



Reports monitoring covid-19 pandemic in countries and regions of the Global South Nº 13

2nd July 2020

Hand washing as a preventive measure: is it possible everywhere?

During the covid-19 pandemic one of the most recommended prevention measures has been hand washing. To do so, as discussed in the previous report, it is necessary to have access to disinfectant solution or water, options that are not always available or accessible to everyone (BIOCOMSC, 2020).

The following map shows countries sized depending on their water resources. As we can see, the areas in the world where there is more water available are Latin America and Asia-Pacific. However, the areas with less water available are Sub-Saharan Africa and the Middle East.

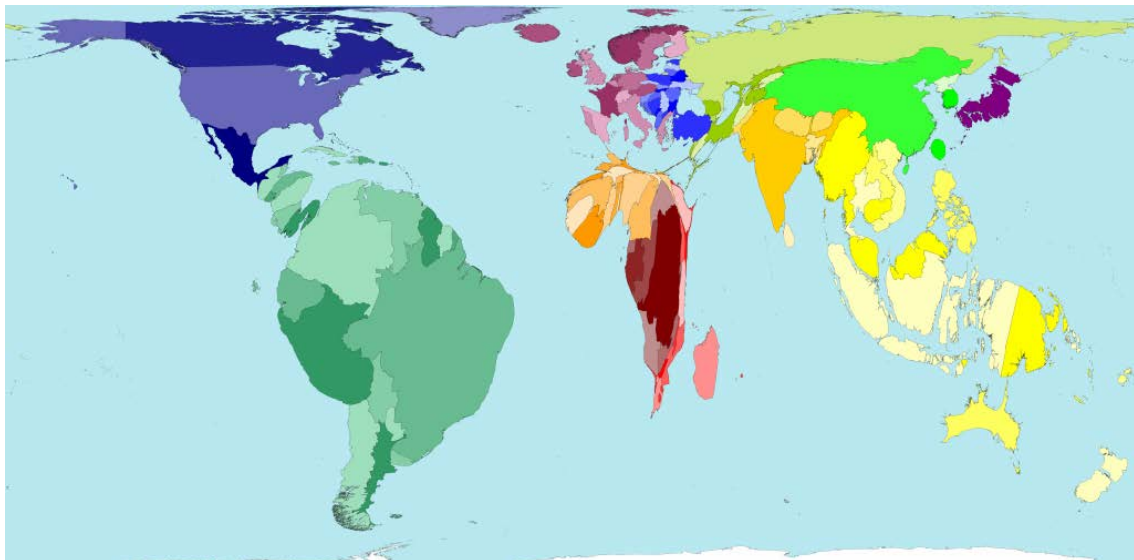


Figure 1. World map depicting water availability. Source: Worldmapper.

According to an study made by the *United Nations Economic and Social Commission*, out of the 450 million people living in the Arab countries, 74 cannot follow the covid-19 prevention measures due to lack of access to toilets and soap. The countries with the largest number of people without access are Sudan with 31 million people, Yemen with 14.3 million, Egypt with 9.9 million and Syria with 5.4 million.

9 out of the 10 countries in the world with less access to water are placed in Africa. Indeed, the 63% of Sub-Saharan Africa's population do not have access to safe water, i.e. access to water free from pathogens and manure that contaminate it (WaterAid, 2019). Due to the lack of water sanitation, many people, especially children, have a higher risk of contracting diseases

such as cholera, haemorrhagic diarrhoea, typhoid or polio. Hence, not only the availability of water is important but also the quality of this water.

Accessing to safe drinking water is very unequal in urban and rural areas. The *World Health Organization (WHO)* estimates that two thirds of urban dwellers have access to safe water while only 17% of the rural population has. Also, the urban population without access to water are mostly inhabitants of informal settlements in the cities (WHO, 2017).

Furthermore, as admitted by the *World Health Organization's* Regional Director for Africa Matshidiso Moet, the drought of the last months has aggravated the poor availability of safe water in many areas of the region. One example is the countries of East Africa which are, since 2019, suffering major locust infestations due to favourable environmental conditions generated by droughts. In Ethiopia, locust infestations have destroyed 1.3 million hectares of pasture and about 200,000 hectares of crops and it has derived onto a loss of 350,000 tonnes of cereals.

Along the continent, the lack of safe water resources due to environmental reasons is mixed with the lack of infrastructures. Those two factors result into a lack of accessibility to safe water.

In Bamako, the capital of Mali, some districts are complaining about water cuts during the day that last between 5 and 6 hours. Witnesses claim in the *Journal du Mali* that they cannot wash their hands regularly neither cook nor drink.

In the east corner of Namibia, the pipes that distribute water are damaged for two years. Inhabitants have complained to the government that obtaining water is too expensive because of the lack of it in the area. Now with the current crisis, the need to bring water to all corners of the country has become important and for the first time the government is working on improving the pipes.

According to the *Asivikelane* initiative, which aims to shed the light on the problems existing in informal settlements in South Africa, 1 every 5 inhabitants of informal settlements in the country do not have access to safe water. Also, only 1 every 10 inhabitants received during the pandemic soap or disinfectant as a donation from the government. The initiative reports that living conditions in informal settlements are very precarious and that people are living in overcrowded and shared sanitation facilities. It also calls for local governments to take action in order to maintain and improve the existing infrastructure by for example repairing broken taps, leaks or providing additional water tanks (IB, 2020).

Similarly, the Republic of Guinea, also known as Guinea Conakry, has suffered for decades from the lack of access to drinking water in most neighbourhoods of the capital. According to the country's Minister of Water and Sanitation, Papa Koly, the city of Conakry would need 400m³ of water to regularly supply its entire population. However, at present only 120m³ of water reaches the population's taps and 250m³ is lost along the way due to poor transport, storage and distribution infrastructures. In this direction, the Minister reports in the newspaper *Guinee News* that despite having the capacity of producing more water, it could not be transported as the transport system is obsolete. Nor could it be stored or distributed so that the storage stations are cracked and the distribution network is worn and leaky.

Furthermore, in Conakry, the capital of Guinea Conakry, the problem is twofold. At this time of year, the dry season, many wells are empty and are difficult to use, therefore families have to walk for miles to reach private wells that provide water. This is where the second problem is added: the frequent power cuts since the beginning of the pandemic. In order to pump the water from the well to the tap where it is supplied, electricity is needed and when there is no electricity, there is no water either. During these months of confinement in Conakry, there have been several long lines, some violent and some peaceful, to fill water cans at private wells.

Finally, we cannot talk about the importance of safe water for cleaning hands, without mentioning sanitation. According to the *WHO* 6 out of 10 people in the world, 4.5 billion, do not have access to safe sanitation (WHO, 2017). This implies, for example, that latrines are shared among many people or that there is no adequate grey water treatment system.

Safe water and sanitation are critical not only as preventive measures for the current pandemic but also for the health of individuals and communities. Thus, work is needed to improve the existing infrastructures in many countries in order to ensure the fundamental and human right to water and sanitation.

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The research group BIOCOS-SC from the Polytechnic University of Catalonia is in contact with different research groups and governmental offices in order to jointly predict the evolution of the pandemic covid-19. Moreover, we follow up local media in 35 African countries and 9 Latino American countries and complemented it with interviews to field experts.

<https://biocomsc.upc.edu/en/covid-19>