	12.01	10.81
2042	11.32	11.42	10.32	12.51	11.03	11.36	11.38	10.34	11.89	10.68
2043	11.2	11.3	10.2	12.44	10.95	11.23	11.26	10.21	11.77	10.56
2044	11.09	11.2	10.08	12.39	10.88	11.11	11.14	10.08	11.66	10.44
2045	10.99	11.1	9.981	12.35	10.82	11.01	11.04	9.963	11.56	10.33
2046	10.9	11.01	9.886	12.34	10.78	10.9	10.94	9.853	11.48	10.24
2047	10.81	10.92	9.79	12.29	10.73	10.8	10.84	9.741	11.37	10.13
2048	10.72	10.84	9.697	12.27	10.68	10.7	10.75	9.631	11.28	10.02
2049	10.63	10.75	9.609	12.25	10.64	10.6	10.65	9.525	11.19	9.928
2050	10.55	10.67	9.524	12.24	10.6	10.51	10.56	9.424	11.1	9.829

TABLE A.3.4 Food insecurity rates, by sex, Northern Africa and Western Asia, 2015–2050, various scenarios

Year	No climate	Current Path	Current Path + SDG push	Worse Climate Path	Worse Climate Path + SDG Push	No climate	Current Path	Current Path + SDG push	Worse Climate Path	Worse Climate Path + SDG Push
	Female	Female	Female	Female	Female	Male	Male	Male	Male	Male
2015	28.78	28.78	28.78	28.78	28.78	24.02	24.02	24.02	24.02	24.02
2016	28.43	28.43	28.43	28.43	28.43	23.78	23.78	23.78	23.78	23.78
2017	28.22	28.22	28.22	28.22	28.22	23.65	23.65	23.65	23.65	23.65
2018	27.95	27.95	27.95	27.95	27.95	23.45	23.45	23.45	23.45	23.45
2019	27.65	27.65	27.65	27.65	27.65	23.23	23.23	23.23	23.23	23.23
2020	27.88	27.88	27.88	27.88	27.88	23.5	23.5	23.5	23.5	23.5
2021	27.59	27.59	27.59	27.59	27.59	23.3	23.3	23.3	23.3	23.3
2022	27.19	27.19	27.19	27.19	27.19	23	23	23	23	23
2023	26.91	26.91	26.91	26.91	26.91	22.79	22.79	22.79	22.79	22.79
2024	26.59	26.71	26.25	26.59	26.24	22.53	22.5	22.12	22.52	22.11
2025	26.32	26.45	25.75	26.54	25.94	22.31	22.3	21.74	22.47	21.89
2026	26.04	26.18	25.17	26.48	25.54	22.09	22.1	21.26	22.42	21.54
2027	25.76	25.92	24.61	26.44	25.17	21.87	21.89	20.81	22.37	21.24
2028	25.48	25.65	24.05	26.39	24.78	21.66	21.69	20.36	22.32	20.92
2029	25.2	25.38	23.54	26.34	24.41	21.45	21.48	19.95	22.25	20.61
2030	24.93	25.1	23.02	26.3	24.07	21.25	21.28	19.56	22.21	20.34
2031	24.71	24.88	22.56	26.33	23.78	21.09	21.11	19.2	22.2	20.09
2032	24.48	24.66	22.1	26.34	23.47	20.92	20.95	18.84	22.18	19.83
2033	24.25	24.44	21.66	26.36	23.18	20.74	20.79	18.5	22.16	19.57
2034	24.02	24.24	21.23	26.4	22.9	20.56	20.64	18.17	22.15	19.32
2035	23.79	24.03	20.81	26.29	22.5	20.38	20.47	17.83	22.01	18.98
2036	23.55	23.8	20.4	26.18	22.13	20.19	20.29	17.5	21.87	18.64
2037	23.31	23.57	19.99	26.09	21.78	20	20.11	17.18	21.74	18.32
2038	23.06	23.33	19.71	25.99	21.58	19.79	19.91	16.95	21.6	18.12
2039	22.81	23.1	19.43	26	21.46	19.59	19.73	16.73	21.54	17.99
2040	22.56	22.86	19.15	25.79	21.18	19.38	19.54	16.52	21.29	17.73
2041	22.31	22.62	18.88	25.69	21	19.17	19.34	16.31	21.13	17.55
2042	22.05	22.37	18.62	25.59	20.83	18.97	19.14	16.11	20.97	17.37
2043	21.79	22.12	18.36	25.48	20.66	18.75	18.93	15.91	20.81	17.19
2044	21.52	21.86	18.1	25.38	20.51	18.53	18.71	15.71	20.63	17.02
2045	21.29	21.64	17.87	25.32	20.39	18.34	18.54	15.53	20.49	16.87
2046	21.06	21.42	17.65	25.36	20.34	18.15	18.36	15.36	20.43	16.78
2047	20.83	21.19	17.43	25.18	20.14	17.96	18.17	15.18	20.19	16.56
2048	20.59	20.97	17.21	25.11	20.02	17.76	17.99	15.01	20.02	16.41
2049	20.36	20.74	17	25.03	19.91	17.57	17.8	14.84	19.86	16.26
2050	20.13	20.51	16.78	24.96	19.8	17.39	17.61	14.67	19.69	16.1

TABLE A.3.5 Food insecurity rates, by sex, Latin America and the Caribbean, 2015–2050, various scenarios

