This poster shows projections of climate change impacts and population change by the end of the 21st century in the context of the way we live today, without adaptation.

The central map shows information about present-day human dynamics, and the surrounding maps show some of the projections of climate change impacts and population change. The climate projections are taken from the latest generation of climate models, for the end of the century (2081–2100) relative to a 1961–1980 baseline, under a ‘business as usual’ greenhouse gas concentration scenario (RCP8.5).

The population change follows a ‘realist of the road: socioeconomic scenario’ (SRES). The future change icons show the medium change across the model runs in climatologically averaged regions, and the numbers show the projection for the region. Since each map shows an inherent uncertainty and all the maps should be considered together.

For further information go to: www.metoffice.gov.uk/human-dynamics

Future change in water run-off

Future change in water demand for irrigation

Future change in average crop yield in production regions

Water run-off is the water surface and subsurface water flowing into streams. This is the water available for our food production, taking into account losses due to evaporation.

Water demand for irrigation is a summary of the amount of water crops need to fully meet their water requirements. This may show the change in demand for the region for agriculture and food production. It does not include other uses (such as energy production) or losses due to evaporation. Water demand for irrigation is the water needed to maintain productivity and does not include losses due to evaporation, so the change in water demand for irrigation can be higher than the projected change in water run-off.

Crop yield projections show how increases and decreases in different regions for different crops. However, several of the climate changes are Constraining a real change in total demand. It is apparent that the climate changes show how a real change in total demand. It is apparent that the climate changes show how a real change in total demand. It is apparent that the climate changes show how a real change in total demand. It is apparent that the climate changes show how a real change in total demand.