

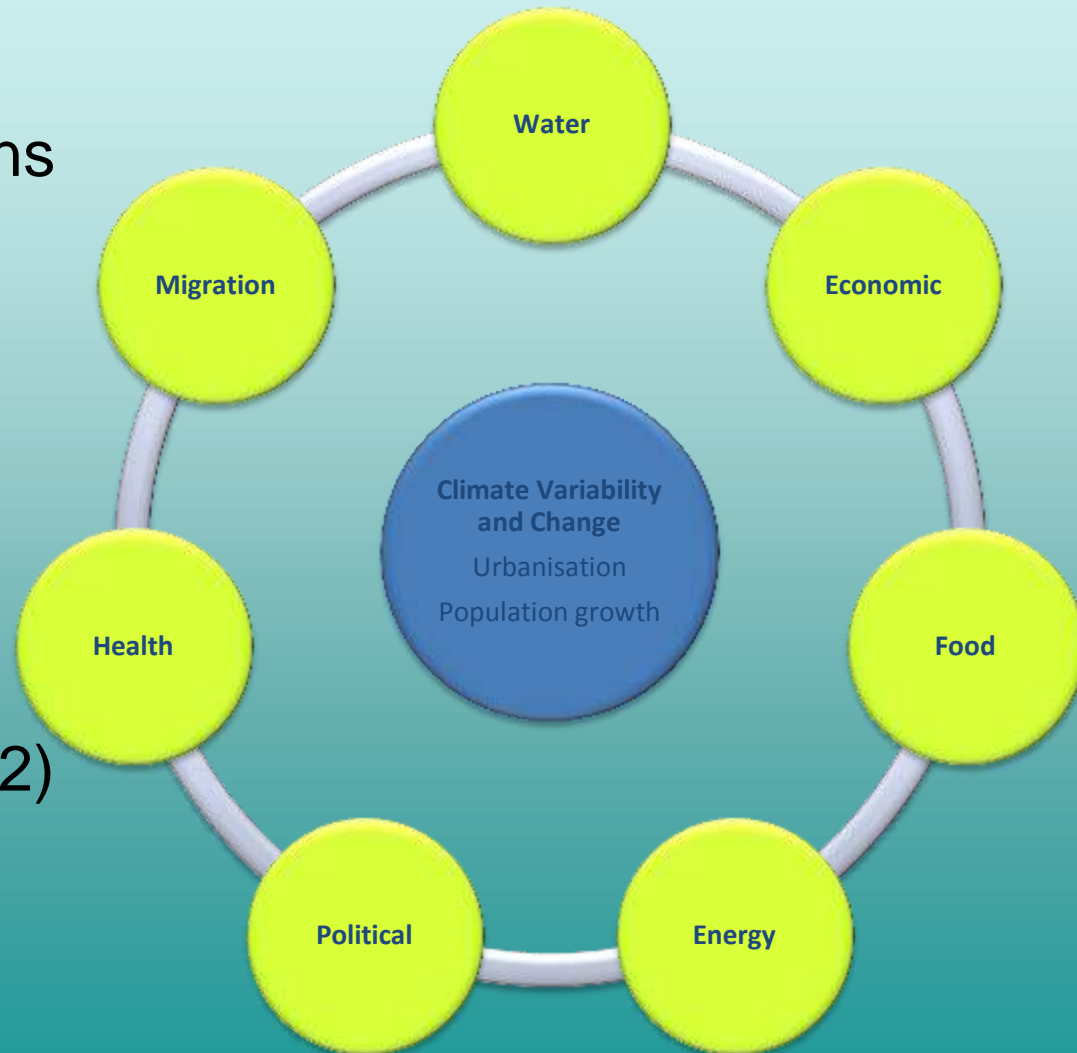
Human dynamics of climate change

www.metoffice.gov.uk/human-dynamics

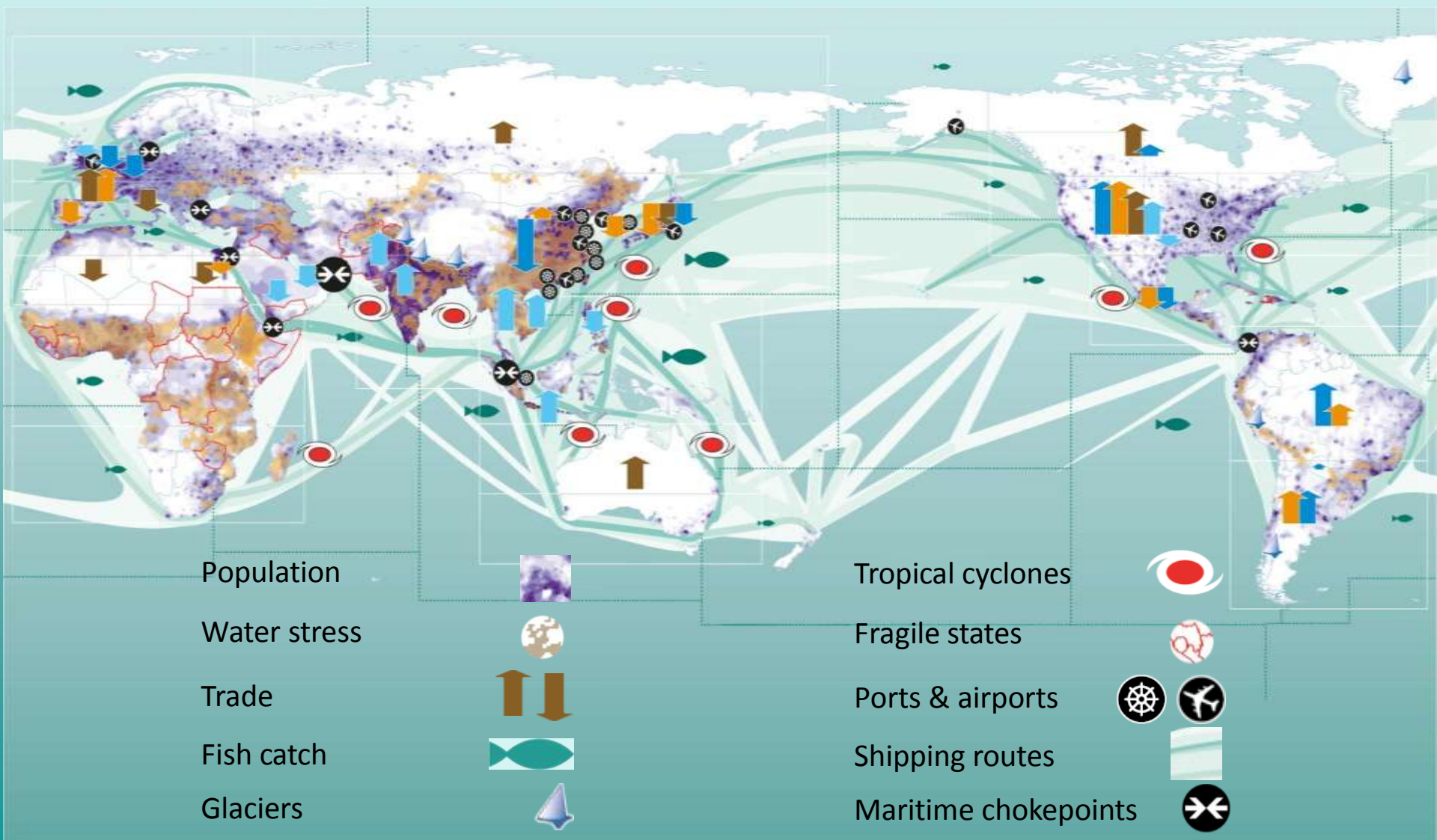


Human dynamics of climate change









- Latest climate projections
- ‘Business-as-usual’ greenhouse gas concentration scenario (RCP 8.5)
- ‘Middle of the road’ population scenario (SSP2)
- Changes from present day to end of century



