Food and Land Use
Comparing the Current Trends scenario with the Better Futures scenario

The Food and Land Use Coalition

CURRENT TRENDS scenario

Deforestation

2030 Deforestation continues at a rate of 7.6 million hectares (Ha) per year – an area the size of Ireland. **7.6** million Ha per year

2050 Deforestation continues at a rate of 6.7 million Ha per year. **6.7** million Ha per year

Agricultural land

2030 The area of land dedicated to agriculture increases over 100 million Ha (3% of area today). ▲ **200** million Ha

2050 The area of land dedicated to agriculture increases by 400 million Ha (12% of area today). ▲ **400** million Ha

Restored natural land

2030 100 million Ha of restored natural land and forests since 2010. **100** million Ha

2050 225 million Ha of restored natural land and forests since 2010. **225** million Ha

Food insecure people

2030 The number of food insecure people globally is 475 million (6% of the population). **475** million people

Biodiversity

2030 Biodiversity loss continues to decline at a rate similar to the last 40 years, with pristine environment loss shown as a 1.8% loss in Biodiversity Intactness Index (BII) between 2010 and 2030. **-1.8%** Loss in BII

2050 Biodiversity loss continues to decline at a rate similar to the last 40 years, with pristine environment loss shown as a 3.2% loss in Biodiversity Intactness Index between 2010 and 2050. **-3.2%** Loss in BII

Death due to high Body Mass Index (BMI)

2030 The number of people dying prematurely per year due to high BMI is 6.4 million globally. **6.4** million people

2050 The number of people dying prematurely per year due to high BMI reaches 10.1 million globally. **10.1** million people

Food and land use emissions

2030 Emissions from food and land use systems account for 12-13 gigatonnes of carbon dioxide equivalent ($GtCO_2e$) per year. This puts a 1.5 degrees-Celsius future out of reach. **12-13** $GtCO_2e$ per year

2050 Emissions from food and land use systems continue to account for 12-13 $GtCO_2e$ per year. **12-13** $GtCO_2e$ per year

Ocean food economy

2050 Bivalves (including oysters, clams and molluscs) continue to represent a very small part of the global food economy, approximately 3 million metric tonnes (edible weight). **3 million** metric tonnes

Wild catch declines by 15% due to overfishing, leading to continued decay of global fish stocks. ▼ **15** % wild catch

BETTER FUTURES scenario

Deforestation

2030 Deforestation is reduced to a rate of 0.2 million hectares (Ha) per year – an area smaller than Hong Kong. **0.2** million Ha per year

2050 Deforestation continues at a rate of 0.2 million Ha per year. **0.2** million Ha per year

Agricultural land

2030 The area of land dedicated to agriculture decreases by 475 million Ha (15% of area today). ▼ **475** million Ha

2050 The area of land dedicated to agriculture decreases by 1200 million Ha (37% of area today). ▼ **1,200** million Ha

Restored natural land

2030 450 million Ha of restored natural land and forests since 2010. **450** million Ha

2050 1300 million Ha of restored natural land and forests since 2010. **1300** million Ha

Food insecure people

2030 Enough food is produced for completely eliminating food insecurity. **SUFFICIENT PRODUCTION**

Biodiversity

2030 The Biodiversity Intactness Index begins to recover slightly after 2020, a sign of halting and reversal of biodiversity decline driven by loss of pristine natural environments, resulting in a slight recovery by 2030. **-0.6%** Loss in BII

2050 The Biodiversity Intactness Index begins to recover after 2020, a sign of halting and reversal of biodiversity decline driven by loss of pristine natural environments, resulting in a recovery of 0.2% between 2010 and 2050. **+0.2%** Recovery of BII

Death due to high Body Mass Index (BMI)

2030 The number of people dying prematurely per year due to health risks caused by high BMI is 4.0 million globally. **4.0** million people

2050 The number of people dying prematurely per year due to high BMI is almost halved from the current trends to 5.6 million globally. **5.6** million people

Food and land use emissions

2030 Emissions from food and land use systems reduce approximately 40 percent from 2020 to 4.7 $GtCO_2e$ per year. This puts the world on a 1.5 degrees-Celsius pathway. **4.7** $GtCO_2e$ per year

2050 Emissions from food and land use systems reduce to net zero. This puts the world on a 1.5 degrees-Celsius pathway.* **0** $GtCO_2e$ per year

Ocean food economy

2050 Mariculture production of bivalves increases 30-fold to around 80 million metric tonnes of edible weight, almost double today's global wildfish capture. **80 million** metric tonnes

Wild catch improved by 24% due to reforming all fisheries so that they are managed within maximum sustainable yield to increase long term sustainability. ▲ **24** % wild catch

*Assuming emissions reductions occur in other sectors, particularly energy and transport.