

Climate change may undermine peace and security

Climate change exacerbates existing pressures on security as well as bringing new challenges, and the potential for violent conflict could increase. The operational responsibilities of the defence sector could also expand in the event of large-scale climate-driven disasters.

Reducing the Carbon 'Footprint'



In many nations, defence forces are the largest single consumer of fossil fuel. Reducing fuel consumption would in turn reduce greenhouse gas (GHG) emissions.

More Efficient Vehicles
Light-duty vehicles could be 40–70% more fuel efficient by 2035 than now.

Alternative Fuels
New aircraft typically offer 20–30% improvement in efficiency. Shifting from kerosene to biofuels offers +30% cuts in direct GHG emissions.

Operational Efficiencies
Aviation carbon dioxide (CO₂) emissions can be reduced through more efficient planning of operations, including routes, altitudes and speeds.

Security-Related Climate Change Impacts

Increase in Drought and Inland Flooding
Food and freshwater insecurity, pandemic/epidemic disease outbreaks, loss of food production and arable lands, population displacement, livelihood insecurity.

Rising and Extreme Temperatures
Lower agricultural output, spread of disease, food insecurity, less renewable water resources, more heat-related illness, change in large-scale fish catch potential.

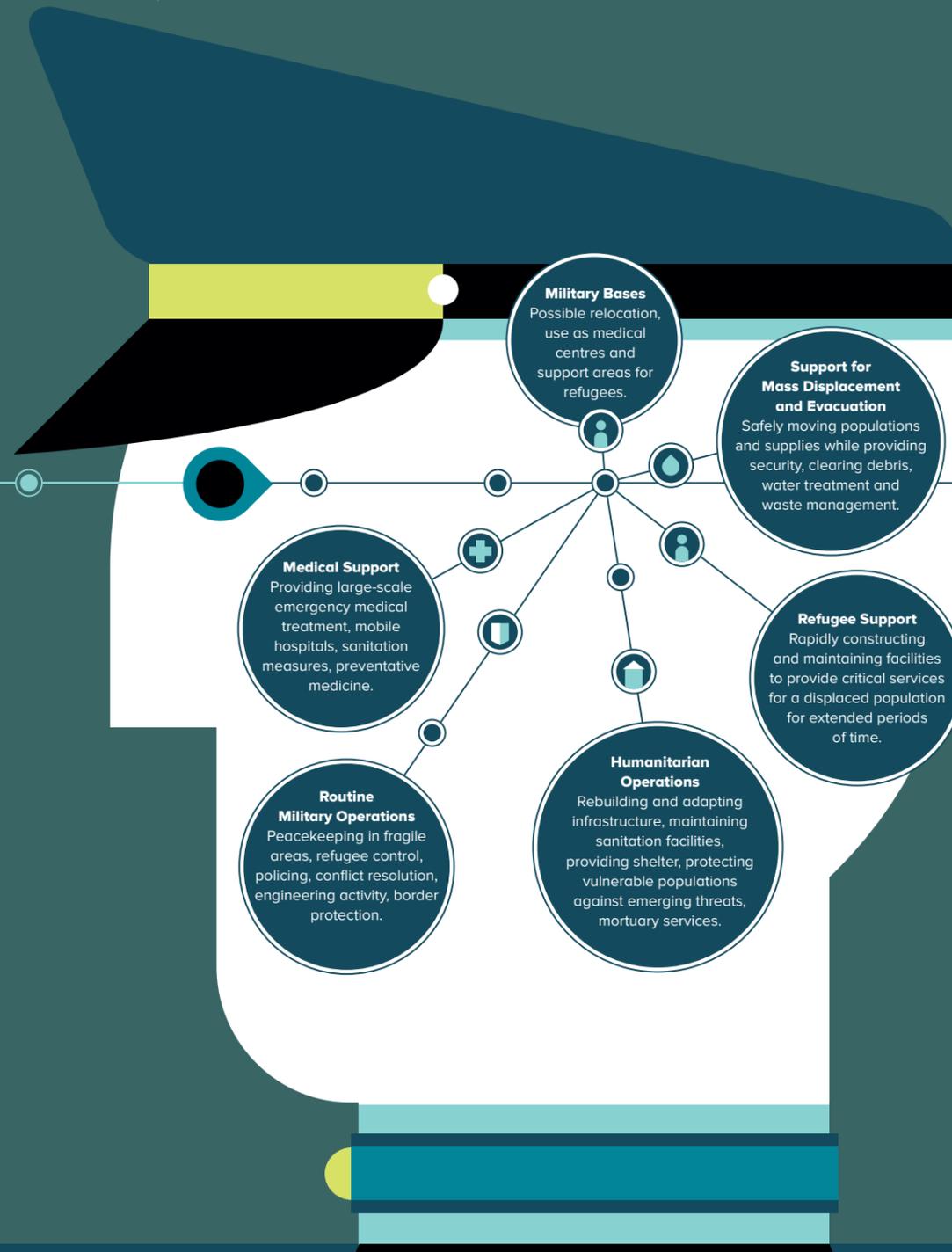
Geopolitical Concerns
Uneven distribution of impacts among countries depending on geographic setting and other factors affecting national and human security. Climate-related security threats greatest in countries with weak or failing governments and/or with existing conflict.

Declining Snow and Ice Cover
Access to offshore resources in newly ice-free areas, freshwater insecurity, changes in geography and new openings for traffic.

Sea-Level Rise and Storm Surges
Increased vulnerability in the Low Elevation Coastal Zones, damage to infrastructure, changing territorial limits and integrity, population displacement, disease spread, loss of arable land, change in coastal resources.

Extreme Weather
Destruction of critical infrastructure, population displacement, pandemic/epidemic disease outbreaks, humanitarian disaster.

Responding to Climate Change Impacts



Resilience Strategies

Flexible Response
Even with adaptation measures, changes in climate can have unexpected, adverse effects on military operations. Flexibility in planning and response will be essential in meeting long-term defence and security responsibilities.

Reducing Risk
Action with an emphasis on disaster risk reduction can increase climate resilience while helping improve human livelihoods.

Planning for Displacement
Millions of people could depend on adaptation measures to reduce displacement caused by coastal flooding and land loss.

Anticipating Climate Risk
Anticipating climate risks can help planners reduce impacts. Numerous facilities may need to be relocated and/or strengthened, notably to secure naval bases against flooding and sea-level rise.

Adjustments in Security Analysis
Nations will need to update strategic security planning to take into account risks and impacts of climate change.

Scenarios for Lack of Resources
Reduction of fresh, clean water resources could require increased peacekeeping in areas prone to conflict over extreme scarcity, as well as logistical adaptation for troop supplies.