Present day human dynamics

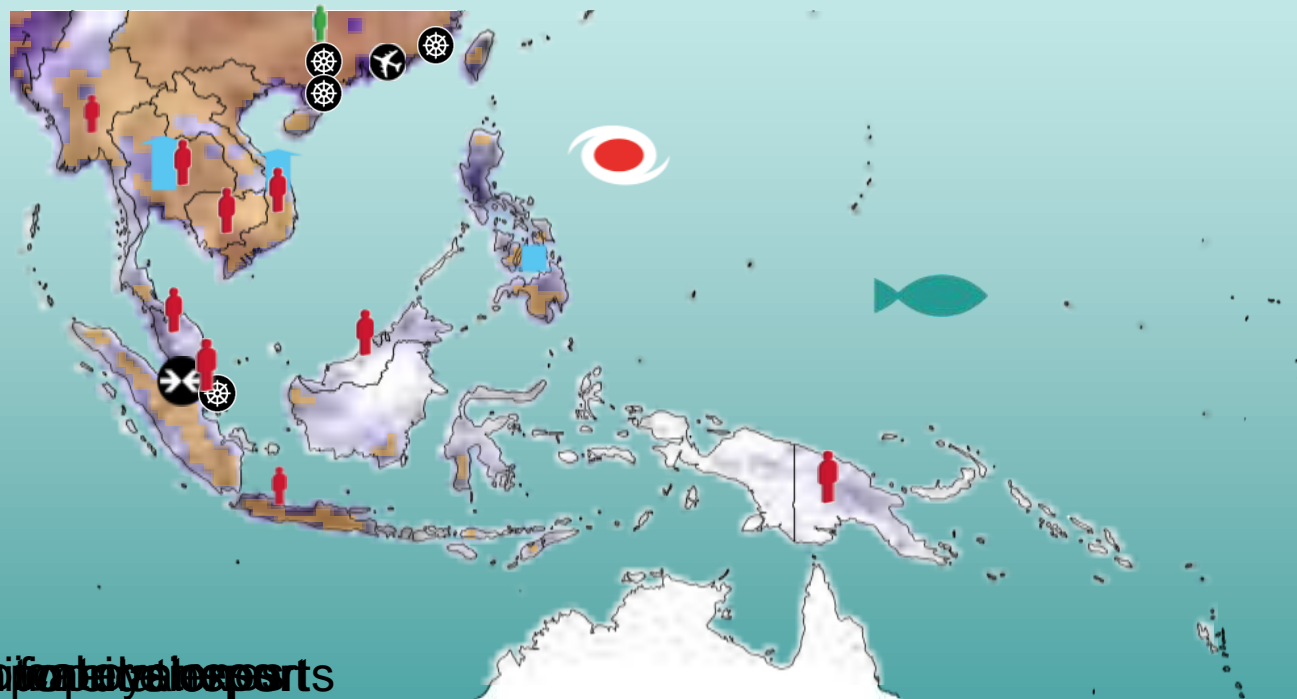


Future climate impacts

 Run off Regions of both increase and decrease	 Flood frequency Increases in flood frequency over large regions, smaller areas seeing decreases
 Water demand for irrigation Global increases in the amount of water needed by crops	 Coastal flooding Millions of people at risk of coastal flooding due to sea level rise and population increases
 Average crop yield Both increases and decreases in yield of wheat, rice and soybeans; Decreases for maize	 Temperature of warm days Increases globally
 Drought Global increases in number of days in drought	 Sea surface temperature Warming sea temperatures and acidification of the ocean threaten marine ecosystems