Year	No climate	Current Path	Current Path + SDG push	Worse Climate Path	Worse Climate Path + SDG Push	No climate	Current Path	Current Path + SDG push	Worse Climate Path	Worse Climate Path + SDG Push
	Female	Female	Female	Female	Female	Male	Male	Male	Male	Male
2015	27.6	27.6	27.6	27.6	27.6	23.4	23.4	23.4	23.4	23.4
2016	27.55	27.55	27.55	27.55	27.55	23.38	23.38	23.38	23.38	23.38
2017	27.4	27.4	27.4	27.4	27.4	23.28	23.28	23.28	23.28	23.28
2018	27.31	27.31	27.31	27.31	27.31	23.24	23.24	23.24	23.24	23.24
2019	27.41	27.41	27.41	27.41	27.41	23.37	23.37	23.37	23.37	23.37
2020	28.11	28.11	28.11	28.11	28.11	24.06	24.06	24.06	24.06	24.06
2021	27.56	27.56	27.56	27.56	27.56	23.63	23.63	23.63	23.63	23.63
2022	27.11	27.11	27.11	27.11	27.11	23.29	23.29	23.29	23.29	23.29
2023	26.87	26.87	26.87	26.87	26.87	23.11	23.11	23.11	23.11	23.11
2024	26.58	26.66	26.4	26.57	26.39	22.87	22.81	22.7	22.87	22.7
2025	26.28	26.39	25.89	26.5	26.07	22.64	22.61	22.25	22.8	22.39
2026	26.01	26.13	25.37	26.45	25.72	22.43	22.4	21.81	22.74	22.07
2027	25.76	25.88	24.88	26.41	25.39	22.23	22.21	21.39	22.68	21.78
2028	25.51	25.65	24.41	26.38	25.07	22.03	22.02	21	22.63	21.49
2029	25.28	25.43	23.97	26.38	24.78	21.86	21.85	20.65	22.6	21.24
2030	25.06	25.21	23.54	26.38	24.5	21.68	21.68	20.31	22.57	20.99
2031	24.85	25.01	23.15	26.42	24.26	21.52	21.53	19.99	22.56	20.77
2032	24.65	24.82	22.77	26.47	24.02	21.35	21.37	19.67	22.54	20.54
2033	24.45	24.62	22.4	26.51	23.78	21.18	21.2	19.36	22.51	20.3
2034	24.24	24.42	22.05	26.55	23.55	21.01	21.04	19.06	22.48	20.07
2035	24.04	24.23	21.71	26.46	23.24	20.83	20.88	18.77	22.35	19.77
2036	23.84	24.03	21.39	26.37	22.94	20.67	20.71	18.48	22.21	19.47
2037	23.63	23.84	21.08	26.27	22.65	20.49	20.55	18.21	22.06	19.17
2038	23.42	23.63	20.86	26.18	22.51	20.3	20.37	18.01	21.92	19
2039	23.22	23.44	20.65	26.12	22.4	20.13	20.21	17.83	21.78	18.85
2040	23.01	23.26	20.46	26.02	22.26	19.96	20.05	17.65	21.63	18.67
2041	22.81	23.07	20.27	25.95	22.16	19.78	19.89	17.49	21.49	18.54
2042	22.62	22.88	20.09	25.88	22.07	19.62	19.73	17.33	21.34	18.4
2043	22.42	22.69	19.91	25.83	21.99	19.45	19.57	17.17	21.21	18.26
2044	22.23	22.5	19.73	25.76	21.91	19.28	19.4	17.02	21.06	18.13
2045	22.04	22.33	19.56	25.72	21.84	19.11	19.25	16.86	20.92	18
2046	21.86	22.15	19.39	25.68	21.79	18.95	19.1	16.71	20.79	17.88
2047	21.67	21.97	19.22	25.63	21.72	18.79	18.94	16.55	20.64	17.74
2048	21.49	21.8	19.05	25.58	21.66	18.63	18.79	16.39	20.5	17.6
2049	21.31	21.63	18.88	25.54	21.61	18.47	18.64	16.24	20.34	17.47
2050	21.14	21.45	18.71	25.51	21.56	18.32	18.49	16.09	20.2	17.34

TABLE A.3.6 Food insecurity rates, by sex, Europe and Northern America, 2015–2050, various scenarios

