

To prevent the spread and outbreak of infectious diseases.

~from the perspective of global warming and globalization.~

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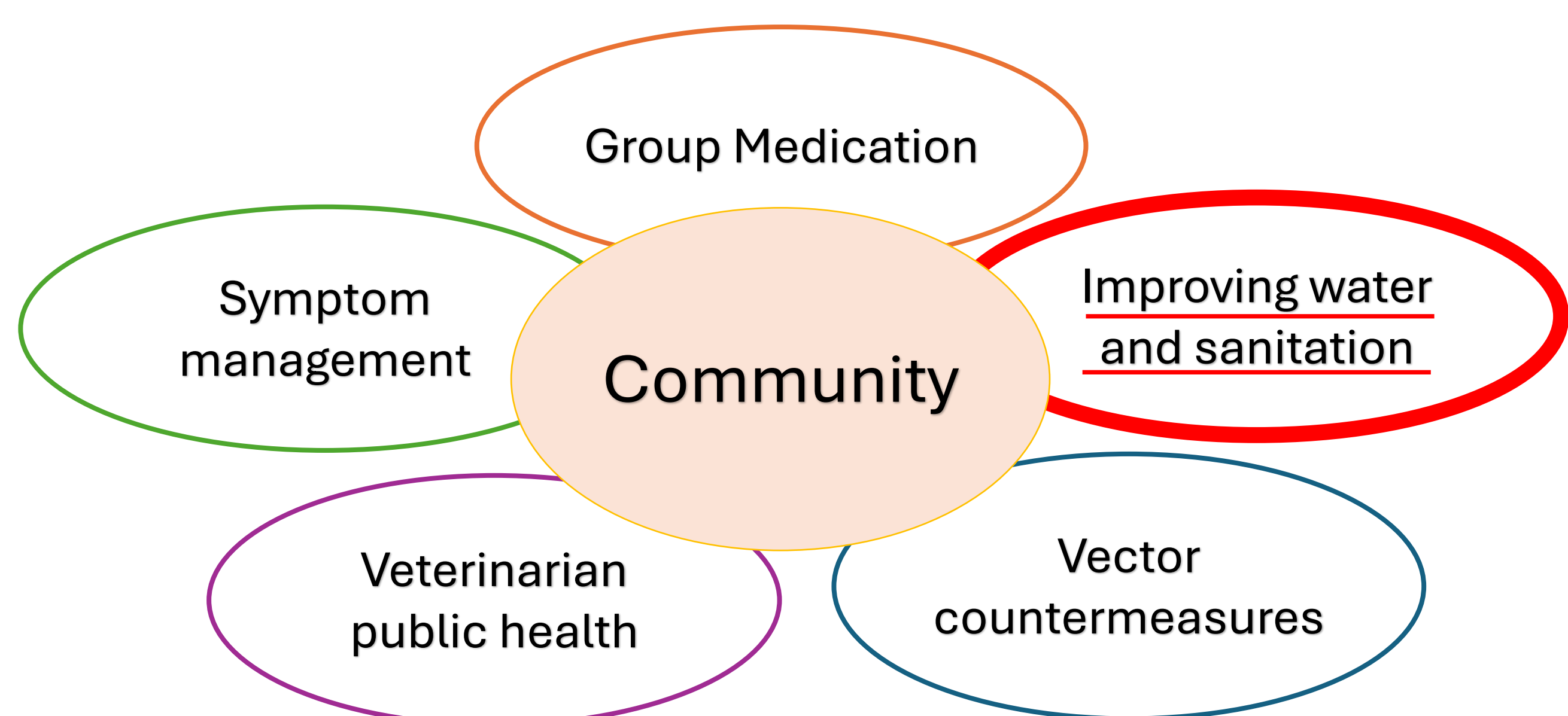
The Trigger

We became interested in infectious diseases in wake of the coronavirus pandemic that began around the world in 2020. In geography classes and seminars, we learned that infectious diseases in tropical regions may spread more due to global warming.