Southeast Asia

Present-day human dynamics

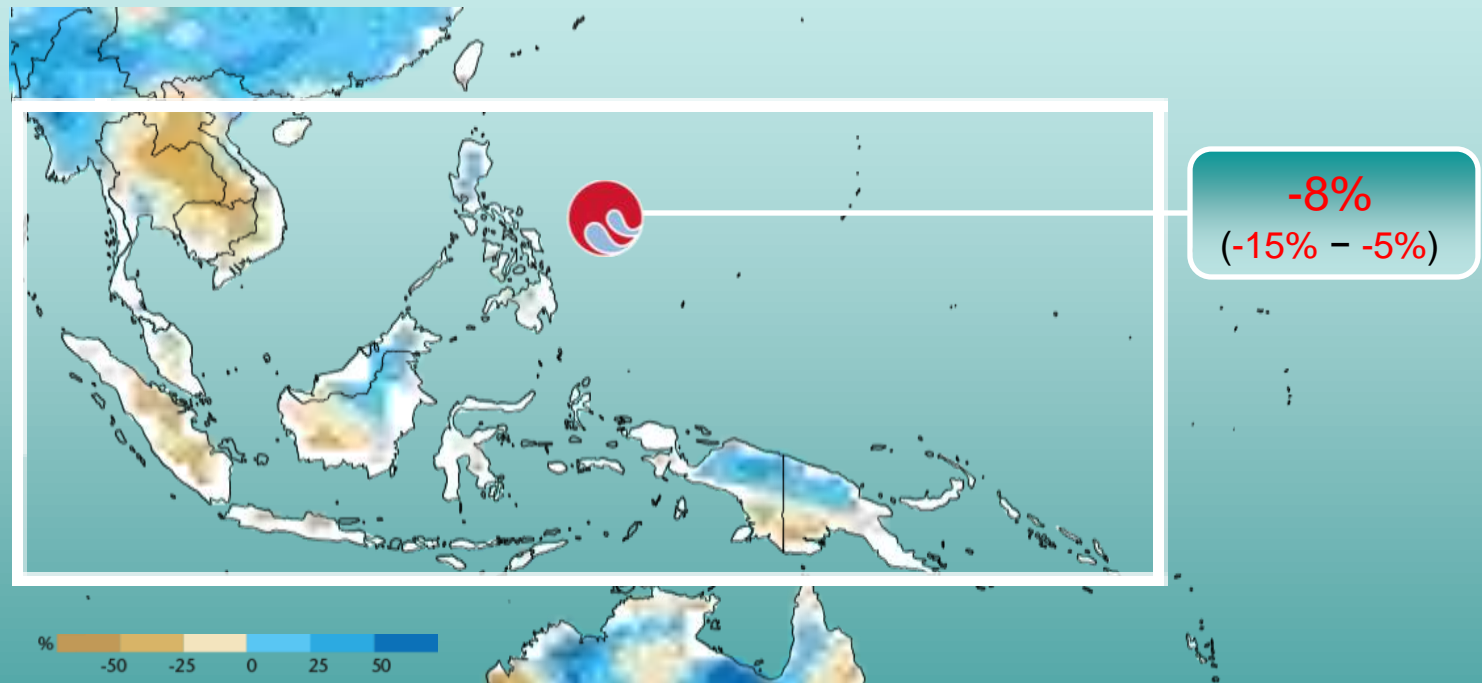


Significant changes in human dynamics
in the region since 1990s

Southeast Asia

Future climate impacts

Water run off

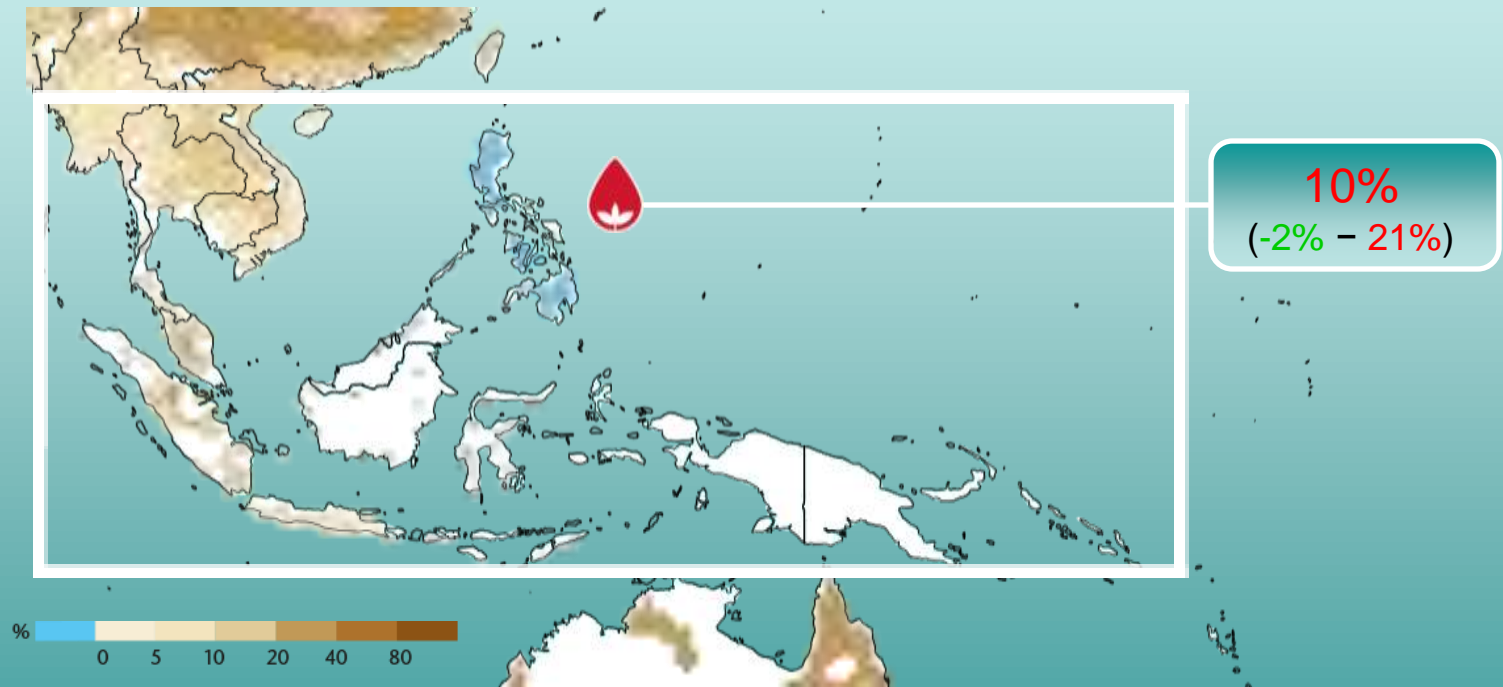


