



# CAN

# DIGITALIZATION SAVE LIFE ON EARTH?

Worldwide, there is an apparent increase in many infectious diseases, including some new ones. This reflects the combined impacts of rapid demographic, environmental, social and technological changes that are impacting our way of life.

## Global warming

is the slow increase in the average temperature of the earth's atmosphere because an increased amount of the energy (heat) striking the earth from the sun is being trapped in the atmosphere and not radiated out into space.

**While global warming has yet to expose any ancient viruses harmful to humans it has begun re-exposing more familiar diseases that modern society thought it had eradicated.**

## Examples of how environmental changes can increase infectious diseases

Environmental Changes	Example Diseases	Pathway of Effect
Dams, canals, irrigation	<ul style="list-style-type: none"> <li>Schistosomiasis</li> <li>Malaria</li> <li>Helminthiasis</li> </ul>	<ul style="list-style-type: none"> <li>Snail host habitat, human contact</li> <li>Breeding sites for mosquitoes</li> <li>Larval contact due to moist soil</li> </ul>
Agricultural intensification	<ul style="list-style-type: none"> <li>Malaria</li> <li>Ven. haemorrhagic fever</li> </ul>	<ul style="list-style-type: none"> <li>Crop insecticides and vector resistance</li> <li>Rodent abundance, contact</li> </ul>
Urbanization and urban crowding	<ul style="list-style-type: none"> <li>Cholera</li> <li>Cutaneous leishmaniasis</li> </ul>	<ul style="list-style-type: none"> <li>Water contamination</li> <li>Proximity, sandfly vectors</li> </ul>
Deforestation and new habitation	<ul style="list-style-type: none"> <li>Malaria</li> <li>Oropouche</li> </ul>	<ul style="list-style-type: none"> <li>Breeding sites and vectors, immigration of susceptible people</li> <li>Contact, breeding of vectors</li> </ul>
Reforestation	<ul style="list-style-type: none"> <li>Lyme disease</li> </ul>	<ul style="list-style-type: none"> <li>Tick hosts, outdoor exposure</li> </ul>
Ocean warming	<ul style="list-style-type: none"> <li>Red tide</li> </ul>	<ul style="list-style-type: none"> <li>Toxic algal blooms</li> </ul>

SOURCE: <https://www.who.int/globalchange/climate/en/chapter6.pdf>

## Link Between Climatic Conditions and Infectious Disease Transmission

- 1 Examine evidence from the recent past of associations between climate variability and infectious disease occurrence.
- 2 Look at early indicators of already-emerging infectious disease impacts of long-term climate change.
- 3 Use the evidence above to create predictive models to estimate the future burden of infectious disease under projected climate change scenarios.



TELEMEDICINE



MOBILE HEALTH



HEALTHCARE DEVICES

We must ensure that digitalization is **human-led and earth-centered**. And we must stop seeing biodiversity as a victim to be saved by the evolving new technology and start seeing it for what it really is: our most valuable resource – one that **sustains, inspires, heals, and guides us throughout our lifetime and across generations.**