Crop yield projections show both increases and decreases in different regions for different crops. However, caused by the impact of climate change, it is apparent that the climate projections shown here represent a threat to global food security and the world's most vulnerable people, especially those already facing food insecurity. The future changes in drought impact are estimated by considering the change in temperature and the amount of water available for agricultural use. These changes can be monitored by tracking changes in crop yield and water availability.

Future changes in water run-off

Water demand for irrigation is a concern in regions where the amount of water available is insufficient to meet the water requirements of crops. The changes in water run-off are shown in the map by color coding different regions. The loss of water in these regions is due to the evaporation of water from the surface of the land. The decrease in water run-off can lead to a reduction in crop yields, which can have significant impacts on food security and economic growth.

Future change in water demand for irrigation

The future change in water demand for irrigation is estimated by considering the changes in population growth, changes in agricultural practices, and changes in climate. The demand for water is projected to increase in some regions, while it is expected to decrease in others. The changes in water demand in each region are shown in the map, with different colors representing different levels of change. The green color represents a decrease in water demand, while the blue color represents an increase.

Future change in average crop yield in production regions

The future change in average crop yield is shown for each crop in the map. The change in crop yield is estimated by considering the changes in climate, changes in soil quality, and changes in agricultural practices. The map shows the changes in crop yield for each crop in different regions. The color coding in the map indicates the magnitude of the change in crop yield. The green color represents an increase in crop yield, while the blue color represents a decrease.

Future change in days in drought and sea surface temperature

The future change in days in drought and sea surface temperature is estimated by considering the changes in climate. The map shows the changes in the number of days in drought and the changes in sea surface temperature in different regions. The color coding in the map indicates the magnitude of the change in days in drought and sea surface temperature. The green color represents an increase in the number of days in drought, while the blue color represents a decrease. The green color represents an increase in sea surface temperature, while the blue color represents a decrease.

Future change in population

The future change in population is estimated by considering the changes in birthrate, changes in death rate, and changes in migration. The map shows the changes in population for each country in different regions. The color coding in the map indicates the magnitude of the change in population. The green color represents an increase in population, while the blue color represents a decrease.