Topic “Neglected Tropical Diseases (NTDs)”

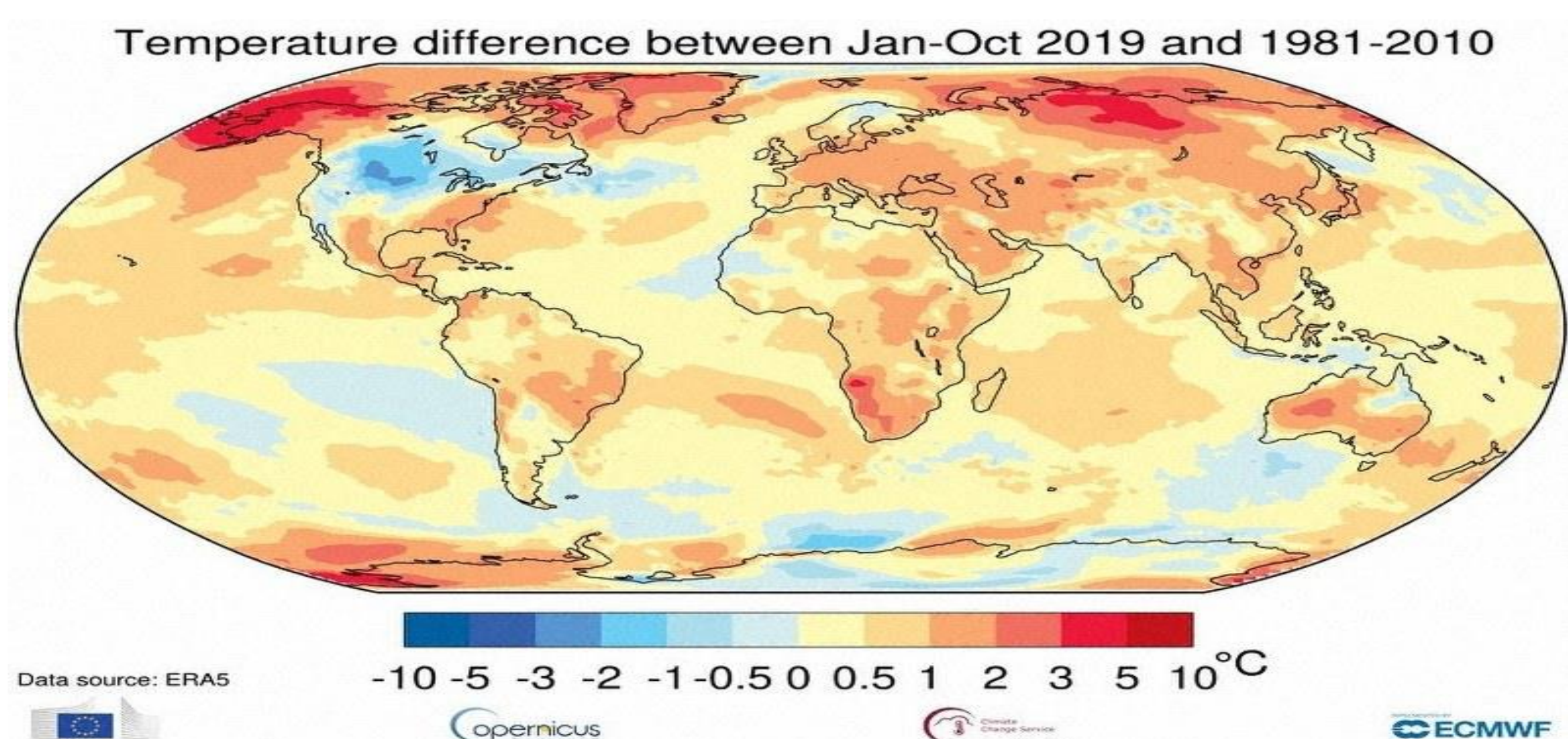
1.6 billion people in the world, mainly in poor tropical regions, are at risk of infection from NTDs including “dengue fever”, schistosomiasis and “leprosy”.

©WHO’s 5 strategies for the elimination of NTDs



Risk of infection spreading ① (global warming)