Year	No climate	Current Path	Current Path + SDG push	Worse Climate Path	Worse Climate Path + SDG Push	No climate	Current Path	Current Path + SDG push	Worse Climate Path	Worse Climate Path + SDG Push
	Female	Female	Female	Female	Female	Male	Male	Male	Male	Male
2015	9.506	9.506	9.506	9.506	9.506	7.979	7.979	7.979	7.979	7.979
2016	9.46	9.46	9.46	9.46	9.46	7.944	7.944	7.944	7.944	7.944
2017	9.398	9.398	9.398	9.398	9.398	7.901	7.901	7.901	7.901	7.901
2018	9.328	9.328	9.328	9.328	9.328	7.848	7.848	7.848	7.848	7.848
2019	9.269	9.269	9.269	9.269	9.269	7.805	7.805	7.805	7.805	7.805
2020	9.324	9.324	9.324	9.324	9.324	7.87	7.87	7.87	7.87	7.87
2021	9.219	9.219	9.219	9.219	9.219	7.78	7.78	7.78	7.78	7.78
2022	9.22	9.22	9.22	9.22	9.22	7.786	7.786	7.786	7.786	7.786
2023	9.199	9.199	9.199	9.199	9.199	7.773	7.773	7.773	7.773	7.773
2024	9.156	9.192	9.155	9.156	9.155	7.742	7.717	7.741	7.741	7.74
2025	9.107	9.147	9.073	9.135	9.09	7.702	7.682	7.679	7.718	7.692
2026	9.061	9.103	8.987	9.115	9.023	7.666	7.648	7.613	7.694	7.638
2027	9.018	9.061	8.898	9.101	8.953	7.631	7.614	7.54	7.673	7.577
2028	8.975	9.018	8.808	9.086	8.883	7.594	7.579	7.465	7.648	7.513
2029	8.935	8.98	8.727	9.079	8.821	7.564	7.549	7.396	7.632	7.454
2030	8.893	8.938	8.648	9.069	8.762	7.528	7.515	7.322	7.61	7.39
2031	8.851	8.898	8.573	9.061	8.707	7.493	7.481	7.247	7.586	7.324
2032	8.811	8.858	8.505	9.056	8.66	7.458	7.447	7.179	7.564	7.265
2033	8.772	8.82	8.441	9.054	8.615	7.427	7.417	7.117	7.545	7.206
2034	8.735	8.784	8.375	9.054	8.571	7.395	7.387	7.049	7.523	7.145
2035	8.691	8.743	8.314	9.041	8.528	7.355	7.349	6.991	7.491	7.089
2036	8.655	8.707	8.255	9.035	8.488	7.323	7.318	6.936	7.461	7.037
2037	8.62	8.672	8.194	9.032	8.449	7.293	7.289	6.88	7.435	6.984
2038	8.583	8.637	8.142	9.03	8.422	7.26	7.258	6.833	7.407	6.941
2039	8.547	8.602	8.091	9.032	8.402	7.226	7.225	6.788	7.379	6.903
2040	8.513	8.57	8.041	9.033	8.38	7.195	7.196	6.743	7.351	6.863
2041	8.479	8.538	7.992	9.039	8.363	7.163	7.166	6.7	7.323	6.825
2042	8.443	8.503	7.946	9.045	8.349	7.128	7.133	6.659	7.294	6.79
2043	8.412	8.473	7.903	9.058	8.34	7.099	7.106	6.621	7.27	6.757
2044	8.382	8.445	7.857	9.074	8.33	7.072	7.08	6.58	7.248	6.722
2045	8.348	8.412	7.814	9.09	8.324	7.039	7.05	6.543	7.225	6.691
2046	8.314	8.379	7.771	9.105	8.32	7.008	7.019	6.507	7.197	6.661
2047	8.284	8.35	7.728	9.123	8.315	6.981	6.994	6.469	7.173	6.628
2048	8.253	8.321	7.685	9.147	8.315	6.952	6.967	6.432	7.151	6.597
2049	8.214	8.285	7.641	9.165	8.313	6.913	6.932	6.392	7.121	6.563
2050	8.184	8.255	7.601	9.19	8.317	6.884	6.904	6.358	7.096	6.534

TABLE A.3.7 Food insecurity rates, by sex, Sub-Saharan Africa, 2015–2050, various scenarios

Year	No climate	Current Path	Current Path + SDG push	Worse Climate Path	Worse Climate Path + SDG Push	No climate	Current Path	Current Path + SDG push	Worse Climate Path	Worse Climate Path + SDG Push
	Female	Female	Female	Female	Female	Male	Male	Male	Male	Male
2015	60.7	60.7	60.7	60.7	60.7	58.76	58.76	58.76	58.76	58.76
2016	59.93	59.93	59.93	59.93	59.93	58.01	58.01	58.01	58.01	58.01
2017	59.11	59.11	59.11	59.11	59.11	57.27	57.27	57.27	57.27	57.27
2018	58.18	58.18	58.18	58.18	58.18	56.43	56.43	56.43	56.43	56.43
2019	57.35	57.35	57.35	57.35	57.35	55.68	55.68	55.68	55.68	55.68
2020	57.29	57.29	57.29	57.29	57.29	55.68	55.68	55.68	55.68	55.68
2021	56.41	56.41	56.41	56.41	56.41	54.88	54.88	54.88	54.88	54.88
2022	55.46	55.46	55.46	55.46	55.46	54.05	54.05	54.05	54.05	54.05
2023	54.55	54.55	54.55	54.55	54.55	53.22	53.22	53.22	53.22	53.22
2024	53.64	53.75	52.75	53.62	52.73	52.39	52.3	51.58	52.37	51.56
2025	52.74	52.92	51.37	53.22	51.76	51.56	51.53	50.4	51.94	50.74
2026	51.86	52.07	49.78	52.79	50.53	50.75	50.75	49	51.49	49.62
2027	51	51.26	48.27	52.4	49.39	49.96	50.01	47.67	51.06	48.58
2028	50.16	50.44	46.76	52.03	48.25	49.19	49.25	46.35	50.64	47.54
2029	49.36	49.66	45.34	51.7	47.19	48.46	48.54	45.11	50.25	46.58
2030	48.58	48.89	44.01	51.4	46.21	47.74	47.84	43.95	49.88	45.68
2031	47.91	48.24	42.84	51.24	45.38	47.12	47.24	42.92	49.62	44.89
2032	47.24	47.59	41.69	51.07	44.56	46.5	46.63	41.92	49.34	44.11
2033	46.55	46.93	40.58	50.87	43.75	45.86	46.02	40.94	49.03	43.33
2034	45.85	46.27	39.5	50.68	42.95	45.21	45.42	39.98	48.71	42.55
2035	45.14	45.6	38.46	50.19	41.94	44.55	44.79	39.05	48.15	41.59
2036	44.39	44.87	37.43	49.7	40.95	43.86	44.12	38.12	47.57	40.65
2037	43.63	44.13	36.41	49.18	39.97	43.15	43.43	37.2	46.96	39.7
2038	42.84	43.35	35.7	48.62	39.37	42.42	42.71	36.54	46.31	39.07
2039	42.04	42.59	34.99	48.31	38.97	41.67	42.01	35.89	45.86	38.6
2040	41.25	41.83	34.3	47.48	38.17	40.94	41.31	35.26	44.99	37.81
2041	40.47	41.08	33.65	46.92	37.62	40.23	40.62	34.65	44.33	37.21
2042	39.69	40.32	33	46.37	37.09	39.5	39.92	34.05	43.68	36.63
2043	38.93	39.58	32.37	45.84	36.58	38.8	39.24	33.47	43.03	36.06
2044	38.17	38.84	31.75	45.31	36.07	38.1	38.56	32.87	42.39	35.49
2045	37.47	38.16	31.18	44.83	35.62	37.44	37.92	32.33	41.78	34.96
2046	36.78	37.48	30.62	44.6	35.34	36.79	37.29	31.79	41.37	34.56
2047	36.1	36.8	30.06	43.86	34.72	36.15	36.66	31.26	40.54	33.89
2048	35.43	36.15	29.52	43.39	34.29	35.52	36.04	30.73	39.93	33.36
2049	34.78	35.5	29	42.93	33.88	34.89	35.43	30.22	39.33	32.84
2050	34.13	34.86	28.49	42.48	33.47	34.28	34.82	29.72	38.72	32.33