Decreasing run off

Southeast Asia

Future climate impacts

Water demand for irrigation



Increasing water
demand for irrigation

Southeast Asia

Future climate impacts

Crop yield



-15%
(-25% - -2%)

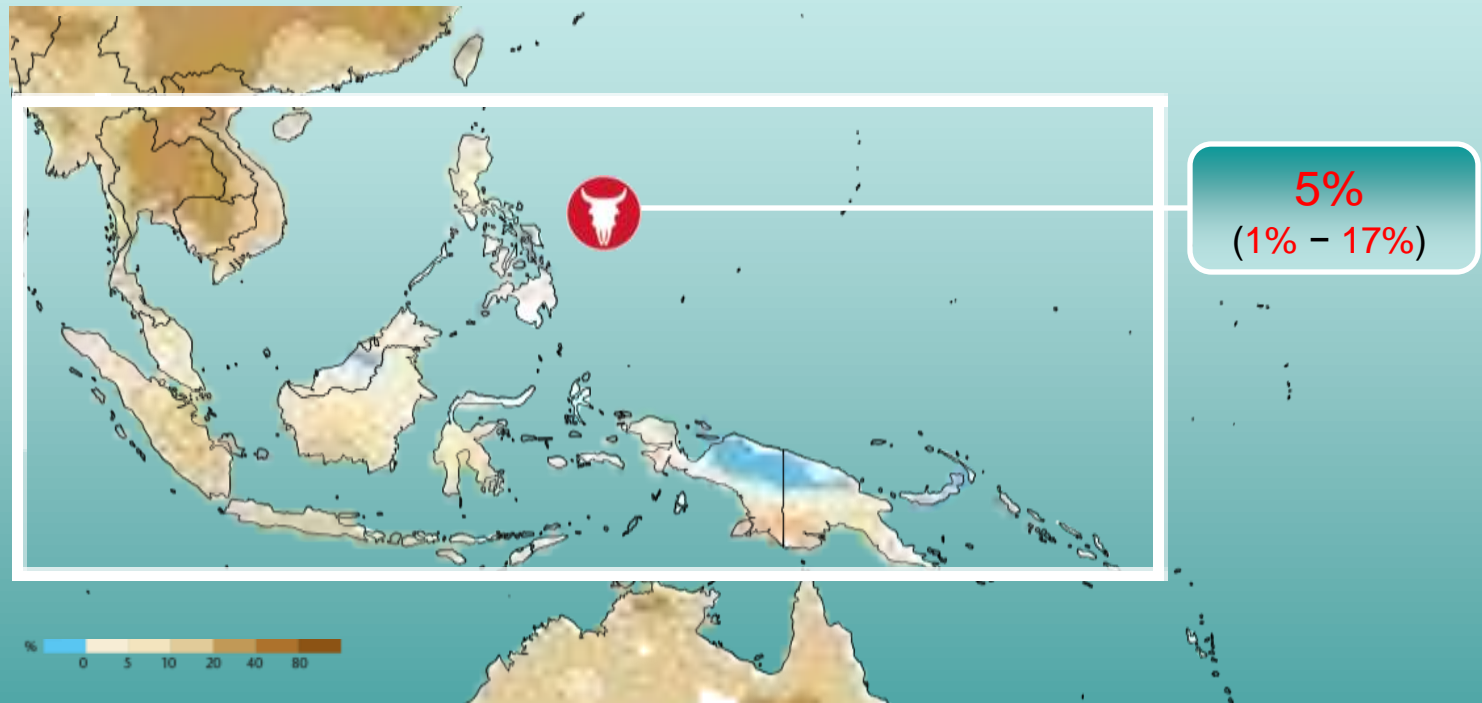
4%
(-4% - 15%)