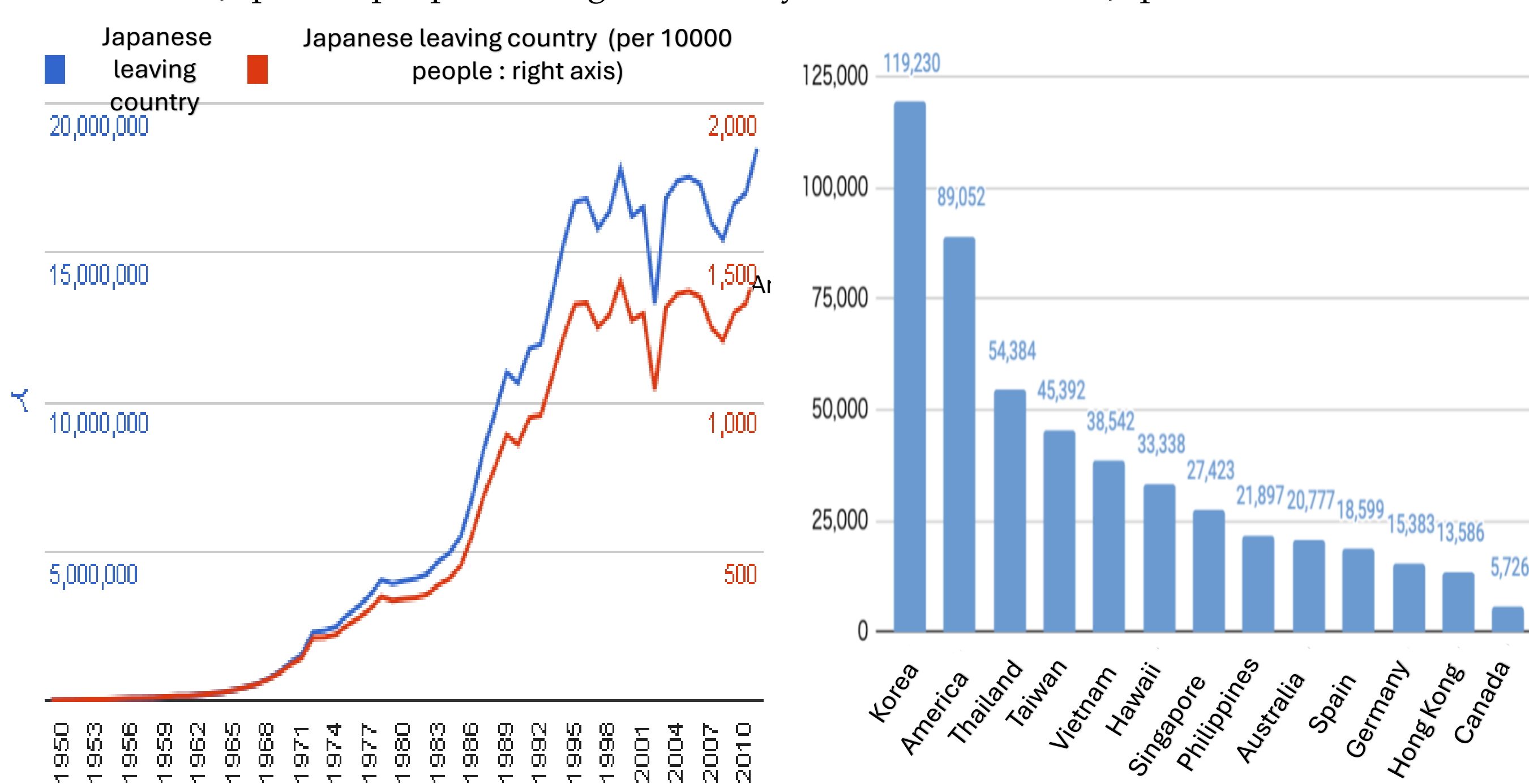
As the number of places with tropical climates increases, the risk of infectious spreading increases...



Risk of infection spreading ② (globalization)

Due to globalization, more and more Japanese people are going abroad.

Number of Japanese people leaving the country · Destinations of Japanese nationals



Why do infectious diseases occur in tropical regions?

Pathogens infect animals and insects (flies, mosquitoes, etc.)

Flies and mosquitoes that near water transmit the diseases to humans.

Rainwater is not properly treated. In addition, safe water is not available.

What we can do

The four strategies other than “improving water and sanitation” are almost impossible to implement with the efforts of only a small group of people.

Therefore, we will focus on the improving water and sanitation strategy.

Current efforts by who?

UNICEF

Providing water stations and toilets in villages school, health centers and more around the world.



JICA

Improving operations and management to continuously advance water services.



Eisai Co., Ltd (Japanese pharmaceutical company)

Developing vaccines that are undergoing clinical trials (filariasis mycetoma).

WaterAid

Working with local people to encourage governments to address water and sanitation issues.

Sanitation around the world

	Japan	France	Kenya	America
Hand washing	◎	○	◎	△
Gargling	◎	×	—	×
Disinfection	◎	◎	○	○
Mask wearing	○	△	—	△

Black light experiment



Conclusion Developed countries must not forget the lessons of the coronavirus pandemic. Developing countries must aim to secure safe water and improve sanitation.

References

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