TABLE A.3.8 Food insecurity rates, by sex, Oceania (excl. Australia and New Zealand), 2015–2050, various scenarios

Year	No climate	Current Path	Current Path + SDG push	Worse Climate Path	Worse Climate Path + SDG Push	No climate	Current Path	Current Path + SDG push	Worse Climate Path	Worse Climate Path + SDG Push
	Female	Female	Female	Female	Female	Male	Male	Male	Male	Male
2015	48.99	48.99	48.99	48.99	48.99	43.74	43.74	43.74	43.74	43.74
2016	47.04	47.04	47.04	47.04	47.04	42.01	42.01	42.01	42.01	42.01
2017	45.9	45.9	45.9	45.9	45.9	41.03	41.03	41.03	41.03	41.03
2018	45.39	45.39	45.39	45.39	45.39	40.63	40.63	40.63	40.63	40.63
2019	43.87	43.87	43.87	43.87	43.87	39.33	39.33	39.33	39.33	39.33
2020	44.23	44.23	44.23	44.23	44.23	39.71	39.71	39.71	39.71	39.71
2021	43.44	43.44	43.44	43.44	43.44	39.1	39.1	39.1	39.1	39.1
2022	42.07	42.07	42.07	42.07	42.07	37.98	37.98	37.98	37.98	37.98
2023	40.32	40.32	40.32	40.32	40.32	36.45	36.45	36.45	36.45	36.45
2024	39.35	39.45	38.67	39.32	38.64	35.62	35.54	35.08	35.6	35.06
2025	38.04	38.21	36.81	38.59	37.26	34.48	34.47	33.51	34.91	33.87
2026	36.84	37.02	35	37.88	35.84	33.45	33.44	31.97	34.26	32.63
2027	35.71	35.93	33.24	37.23	34.44	32.49	32.51	30.47	33.63	31.41
2028	34.6	34.82	31.55	36.58	33.09	31.52	31.56	29	33.01	30.19
2029	33.54	33.77	29.98	35.99	31.81	30.61	30.65	27.65	32.43	29.06
2030	32.53	32.77	28.55	35.43	30.66	29.75	29.79	26.42	31.89	28.02
2031	31.67	31.92	27.32	35	29.67	29.01	29.08	25.38	31.44	27.14
2032	30.84	31.09	26.19	34.61	28.74	28.3	28.36	24.41	31.02	26.32
2033	30.04	30.32	25.15	34.19	27.87	27.6	27.69	23.51	30.58	25.52
2034	29.27	29.56	24.16	33.8	27.04	26.92	27.02	22.65	30.14	24.77
2035	28.53	28.83	23.25	33.16	26.06	26.27	26.4	21.86	29.52	23.89
2036	27.79	28.11	22.4	32.53	25.13	25.63	25.76	21.11	28.9	23.04
2037	27.05	27.38	21.59	31.9	24.25	24.97	25.12	20.39	28.27	22.23
2038	26.34	26.68	21.01	31.26	23.69	24.34	24.5	19.86	27.63	21.68
2039	25.63	25.98	20.47	30.89	23.3	23.71	23.88	19.35	27.19	21.26
2040	24.94	25.31	19.94	30	22.63	23.08	23.28	18.87	26.36	20.63
2041	24.29	24.67	19.45	29.41	22.14	22.51	22.72	18.43	25.77	20.16
2042	23.65	24.03	18.97	28.83	21.69	21.94	22.15	18	25.18	19.71
2043	23.03	23.42	18.52	28.28	21.24	21.39	21.62	17.59	24.61	19.26
2044	22.44	22.83	18.06	27.69	20.82	20.87	21.09	17.17	24.02	18.83
2045	21.94	22.33	17.7	27.22	20.45	20.42	20.65	16.84	23.51	18.44
2046	21.46	21.85	17.33	26.98	20.24	19.99	20.21	16.5	23.18	18.18
2047	21.01	21.39	16.98	26.33	19.79	19.58	19.8	16.16	22.55	17.71
2048	20.56	20.94	16.63	25.92	19.49	19.17	19.4	15.83	22.08	17.38
2049	20.14	20.52	16.29	25.53	19.19	18.79	19.02	15.51	21.65	17.04
2050	19.73	20.12	15.96	25.15	18.91	18.41	18.66	15.18	21.21	16.71

