

## CASE STUDY

### CLIMATE CHANGE VULNERABILITY AMONG INDIGENOUS ARCTIC COMMUNITIES

Local indigenous populations in the Arctic region face an entirely unsustainable future on account of climate change, according to scientists who are working in the region. Life is changing irreversibly for people who live in the Arctic and depend on the presence of sea ice both economically and culturally.

- In northwest Greenland, many of the region's native Inuit maintain a strong cultural connection to the Arctic landscape through their traditional livelihoods of hunting and fishing. An important part of the traditional way of life is the seasonal hunt for different animal species, including seals and narwhals.
- In places where the sea ice is breaking up earlier and forming later, however, they are losing safe access to traditional hunting grounds for large parts of the year. In the future, there will be no access at all (Figure 2.30). Observations show that the Arctic is warming twice as fast as the rest of world because of its high latitude. Summer sea ice cover has decreased by about 50 per cent since the late 1970s (see page 57).
- On Greenland's Disko Island, the main town of Qeqertarsuaq is home to around 900 inhabitants. Thick winter sea ice used to provide dog-sledding routes that

connected Disko other places. The recent reduction in sea ice means that Disko residents are now becoming isolated, in addition to losing their ice hunting grounds.

This is an extreme form of vulnerability: Inuit culture and the physical environment are so highly interconnected that it is hard to imagine how communities will survive in any recognizable way if the ice does not.

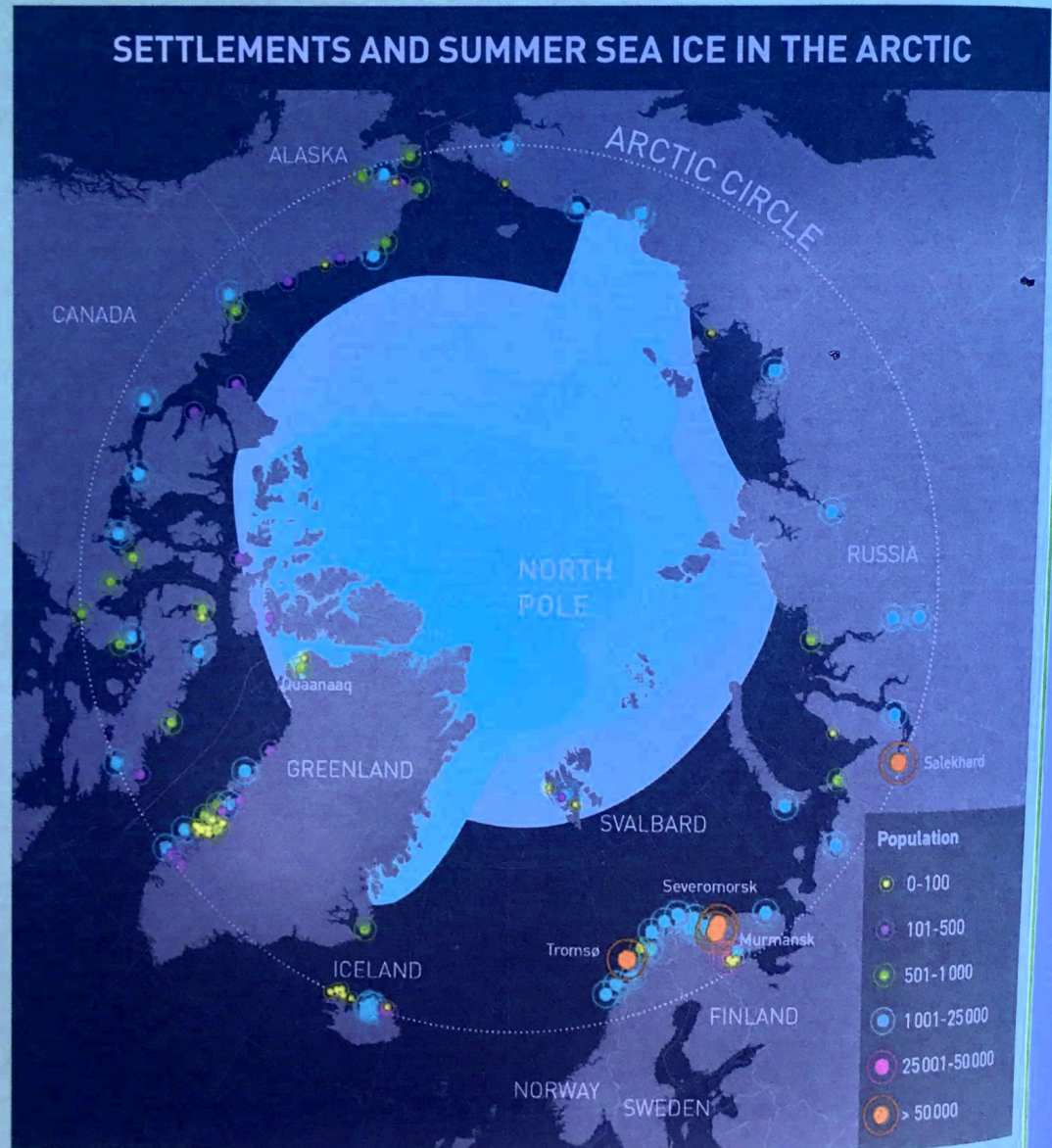


Figure 2.30 Settlement positions and summer sea ice in the Arctic