Decreasing maize yield
Increasing rice yield

Southeast Asia

Future climate impacts

Drought

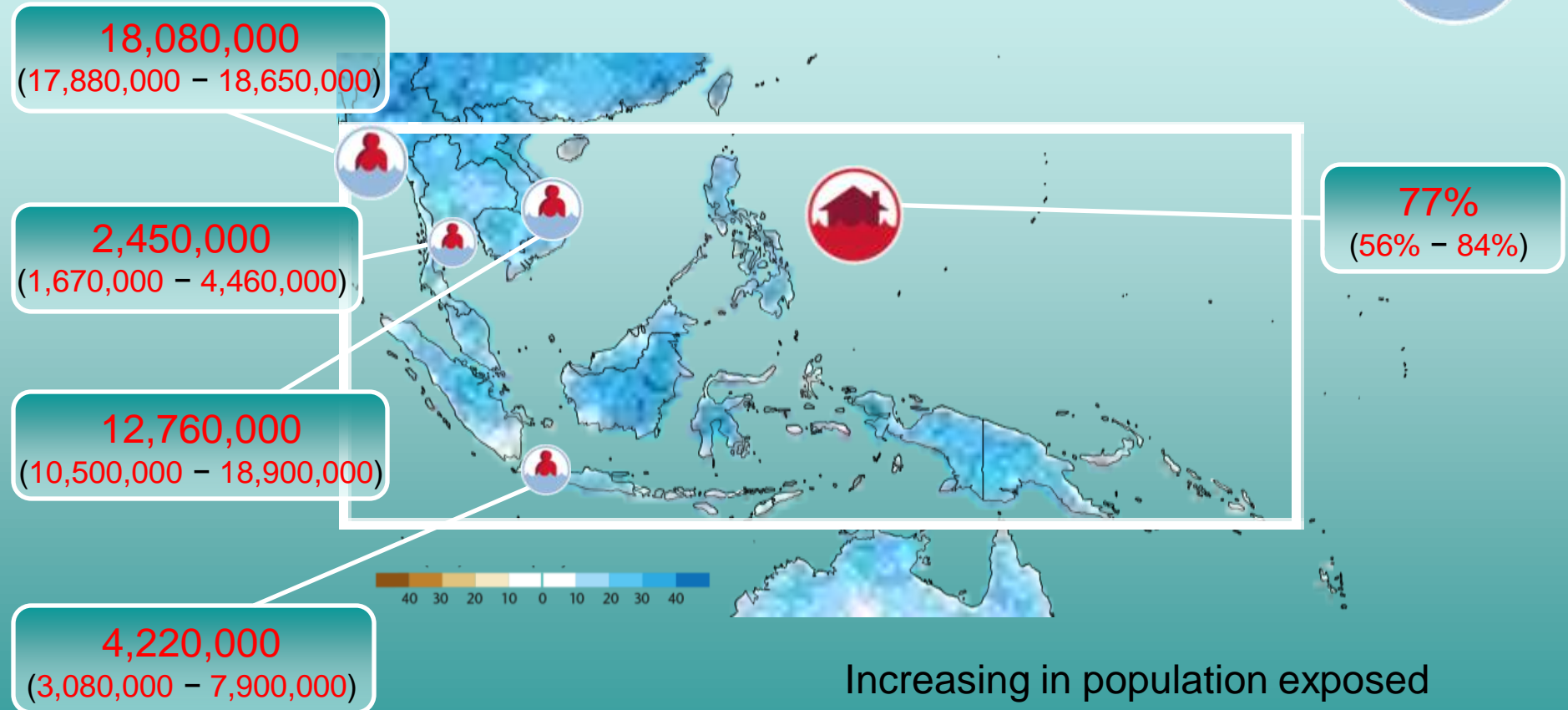


Increasing drought days

Southeast Asia

Future climate impacts

Flooding and coastal flooding



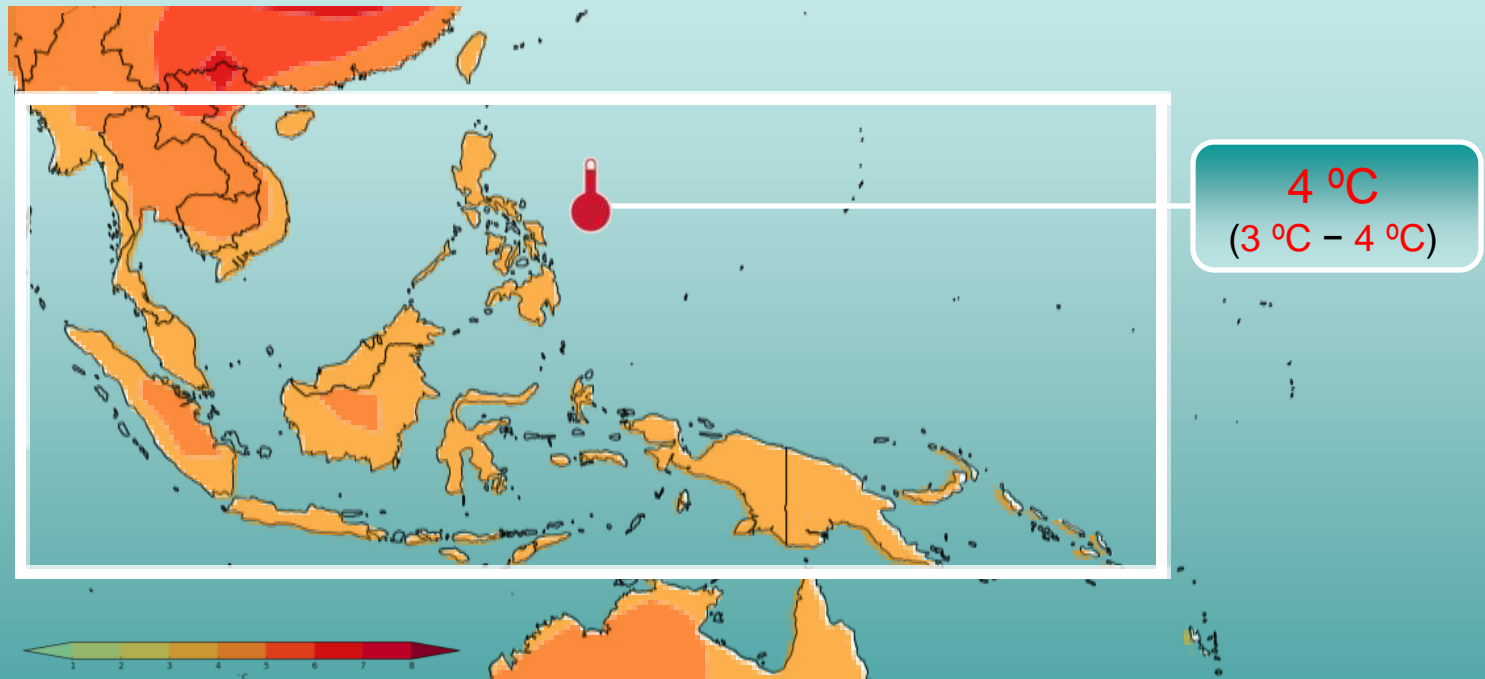
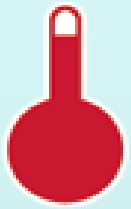
Increasing in population exposed
to coastal flooding

Increasing flood frequency for most areas

Southeast Asia

Future climate impacts

Warm days



Increasing temperature
of the warmest days

Southeast Asia

Future climate impacts



Human dynamics of climate change

Poster is full of information about human
activity and climate change

Please have a look for yourself and see what
connections you can make

Human dynamics of climate change