TABLE A.3.9 Food insecurity rates, by sex, Australia and New Zealand, 2015–2050, various scenarios

Year	No climate	Current Path	Current Path + SDG push	Worse Climate Path	Worse Climate Path + SDG Push	No climate	Current Path	Current Path + SDG push	Worse Climate Path	Worse Climate Path + SDG Push
	Female	Female	Female	Female	Female	Male	Male	Male	Male	Male
2015	9.608	9.608	9.608	9.608	9.608	7.675	7.675	7.675	7.675	7.675
2016	9.548	9.548	9.548	9.548	9.548	7.644	7.644	7.644	7.644	7.644
2017	9.492	9.492	9.492	9.492	9.492	7.609	7.609	7.609	7.609	7.609
2018	9.43	9.43	9.43	9.43	9.43	7.566	7.566	7.566	7.566	7.566
2019	9.389	9.389	9.389	9.389	9.389	7.543	7.543	7.543	7.543	7.543
2020	9.381	9.381	9.381	9.381	9.381	7.545	7.545	7.545	7.545	7.545
2021	9.343	9.343	9.343	9.343	9.343	7.517	7.517	7.517	7.517	7.517
2022	9.278	9.278	9.278	9.278	9.278	7.464	7.464	7.464	7.464	7.464
2023	9.239	9.239	9.239	9.239	9.239	7.433	7.433	7.433	7.433	7.433
2024	9.201	9.237	9.201	9.201	9.201	7.405	7.379	7.405	7.405	7.405
2025	9.156	9.197	9.132	9.18	9.145	7.371	7.35	7.357	7.383	7.367
2026	9.111	9.154	9.054	9.157	9.082	7.336	7.317	7.3	7.356	7.319
2027	9.07	9.113	8.976	9.14	9.02	7.303	7.285	7.238	7.334	7.266
2028	9.028	9.072	8.903	9.125	8.964	7.27	7.254	7.173	7.311	7.209
2029	8.993	9.038	8.836	9.118	8.914	7.246	7.231	7.107	7.296	7.151
2030	8.945	8.991	8.771	9.1	8.868	7.207	7.192	7.04	7.267	7.093
2031	8.902	8.948	8.706	9.089	8.822	7.173	7.159	6.97	7.243	7.03
2032	8.861	8.908	8.645	9.082	8.781	7.142	7.129	6.904	7.222	6.97
2033	8.82	8.868	8.583	9.077	8.742	7.11	7.098	6.839	7.201	6.91
2034	8.771	8.82	8.516	9.066	8.697	7.066	7.056	6.772	7.167	6.849
2035	8.728	8.778	8.455	9.053	8.657	7.03	7.02	6.719	7.135	6.797
2036	8.685	8.736	8.388	9.041	8.61	6.992	6.984	6.659	7.102	6.74
2037	8.643	8.694	8.329	9.031	8.574	6.955	6.948	6.611	7.067	6.694
2038	8.601	8.653	8.272	9.022	8.545	6.919	6.913	6.564	7.033	6.652
2039	8.558	8.612	8.216	9.014	8.52	6.881	6.876	6.518	6.998	6.612
2040	8.516	8.571	8.162	9.009	8.497	6.842	6.839	6.473	6.963	6.573
2041	8.469	8.525	8.11	8.999	8.476	6.798	6.797	6.43	6.922	6.534
2042	8.429	8.486	8.06	8.998	8.459	6.763	6.763	6.389	6.889	6.497
2043	8.39	8.448	8.006	9	8.438	6.728	6.729	6.342	6.856	6.453
2044	8.35	8.409	7.958	9.005	8.426	6.693	6.695	6.303	6.825	6.419
2045	8.313	8.372	7.91	9.009	8.414	6.661	6.663	6.263	6.793	6.383
2046	8.276	8.336	7.864	9.02	8.408	6.629	6.633	6.227	6.765	6.352
2047	8.24	8.301	7.819	9.032	8.403	6.598	6.603	6.191	6.736	6.32
2048	8.198	8.26	7.769	9.04	8.394	6.559	6.565	6.149	6.701	6.282
2049	8.162	8.225	7.726	9.058	8.394	6.528	6.535	6.114	6.675	6.252
2050	8.128	8.192	7.684	9.077	8.397	6.498	6.507	6.081	6.648	6.224

Factsheet: Indonesia

This factsheet presents projections for Indonesia of each scenario for GDP, GDP per capita, Gini, FIES (total, female, and male), and extreme poverty measured at the \$2.15 threshold by age and sex. Table 16 shows the starting point of Indonesia in 2024 and the forecast for all variables of each scenario in 2030, the final year of SDG

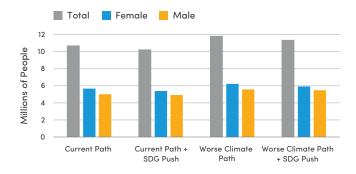
monitoring. The results show that Indonesia is projected to make progress across all variables except inequality, however, climate change may significantly slow down this progress. Even under the worst climate conditions, *SDG Push* policies help mitigate the effects of climate change.

TABLE 16. Projections of each scenario for Indonesia across variables in 2024 and 2030. GDP is measured as market exchange rates in trillions of 2017\$, GDP per capita is measured as purchasing power parity in thousands of 2017\$, Gini is measured on a 0-1 scale, FIES is measured as percent of population (total, female, and male), extreme poverty (\$2.15 per day) is measured in millions (total, female, and male)

	Starting Point	Current Path	Current Path + SDG Push	Worse Climate Path	Worse Climate Path + SDG Push	
	2024		2	030		
GDP	1.33	1.58	1.61	1.53	1.57	
GDP per capita	11.86	12.62	12.83	12.38	12.59	
Gini	0.397	0.401	0.401	0.403	0.403	
FIES	22.7	20.81	19.6	21.79	20.32	
Female FIES	24.15	22.1	20.71	23.22	21.56	
Male FIES	21.26	19.53	18.48	20.37	19.08	
\$2.15 Total	13.5	10.77	10.31	11.95	11.44	
\$2.15 Female	7.12	5.73	5.38	6.3	5.95	
\$2.15 Male	6.38	5.04	4.93	5.65	5.49	
Age 25-34 \$2.15 Total	1.72	1.34	1.28	1.48	1.42	
Age 25-34 \$2.15 Female	0.97	0.76	0.7	0.83	0.77	
Age 25-34 \$2.15 Male	0.75	0.58	0.58	0.65	0.65	

FIGURE 25

Extreme poverty in Indonesia in 2030 across scenarios as the total, female, and male measured in millions



Source: UN Women and the Pardee Center for International Futures using IFs v. 7.97.

Figure 25 shows total poverty in Indonesia for each scenario in 2030 alongside the breakdown by sex measured in millions. Across each scenario over 50% of the people living in extreme poverty are women. In the Current Path scenario, 10.8 million Indonesians live in extreme poverty, 5.7 million are female and 5 million are male. SDG Push interventions lower extreme poverty in the Current Path to 10.3 million total, 5.4 million of which are female and 4.9 million are male. The Worse Climate Path scenario projects almost 12 million people in extreme poverty, 6.3 million are female and 5.7 million are male. SDG Push interventions help alleviate extreme poverty in the Worse Climate Path scenario reducing the total number of people in extreme poverty to 11.4 million, 6 million of which are female and 5.5 million are male.

Factsheet: Philippines

This factsheet presents projections for Philippines of each scenario for GDP, GDP per capita, Gini, FIES (total, female, and male), and extreme poverty measured at the \$2.15 threshold by age and sex. Table 17 shows the starting point of Philippines in 2024 and the forecast for all variables of each scenario in 2030, the final

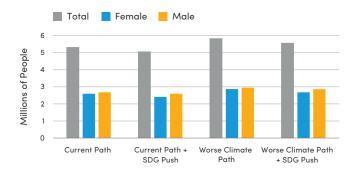
year of SDG monitoring. Results show that Indonesia is projected to make progress across all variables except inequality, however, climate change may significantly slow down this progress. Even under the worst climate conditions, *SDG Push* policies help mitigate the effects of climate change.

TABLE 17. Projections of each scenario for Philippines across variables in 2024 and 2030. GDP is measured as market exchange rates in trillions of 2017\$, GDP per capita is measured as purchasing power parity in thousands of 2017\$, Gini is measured on a 0-1 scale, FIES is measured as percent of population (total, female, and male), extreme poverty (\$2.15 per day) is measured in millions (total, female, and male)

	Starting Point	Current Path	Current Path + SDG Push	Worse Climate Path	Worse Climate Path + SDG Push		
	2024	2030					
GDP	0.42	0.582	0.603	0.566	0.586		
GDP per capita	8.483	9.947	10.18	9.751	9.98		
Gini	0.446	0.45	0.45	0.453	0.453		
FIES	26.16	23.06	21.52	24.28	22.43		
Female FIES	26.42	23.22	21.62	24.56	22.65		
Male FIES	25.91	22.9	21.43	23.99	22.22		
\$2.15 Total	5.972	5.345	5.074	5.869	5.601		
\$2.15 Female	2.924	2.636	2.443	2.889	2.714		
\$2.15 Male	3.048	2.709	2.632	2.981	2.888		
Age 25-34 \$2.15 Total	0.95	0.837	0.794	0.919	0.876		
Age 25-34 \$2.15 Female	0.47	0.414	0.384	0.453	0.425		
Age 25-34 \$2.15 Male	0.481	0.423	0.41	0.466	0.451		

FIGURE 26

Extreme poverty in Philippines in 2030 across scenarios as the total, female, and male measured in millions



Source: UN Women and the Pardee Center for International Futures using IFs v. 7.97.

Figure 26 shows total poverty in Philippines for each scenario in 2030 alongside the gender breakdown measured in millions. In the *Current Path* scenario, 5.3 million Filipinos live in extreme poverty, 2.6 million are female and 2.7 million are male. *SDG Push* interventions lower extreme poverty in the *Current Path* to 5.1 million total, 2.4 million of which are female and 2.6 million are male. The *Worse Climate Path scenario* projects almost 6 million people in extreme poverty, 2.9 million are female and 3 million are male. *SDG Push* interventions help alleviate extreme poverty in the *Worse Climate Path scenario* reducing the total number of people in extreme poverty to 5.6 million, 2.7 million of which are female and 2.9 million are male.

Factsheet: Solomon Islands

This factsheet presents projections for Solomon Islands of each scenario for GDP, GDP per capita, Gini, FIES (total, female, and male), and extreme poverty measured at the \$2.15 threshold by age and sex. Table 18 shows the starting point of Solomon Islands in 2024 and the forecast for all variables of each scenario in 2030, the

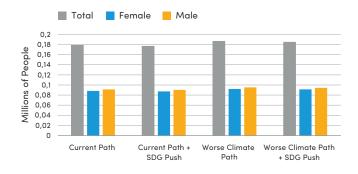
final year of SDG monitoring. The results show that Solomon Islands is projected to make progress across all variables except inequality, however, climate change may significantly slow down this progress. Even under the worst climate conditions, *SDG Push* policies help mitigate the effects of climate change.

TABLE 18. Projections of each scenario for Solomon Islands across variables in 2024 and 2030. GDP is measured as market exchange rates in trillions of 2017\$, GDP per capita is measured as purchasing power parity in thousands of 2017\$, Gini is measured on a 0-1 scale, FIES is measured as percent of population (total, female, and male), extreme poverty (\$2.15 per day) is measured in millions (total, female, and male)

	Starting Point	Current Path	Current Path + SDG Push	Worse Climate Path	Worse Climate Path + SDG Push	
	2024	2030				
GDP	0.0015	0.0018	0.0019	0.0017	0.0018	
GDP per capita	2.514	2.892	3.048	2.797	2.955	
Gini	0.371	0.374	0.374	0.374	0.374	
FIES	37.71	32.03	27.39	34.78	29.41	
Female FIES	40.26	34.16	28.97	37.25	31.27	
Male FIES	35.15	29.91	25.82	32.32	27.55	
\$2.15 Total	0.208	0.179	0.177	0.187	0.185	
\$2.15 Female	0.102	0.088	0.087	0.092	0.091	
\$2.15 Male	0.106	0.091	0.09	0.095	0.094	
Age 25-34 \$2.15 Total	0.028	0.025	0.025	0.026	0.026	
Age 25-34 \$2.15 Female	0.014	0.012	0.012	0.013	0.013	
Age 25-34 \$2.15 Male	0.014	0.013	0.013	0.013	0.013	

FIGURE 27

Extreme poverty in Solomon Islands in 2030 across scenarios as the total, female, and male measured in millions



Source: UN Women and the Pardee Center for International Futures using IFs v. 7.97.

Figure 27 shows total poverty in Solomon Islands for each scenario in 2030 alongside the gender breakdown measured in millions. In the *Current Path* scenario, 179,000 Solomon Islanders live in extreme poverty, 88,000 are female and 91,000 are male. *SDG Push* interventions lower extreme poverty in the *Current Path* to 177,000 total, 87,000 of which are female and 90,000 are male. The *Worse Climate Path scenario* projects 187,000 people in extreme poverty, 92,000 are female and 95,000 are male. *SDG Push* interventions help alleviate extreme poverty in the *Worse Climate Path scenario* reducing the total number of people in extreme poverty to 185,000, 91,000 of which are female and 94,000 are male.

Factsheet: Samoa

This factsheet presents projections for Samoa of each scenario for GDP, GDP per capita, Gini, FIES (total, female, and male), and extreme poverty measured at the \$2.15 threshold by age and sex. Table 19 shows the

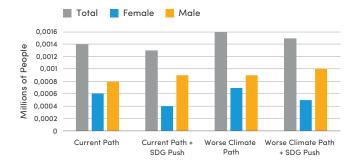
starting point of Samoa in 2024 and the forecast for all variables of each scenario in 2030, the final year of SDG monitoring. The results show that climate change may significantly slow down progress across variables.

TABLE 19. Projections of each scenario for Samoa across variables in 2024 and 2030. GDP is measured as market exchange rates in trillions of 2017\$, GDP per capita is measured as purchasing power parity in thousands of 2017\$, Gini is measured on a 0-1 scale, FIES is measured as percent of population (total, female, and male), extreme poverty (\$2.15 per day) is measured in millions (total, female, and male)

	Starting Point	Current Path	Current Path + SDG Push	Worse Climate Path	Worse Climate Path + SDG Push
	2024		2	2030	
GDP	0.0008	0.001	0.001	0.0009	0.001
GDP per capita	5.869	6.604	6.767	6.469	6.627
Gini	0.387	0.3899	0.3899	0.391	0.391
FIES	17.49	16.05	15.3	16.77	15.88
Female FIES	18.31	16.77	15.87	17.58	16.54
Male FIES	16.67	15.33	14.73	15.95	15.23
\$2.15 Total	0.0018	0.0014	0.0013	0.0016	0.0015
\$2.15 Female	0.0008	0.0006	0.0004	0.0007	0.0005
\$2.15 Male	0.0009	0.0008	0.0009	0.0009	0.001
Age 25-34 \$2.15 Total	0.0002	0.0002	0.0002	0.0002	0.0002
Age 25-34 \$2.15 Female	0.0001	0.0001	0.0001	0.0001	0.0001
Age 25-34 \$2.15 Male	0.0001	0.0001	0.0001	0.0001	0.0001

FIGURE 28

Extreme poverty in Samoa in 2030 across scenarios as the total, female, and male measured in millions



Source: UN Women and the Pardee Center for International Futures using IFs v. 7.97.

Figure 28 shows total poverty in Samoa for each scenario in 2030 alongside the gender breakdown measured in millions. In the *Current Path* scenario, 1,400 Samoans live in extreme poverty, 600 are female and 800 are male. *SDG Push* interventions lower extreme poverty in the *Current Path* to 1,300 total, 400 of which are female and 900 are male. The *Worse Climate Path scenario* projects 1,600 people in extreme poverty, 700 are female and 900 are male. *SDG Push* interventions help alleviate extreme poverty in the *Worse Climate Path scenario* reducing the total number of people in extreme poverty to 1,500, 500 of which are female and 1,000 are male.

Factsheet: Tonga

This factsheet presents projections for Tonga of each scenario for GDP, GDP per capita, Gini, FIES (total, female, and male), and extreme poverty measured at the \$2.15 threshold by age and sex. Table 20 shows the

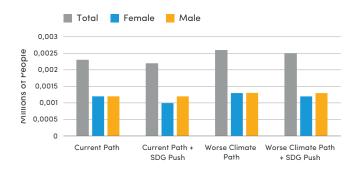
starting point of Tonga in 2024 and the forecast for all variables of each scenario in 2030, the final year of SDG monitoring. The results show that climate change may significantly slow down progress across variables.

TABLE 20. Projections of each scenario for Tonga across variables in 2024 and 2030. GDP is measured as market exchange rates in trillions of 2017\$, GDP per capita is measured as purchasing power parity in thousands of 2017\$, Gini is measured on a 0-1 scale, FIES is measured as percent of population (total, female, and male), extreme poverty (\$2.15 per day) is measured in millions (total, female, and male)

	Starting Point	Current Path	Current Path + SDG Push	Worse Climate Path	Worse Climate Path + SDG Push		
	2024		2030				
GDP	0.0005	0.0005	0.0005	0.0005	0.0005		
GDP per capita	6.279	6.627	6.831	6.491	6.695		
Gini	0.376	0.379	0.379	0.382	0.382		
FIES	26.29	24.42	21.2	26.69	22.99		
Female FIES	28.28	26.28	22.54	28.87	24.61		
Male FIES	24.3	22.56	19.86	24.51	21.37		
\$2.15 Total	0.0023	0.0023	0.0022	0.0026	0.0025		
\$2.15 Female	0.0011	0.0012	0.001	0.0013	0.0012		
\$2.15 Male	0.0012	0.0012	0.0012	0.0013	0.0013		
Age 25–34 \$2.15 Total	0.0003	0.0003	0.0003	0.0004	0.0004		
Age 25-34 \$2.15 Female	0.0001	0.0002	0.0001	0.0002	0.0002		
Age 25-34 \$2.15 Male	0.0001	0.0002	0.0002	0.0002	0.0002		

FIGURE 29

Extreme poverty in Tonga in 2030 across scenarios as the total, female, and male measured in millions



Source: UN Women and the Pardee Center for International Futures using IFs v. 7.97.

Figure 29 shows total poverty in Tonga for each scenario in 2030 alongside the gender breakdown measured in millions. In the *Current Path* scenario, 2,300 Tongans live in extreme poverty, 1,200 are female and 1,200 are male. *SDG Push* interventions lower extreme poverty in the *Current Path* to 2,200 total, 1,000 of which are female and 1,200 are male. The *Worse Climate Path scenario* projects 2,600 people in extreme poverty, 1,300 are female and 1,300 are male. *SDG Push* interventions help alleviate extreme poverty in the *Worse Climate Path scenario* reducing the total number of people in extreme poverty to 2,500, 1,200 of which are female and 1,300 are male.

Factsheet: Kiribati

This factsheet presents projections for Kiribati of each scenario for GDP, GDP per capita, Gini, FIES (total, female, and male), and extreme poverty measured at the \$2.15 threshold by age and sex. Table 21 shows the

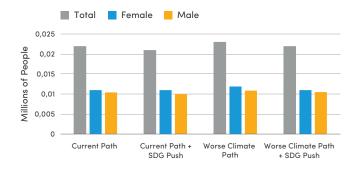
starting point of Kiribati in 2024 and the forecast for all variables of each scenario in 2030, the final year of SDG monitoring. The results show that climate change may significantly slow down progress across variables.

TABLE 21. Projections of each scenario for Kiribati across variables in 2024 and 2030. GDP is measured as market exchange rates in trillions of 2017\$, GDP per capita is measured as purchasing power parity in thousands of 2017\$, Gini is measured on a 0-1 scale, FIES is measured as percent of population (total, female, and male), extreme poverty (\$2.15 per day) is measured in millions (total, female, and male)

	Starting Point	Current Path	Current Path + SDG Push	Worse Climate Path	Worse Climate Path + SDG Push		
	2024		2030				
GDP	0.0003	0.0004	0.0004	0.0004	0.0004		
GDP per capita	2.561	3.065	3.139	2.98	3.079		
Gini	0.429	0.434	0.434	0.433	0.433		
FIES	28.95	26	24.77	26.8	25.28		
Female FIES	29.08	26.02	24.56	26.89	25.14		
Male FIES	28.83	25.98	24.99	26.72	25.42		
\$2.15 Total	0.025	0.022	0.021	0.023	0.022		
\$2.15 Female	0.013	0.011	0.011	0.0119	0.011		
\$2.15 Male	0.012	0.0104	0.01	0.0109	0.0105		
Age 25-34 \$2.15 Total	0.0026	0.0021	0.002	0.0022	0.0021		
Age 25-34 \$2.15 Female	0.0015	0.0012	0.0012	0.0013	0.0012		
Age 25-34 \$2.15 Male	0.0011	0.0009	0.0009	0.0009	0.0009		

FIGURE 30

Extreme poverty in Kiribati in 2030 across scenarios as the total, female, and male measured in millions



Source: UN Women and the Pardee Center for International Futures using IFs v. 7.97.

Figure 30 shows total poverty in Kiribati for each scenario in 2030 alongside the gender breakdown measured in millions. In the *Current Path* scenario, 2,200 Kiribatis live in extreme poverty, 1,100 are female and 1,040 are male. *SDG Push* interventions lower extreme poverty in the *Current Path* to 2,100 total, 1,100 of which are female and 1,000 are male. The *Worse Climate Path scenario* projects 2,300 people in extreme poverty, 1,190 are female and 1,090 are male. *SDG Push* interventions help alleviate extreme poverty in the *Worse Climate Path scenario* reducing the total number of people in extreme poverty to 2,200, 1,100 of which are female and 1,050 are male.



220 East 42nd Street New York, NY 10017, USA Tel: 646-781-4400 Fax: 646-781-4444

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